

Belief Statements

Goals

To prepare all youth in western Wisconsin for success in life and work in a competitive, rapidly changing global economy.

Mission

Western Wisconsin School-To-Work Consortium

School-To-Work Office
Western Wisconsin Technical College
Academic Resource Center
Room 232
304 North Sixth Street
La Crosse, WI 54602-0908
(608) 785-9089
Fax (608) 785-9212

- 1** We believe that Our educational system should provide a better system of transition to postsecondary education and employment for all students.
- 2** We believe that In order for School-To-Work to be successful, business/industry/labor must participate in the educational process.
- 3** We believe that Competencies critical for the current and future workforce include personal qualities such as honesty and responsibility, thinking skills such as decision-making and problem-solving, and basic skills such as writing and reading.
- 4** We believe that There should be better linkages among all levels of education.
- 5** We believe that Effective School-To-Work programs combine school-based and work-based learning.
- 6** We believe that A high performance economy, characterized by high-skill, high-wage employment is beneficial to everyone.
- 7** We believe that An effective, developmental PK-12 career education program is integral to School-To-Work.
- 8** We believe that Students, parents, as well as community, business, industry, labor, government, and educational leaders must assume personal responsibility for successful School-To-Work transition.
- 9** We believe that School-To-Work activities should be equally accessible to all students and all school districts.
- 10** We believe that Students benefit from learning in the context of real life applications.
- 11** We believe that All parents, students, and educators can benefit from exposure to the workplace.
- 12** We believe that The integration of academic and vocational curricula is essential to School-To-Work.
- 13** We believe that Because parents and teachers exert a primary influence on students' beliefs and behaviors, they are vital to the planning and implementation of School-To-Work.

- 1** To ensure that all students have the opportunity to acquire the knowledge, skills, and attitudes they need to succeed in a high-skills economy and to participate fully as productive members of their communities.
- 2** To actively recruit participation and involvement of business, industry, and labor in School-To-Work initiatives.
- 3** To facilitate collaborative partnerships among parents, secondary schools, post secondary institutions, community organizations/agencies, and business/industry/labor that will assist students as they make the transition from school to work.
- 4** To plan and implement marketing strategies that will encourage citizen participation in School-To-Work and will enhance public understanding, clarify misconceptions, and improve perceptions of School-To-Work.
- 5** To provide students and parents with a career selection process including awareness, exploration, and preparation that leads to future employment and continued education.
- 6** To support in the following ways the efforts of local school districts in their development of equitable, cost-effective School-To-Work programs:
 - act as a clearinghouse for resources and effective practices
 - network with state and local agencies
 - coordinate staff development
 - develop policies and procedures
 - coordinate federal, state, and community resources
 - promote business, industry, and labor involvement
 - develop a regional framework
- 7** To foster educational reform:
 - improve curriculum, instruction, and assessment through input of all partners
 - accommodate a variety of learning styles
 - encourage participation in a variety of work-related activities
- 8** To coordinate School-To-Work activities with other programs for special populations.

Committee Membership, Communication Structure

Work-Based Learning Subcommittee

Purpose

To develop, support, market, and evaluate Work-Based Learning activities which promote employability skills, such as those identified in the SCANS (Secretary's Commission on Achieving Necessary Skills) Report.

Goals

- 1** Facilitate the development of a range of work-based learning options by communities and school districts throughout the Consortium
- 2** Support high quality work-based programs through a variety of mechanisms, such as developing appropriate policies and procedures, providing training, and creating a Work-Based Learning Grant application process.
- 3** Market Work-Based Learning opportunities to students, parents, schools, and businesses using appropriate mediums, presentations, and staff development.
- 4** Assist schools in the recruitment of business partners who will provide Work-Based Learning experiences.
- 5** Develop reporting methods to summarize Work-Based Learning experiences in the Consortium.

School-Based Learning Subcommittee

Purpose

To develop School-Based Learning activities consistent with the School-To-Work Opportunities Act which better prepare all youth in western Wisconsin for success in life and work in a competitive, rapidly changing global economy.

Goals

- 1** Provide comprehensive staff development opportunities for educators at all levels.
- 2** Facilitate the articulation process at the secondary and post secondary levels.
- 3** Foster the development of applied and integrated curricula that addresses personal qualities, higher order thinking skills, and basic skills.
- 4** Establish a system of student performance assessment to monitor student progress/success.
- 5** Incorporate contemporary emerging issues (e.g. new technologies, alternative delivery systems) into school-based learning initiatives.

School-Business Partnership Subcommittee

Purpose

To create ways for communities to enhance relationships between schools and businesses to enhance learning opportunities for students of all ages.

Goals

- 1** Foster school/business linkages.
- 2** Survey business organizations regionally to determine existing school/business programs.
- 3** Encourage and support the development of new school/business programs.
- 4** Continue the "School-To-Work Expo."

Planning and Implementation Committee

Purpose

To promote coordination of programs and initiatives at the local level which will better prepare young adults to make the transition from school to work in an ever-changing, increasingly global economy.

Goals

- 1** Assist districts with strategic planning.
- 2** Serve as a forum for networking and sharing best practices.
- 3** Develop and implement marketing strategies.
- 4** Foster increased career awareness and establish linkages between area schools and the Career Exploration Link career center.
- 5** Promote the development of applied/integrated curriculum.
- 6** Assist consortium schools with the development of work-based learning opportunities.
- 7** Provide schools with relevant economic information, such as labor market statistics, economic data, and employment projections.
- 8** Facilitate the articulation process.
- 9** Make recommendations to the STW Council and serve as a liaison between the Council and consortium schools.
- 10** Provide technical assistance with data collection and the preparation of state reports.
- 11** Evaluate the success of School-To-Work programs and initiatives.

Career Center Committee

Purpose

To provide guidance and help in carrying out the development, implementation, and assessment of the Career Exploration Link which serves as a regional career information resource for students and their parents and schools.

Goals

- 1** Integrate the Career Center with the one-stop center.
- 2** Develop and implement a marketing plan.
- 3** Develop partnerships which will lead to self-sufficiency for the Career Center.
- 4** Facilitate career guidance for students in all 28 school districts.
- 5** Establish interest bulletin board for state-wide communication.

School-To-Work Council Bylaws

June 1995

Article I Name

The name by which this organization shall be known is the School-To-Work Council hereafter referred to as the Council.

Article II Purpose

Section 1. The purpose of this Council is to support the development, implementation, and assessment of School-To-Work initiatives in western Wisconsin. It is also the goal of the Council to see that the mission of the Western Wisconsin School-To-Work Consortium is carried out.

Article III Membership

Section 1. Composition. The representatives, whose skills, interests, and knowledge will assist the program in achieving its goals and objectives, shall come from a cross-section of the communities. Staff will serve as ex-officio members (school-based learning coordinator; work-based learning coordinator; and career center director).

Section 2. Number of Members. The total number of members of the Council will be 36.

Section 3. Term Length. The length of term for each member will be three years. Terms shall be staggered. Members will be eligible to serve successive terms. Service on the Council will commence July 1 and end June 30. Council must review annually the list of members and student representatives.

Section 4. Attendance. Absence of any member for three consecutive meetings without a valid excuse may be cause for removal from the Council membership.

Section 5. Vacancies. Vacancies occurring for any reason will be filled by the chair with Council approval.

Article IV Officers

Section 1. Composition. The Council shall elect from its members the following officers: Chairperson, Vice Chairperson, and Secretary.

Section 2. Election. The election will be held at the monthly meeting in April of each year by a majority vote of the members. All officers will assume office at the July meeting.

Section 3. Terms. All officers will serve for one calendar year. Officers may serve consecutive terms.

Section 4. Duties.

- a. Chairperson. The Chairperson of the Council shall preside at all meetings. He or she may call special meetings, with prior notice given, when necessary. The Chairperson of the Council shall appoint all committees with the approval of the Council, and shall be an ex-officio member of all Council committees. If the Chairperson represents education, the Vice Chairperson should represent the business community and the reverse is true if the Chairperson selected is from the business community. In case of resignation or death of an officer, the Chairperson shall appoint a replacement with the approval of the Council members, for the balance of the term.

- b. Vice Chairperson. The Vice Chairperson shall preside and perform the duties of the Chairperson, in his/her absence, and shall perform all other duties that may be assigned by the Chairperson.

- c. Secretary. The Secretary shall keep the minutes of the Council in a book provided for this purpose and shall perform such other secretarial duties as may arise from time to time and as directed by the Council. The secretary will duplicate and mail the minutes to the Council members.

- d. The Director of the School-To-Work office shall not hold an elected office.

Section 5. Committees.

- a. Standing Committees. Such other committees, standing or special, shall be appointed by the President of the Council.

The Executive Committee will be composed of the Chairperson, the Vice Chairperson, the Secretary, the Director of the School-To-Work office, and the immediate past Chairperson. The Executive Committee is empowered to act on behalf of the Council between meetings. Any action taken by the Executive Committee shall be subject to review by the Council at the following meeting.

Standing Committee chairpersons and committee members will be appointed by the Council Chairperson prior to the first Council meeting each year.

- b. Committee Membership. Appointments of members to serve on standing or special committees may include persons other than members of the Council.

- c. Committee Reports and Meetings. Standing committees and temporary committees will report on a regular basis as committee meetings are held and as directed by the Council.

- d. Orientation. The chairperson will be responsible for the orientation of members of the Council. Appointed committees will receive sufficient orientation and information on the nature of the program to insure that the purposes and the roles expected of each member and the committee will be fulfilled.

Section 6. Compensation. No compensation shall be paid Council members for services rendered to the Council, provided, however, reimbursement may be made to Council members for necessary, authorized expenses.

Article V Meetings

Section 1. Regular Meetings. The Council shall meet monthly at a site designated by the Council chairperson.

Section 2. Annual Meeting. The annual meeting of the Council shall be held for the purpose of electing officers and any other business as may be necessary.

Section 3. Special Meetings. Special meetings may be called by the chair or four (4) members of the Council as deemed necessary, provided seven (7) days notice is given to all members.

Section 4. Emergency Meetings. In the event of an emergency, the Executive Committee may meet and take appropriate action on behalf of the Council.

School-To-Work Council Bylaws

CONTINUED

Section 5. Quorum. One-third (1/3) of the existing members of the Council will constitute a quorum for the conduct of business at any regular or special meeting.

Section 6. Voting. At all Council meetings, each Council member shall have one vote. No proxy votes shall be permitted. Simple majority vote of the quorum shall prevail in all matters except those matters which these by-laws require other than a majority vote.

Section 7. Minutes. The Council shall keep a correct and complete record of all Council proceedings which shall be attested to by signature of the Secretary.

Article VI Parliamentary Authority

Section 1. Rules of order. Meetings shall be conducted according to Robert's Rule of Order in all areas not outlined by the by-laws.

Article VII Amendments

Amendments to these by-laws shall be submitted to all members of the Council in writing at least seven (7) days prior to the meeting and shall require a two-thirds (2/3) vote of all members present.

Article VIII

Conflict of Interest

No Council member or employee of the School-To-Work Council shall have or acquire any interest, direct or indirect, in any project which the Council is operating or promoting, or in any contract relating to any such project of the Council without making written disclosure to the Council of the nature and extent of his/her interest. No Council member who has such interest shall vote on any matter relating to it. Further, no Council member, officer, or employee of the Council shall violate the conflict of interest regulations as established by funding sources or as established by or contrary to Wisconsin Statutes 181.225 or its successors thereto.

Consortium Partners

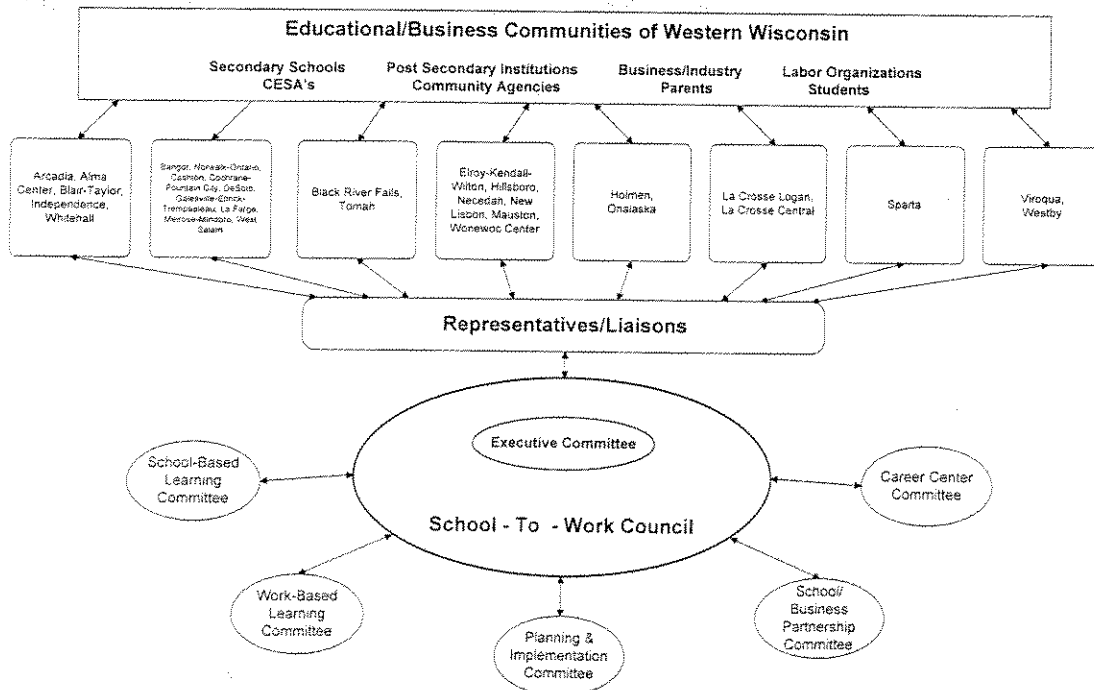
The school districts of Alma Center-Humbird-Merrilan, Arcadia, Bangor, Black River Falls, Blair-Taylor, Cashton, Cochrane-Fountain City, De Soto, Elroy-Kendall-Wilton, Gale-Ettrick-Trempealeau, Hillsboro, Holmen, Independence, La Crosse, La Farge, Mauston, Melrose-Mindoro, Necedah, New Lisbon, Norwalk-Ontario, Onalaska, Sparta, Tomah, Viroqua, West Salem, Westby, Whitehall, Wonewoc-Union Center, CESA #4, CESA #5, Western Wisconsin Technical College, Western Wisconsin Private Industry Council, UW-La Crosse, Viterbo College, Job Service, Greater La Crosse Area Chamber of Commerce, District Lodge 66, Machinist Union, Education Committee La Crosse AFL-CIO, area business, parents and students

96-W-1890-A4

Committee Membership, Communication Structure

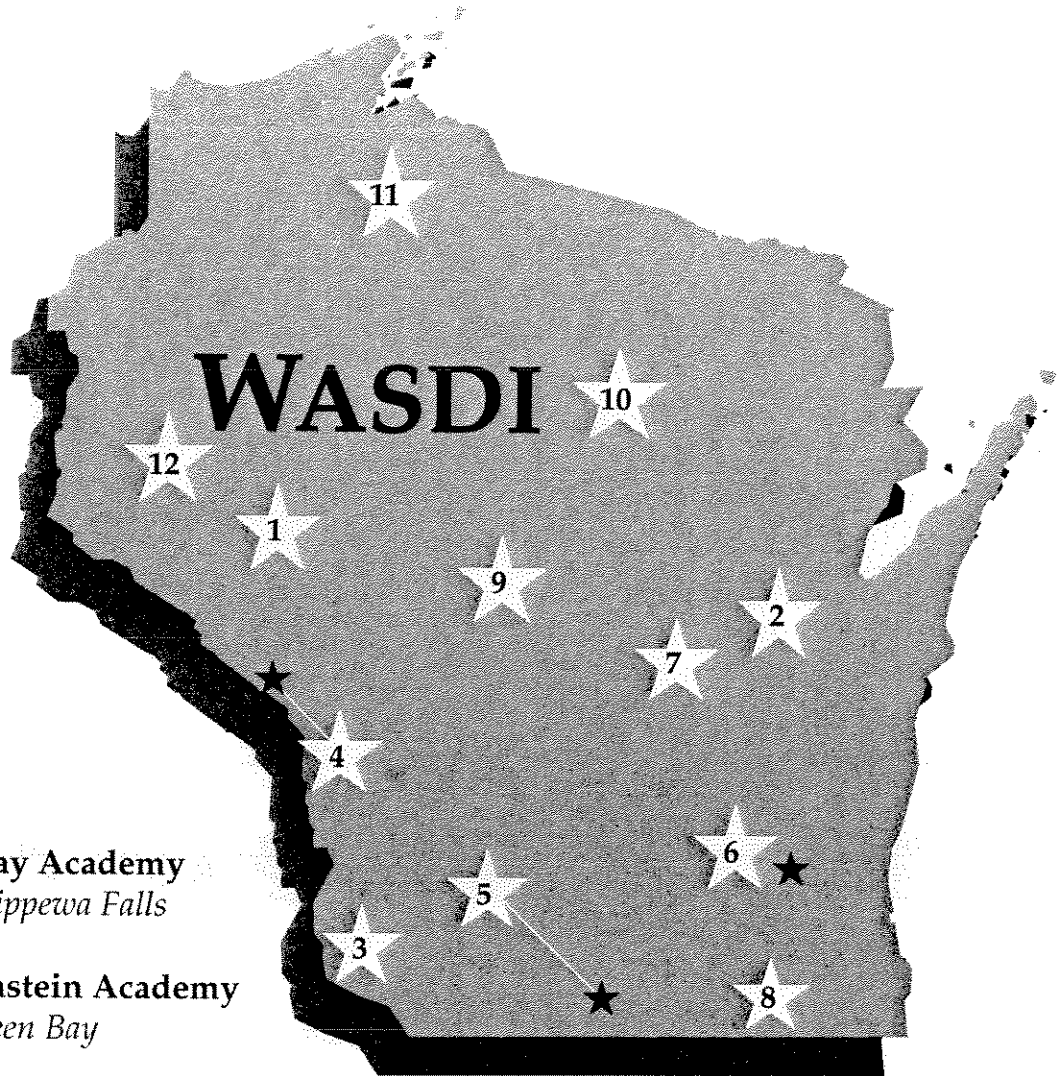
WESTERN WISCONSIN SCHOOL TO WORK CONSORTIUM

Committee Membership and Communication Structure

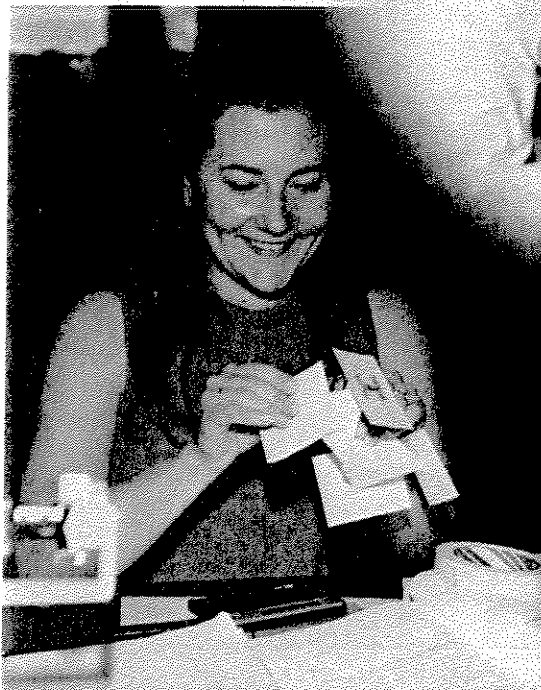
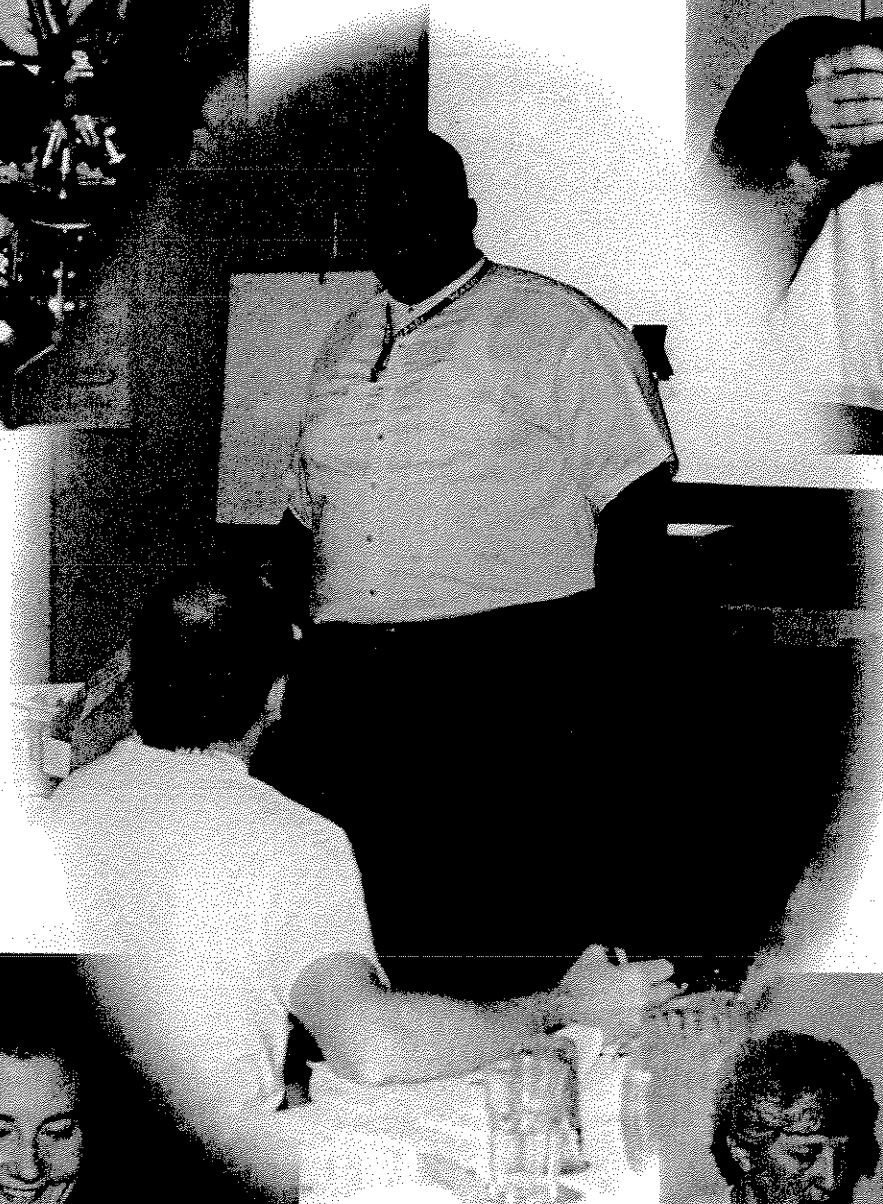
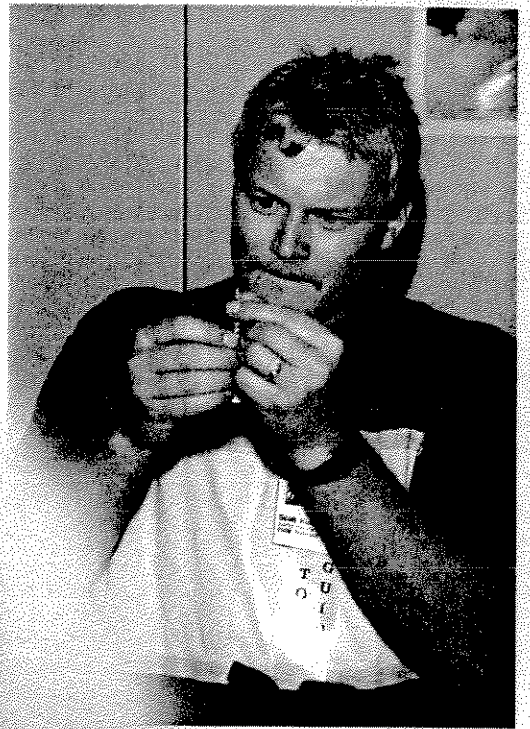


Western Wisconsin Technical College will receive approximately \$734,610 in Carl D. Perkins Vocational and Applied Technology Education Act funds from July 1, 1995 to June 30, 1996 to provide school-to-work opportunities and services to assist students with special needs. These federal funds represent approximately 3 percent of the projected College operational budget of \$25,771,612.

**Wisconsin Academy Staff Development Initiative
1999 Summer Academy Workshops for K-12 Teachers
in Science, Mathematics, and Technology Education**



- | | |
|--|--|
| 1. Cray Academy
<i>Chippewa Falls</i> | 8. Chiwaukee Academy
<i>Kenosha</i> |
| 2. Einstein Academy
<i>Green Bay</i> | 9. Wisconsin River Valley Academy
<i>Stevens Point</i> |
| 3. Southwest Academy
<i>Fennimore</i> | 10. Northwoods Academy
<i>Rhineland</i> |
| 4. Washburn Academy
<i>Onalaska/Holmen</i> | 11. Gitche Gume Academy
<i>Ashland</i> |
| 5. John Muir Academy
<i>Williams Bay/Verona</i> | 12. Star Academy
<i>Amery</i> |
| 6. Sally Ride Academy
<i>Waukesha/West Allis</i> | |
| 7. Christa McAuliffe Academy
<i>Appleton</i> | |



WASDI Academies 1999

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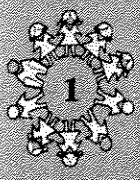
Mathematics, Science and Technology for Teachers



WASDI Academies 1999



Mathematics, Science and Technology for Teachers



History

The Wisconsin Academy Staff Development Initiative (WASDI) is the coordinated, systematic statewide dissemination of a documented successful K-12 staff development program to improve science, mathematics and technology education. WASDI is a five-year teacher enhancement project funded by the National Science Foundation, school districts, businesses, universities and others and is a program of the Wisconsin Academy of Sciences, Arts and Letters. The Wisconsin Academy of Sciences, Arts and Letters is an independent, non-profit, membership organization whose purpose is to advance science, art and literature in the state.

The Wisconsin Academy Staff Development Initiative builds on outstanding examples of mathematics, science and technology education programs in order to revitalize teaching and learning. It is designed to energize gifted and respected K-12 WASDI Lead Teachers and give them the flexibility, responsibility, and resources to affect change. In 1998, ten academies operated with three satellites. Seventy-five WASDI Lead Teachers presented workshops in 1998. In 1999, eleven academies will be operating with four satellites.

The teacher enhancement program of WASDI is modeled after the Cray Academy in Chippewa Falls, initiated and developed with the support of Cray Research, Inc/A Silicon Graphics Co. The goal was to replicate the Cray Academy in ten sites around the state of Wisconsin by 1999 and we have actually exceeded this goal. Each academy is governed by its own board of directors. The entire project is governed by a State Coordinating Committee and an Institute Advisory Committee.

Model

The Academies offer a series of workshops in one-week sessions during the summer. The overall goal of the summer academies is integration. The academies will achieve balance in offerings between science, mathematics, and technology as well as balance within the disciplines. The workshops are led by teachers, nationally-recognized presenters and university and technical college instructors identified for their ability to model effective teaching practices. They provide the teacher-participants with tools, activities, exercises, etc. to engage their students in hands-on work in science, mathematics, and technology. The integration of these disciplines and networking among participants is emphasized.

In addition, during each one-week session, teachers tour local industries and participate in discussions with representatives to gain an understanding of the application of science, mathematics, and technology in the workplace. Pamphlets are developed by some businesses, describing those science, mathematics and technology skills required in their business is provided to each participant. Group discussions reinforce the skills businesses need as well as provide an opportunity for participants to interact in a more direct manner with business leaders. It also gives the business representatives a chance to see and hear what is really going on in education today from the teachers' perspectives.

Academy Directors are encouraged to offer a core series of workshops that are determined by the State Coordinating Committee. The Institute Advisory Committee makes recommendations for these core offerings. Special attention is also given to those programs recommended by the National Science Foundation and National Research Center dissemination projects. Sixty WASDI Lead Teachers are trained each year over an eighteen month period in preparation to serve as instructors for these core programs at the summer academies. Examples of core programs are: FOSS (Full Option Science System), Operation Physics, Connected Mathematics Project, Elementary Technology, Children's Engineering-Design Technology, TERC, BSCS (Science for Life and Living), Principles of Engineering, Biotechnology, Computers, Calculators and Children, Middle School Math Models, SEPUP (Science Education for Public Understanding Program), Core-Plus Mathematics, Communication Technology, Problem Solving, Technology in High School Mathematics, Integrating Technology in High School Science, and High School Algebra for All Students. At the end of the five year project, 300 teachers will be prepared to serve as instructors for these summer academies in the core areas.

Evaluations of the Academies have documented that teachers have changed their attitude toward math and science and have significantly increased the amount of hands-on activities in their classrooms. Evaluators have found that the Academies also provide teachers with the unique opportunity

- to work in other subject areas,
- to renew interest in their profession and revitalize their energy,
- to work with teachers from grade levels other than their own, and
- to further understand the value of their relationships with people in the business community.

WASDI Academies 1999

Academy Sites and Director Information

Chiwaukee Academy, Est. 1998
Kenosha, WI
Dates: August 9-13, 1999
Registration/Tuition Fees: \$275/290/495

Director, **Louise Mattioli - 414-653-7682**
Co-Directors, **Jay Simonsen and Dave Eggebrecht**
3600 52nd Street, Kenosha, WI 53144-2697
Credit issued from UW-Parkside or Carthage College

Christa McAuliffe Academy, Est 1996
Appleton, WI
Dates: July 19-23, 1999
Registration/Tuition Fees: \$315

Director, **Chris Perket - 920-734-7101**
227 S. Walnut Street, Appleton, WI 54913-1855
Credit issued from UW-Oshkosh

Cray Academy, Est. 1988
Chippewa Falls, WI
Chippewa Falls Dates: July 26-30 & August 2-6, 1999
Registration Fees: \$65
Tuition: Districts contribute to the CESA Consortium

Director, **Linda Dunahee, Ph.D. - 715-720-2039**
Program Director CF Site, **Kathy Tulman - 715-720-2034**
725 West Park Avenue, Chippewa Falls, WI 54729
Credit issued from UW-Eau Claire

Einstein Academy, Est 1992
Green Bay, WI
Dates: August 2-6, 1999
Registration/Tuition Fees: \$200

Director, **Sue Theno - 920-983-1104**
3100 Market Street, Green Bay, WI 54304
Credit issued from UW-Green Bay

Gitche Gume Academy, Est. 1999
Ashland, WI
Dates: June 14-18, 1999
Registration/Tuition Fees: \$300

Director, **Peggy Smith - 715-682-2363 ext. 159**
CESA 12, 618 Beaser Avenue, Ashland, WI 54806
Credit issued from UW-Superior

John Muir Academy, Est. 1994
Williams Bay, WI Dates: June 21-25, 1999
Verona, WI Dates: July 26-30, 1999
Registration Fee: \$325

Director, **Marian Balch - 608-264-9808**
3319 West Beltline Hwy, Madison, WI 53713
Credit issued from Edgewood College
Up to three credits available

Northwoods Academy, Est. 1998
Rhineland, WI
Dates: August 2-6, 1999
Registration/Tuition Fees: \$250

Co-Director, **Virginia Metzdorf - 800-544-3039**
PO Box 518 Hwy G, Rhineland, WI 54501
Co-Director, **Penny Kuckkahn**
PO Box 518 Hwy G, Rhineland, WI 54501
Credit issued from Viterbo College

Sally Ride Academy, Est. 1995
West Allis, WI Dates: June 21-25, 1999
Waukesha, WI Dates: August 2-6, 1999
Registration/Tuition Fees: \$300

Director, **Melinda deCorioli, Ph.D. - 414-352-6914**
7058 N. Fairchild Circle, Milwaukee, WI 53217
Credit issued from Cardinal Stritch University
Up to three credits available

Southwest Academy, Est. 1993
Fennimore, WI
Dates: July 26-30, 1999
Registration/Tuition Fees: \$270

Director, **Susan Foster - 920-982-7177**
N3527 Bean City Road, New London, WI 54961
Credit issued from UW-Platteville

Star Academy, Est. 1999
Amery, WI
Dates: June 14-18, 1999
Registration/Tuition Fees: \$175 consortium members
\$315 non consortium members

Director, **Brenda Ramin - 715-986-2020**
225 Ostermann Drive, Turtle Lake, WI 54889
Credit issued from UW-Stout

Washburn Academy, Est. 1994
Holmen, WI Dates: July 26-30, 1999
Onalaska, WI Dates: August 2-6, 1999
Registration/Tuition Fees: \$275

Director, **Cheryl Hanson - 608-786-4833**
PO Box 157, 923 East Garland Street, West Salem, WI 54669
Credit issued from UW-LaCrosse

Wisconsin River Valley Academy, Est. 1998
Wisconsin Rapids, WI
Dates: June 14-18, 1999
Registration/Tuition Fees: \$300

Director, **Dave Rasmussen, 715-345-5569**
2400 Main Street, Stevens Point, WI 54481
Fiscal Agent: CESA 5, Administrator Don Stevens
Credit issued from Viterbo College or UW-Stevens Point

All Academy directors may be reached by email. They all use the same email address with the exception of their first and last names: ex. linda_dunahee@wetrn.pbs.org, cheryl_hanson@wetrn.pbs.org. To email any of the directors type their first name_last name@wetrn.pbs.org

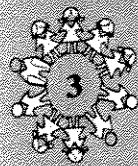
You may also contact the WASDI project director through the same means: julie_stafford@wetrn.pbs.org if you have any questions or comments regarding the information in this booklet.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999



Summer Workshops - General Information

Who are the Academies for?

The Academies are for public and private elementary, middle and high school mathematics, science and technology teachers from the state of Wisconsin. Courses are designed for teachers who are inexperienced in the instruction of science, math and technology as well as the seasoned professional looking for new ideas. They are located geographically around the state for convenient access so that all teachers have the opportunity to attend workshops.

What will be taught?

An increased understanding of concepts presented through "hands-on", problem-solving, cooperative learning, application and demonstration activities encouraging integration of mathematics, science and technology education. New practical teaching strategies, ideas, curriculum, experiential learning and assessment. Knowledge of new, simple inexpensive and accessible materials and technology for classroom application. Participants have many opportunities to share ideas with other teachers, and to enhance your present teaching practices. Attention is also given to the state and national standards where applicable. There are three components to the Academies:

- keynote speaker
- hands-on workshops
- industrial and business tours and discussions

Expenses

Tuition and registration fees for participants may be paid by local school district staff development funds (including Dwight D. Eisenhower Act funds or Goals 2000 funds), business and industry sponsorship or individuals. Similar sources of funding may be used to defray participants' lodging, travel and meal expenses. Daily lunches and breaks are offered at each site. Exact costs for tuition and registration are listed in the individual Academy brochures and on the Academy Site Director's page (2) in this publication.

Graduate Credit

Graduate credit is offered at each of the Academy sites. Each site has a cooperating university which will issue graduate credit. These universities are listed on the Site Director's page (2) for each Academy. Participants may choose to receive Equivalency Clock Hours instead of graduate credit if they so desire. All teachers are required to participate in the workshops, discussions and industrial tours for the entire week. A designated Professor of Record is on site at each of the Academies. Attendance is taken each day including tour day for credit purposes.

Housing

Housing is available in each of the Academy sites at either a local hotel or university dormitory. Hotel sites and rates are given in each of the specific Academy brochures.

Directions

Maps and directions to the Academy sites are located in the Academy brochures. Once a teacher is accepted to an Academy workshop, more information on credit, housing, tours and the workshop will be sent to the teacher.

Weekly Schedule

A majority of the Academy workshops are in session from Monday-Friday during their scheduled weeks. A keynote speaker traditionally kicks off the week in most of the academies. Teachers report to their workshops immediately after the keynote address on Monday morning; Tuesday, Thursday and Friday are full workshop days. Wednesday is devoted to business and industry which includes tours in the morning and discussions in the afternoon. Each Academy workshop consists of at least 30 hours of instruction.

Workshop Information:

Abbreviated descriptions for each of the workshops offered at the Academies during the summer of 1999 are listed on the following pages. They are listed in categorical order by elementary, middle and high school as well as mathematics, science, technology and integrated. For more information on specific workshops, feel free to contact the site director on Page (2) for that academy and a brochure with full descriptions and registration information will be sent to you.

WASDI Academies 1999

Business and Industry Partnerships

The WASDI project includes the development of business partnerships over the life of the five-year NSF grant, in accordance with Goals 2000 and School-to-Work Transition, to insure the permanence of the ten sites around the state. Business and industry are involved with the Academies at three different levels:

- They serve as tour sites for Academy participants in each community.
- They participate in discussions with teachers.
- They make cash or in-kind contributions to support their local Academy or they may contribute at a level to support the state-wide program.

Academy tour sites are listed below in alphabetical order:

3M (CR), Abbott Laboratories (CHI), ABC Supply Company, Inc. (JM), Air Wisconsin Airlines Corporation-Appleton (CM), Akrosil, Division of International Paper (CM), Allen-Bradley Co./Rockwell International (SR), American Astronomical Society (SW), American Family Mutual Insurance Company (JM), AmeriPrint Graphics (CM), Ameritech (CR), Andes Candies, Inc. (JM), Appleton Papers, Inc.-Locks Mill (CM), Appleton Water Filtration Plant (CM), Ayres Associates (CR), Bank One-Appleton (CM), Barnstead/Thermolyne (SW), Bay Technologies (E), Beckart Environmental, Inc. (CHI), Bellin Hospital (E), Blackhawk Engineering (SW), Bothe Associates, Inc. (CHI), Carnes Company (JM), Century Telephone of Wisconsin (W), Chippewa Brass & Aluminum Foundry Ltd. (CR), Chippewa Herald (CR), Chrysler Corporation (CHI), Coating Place, Inc. (JM), Compression Inc. (CR), County Concrete (CR), Courtesy Corporation/McDonald's (W), Covance (JM), Dairyland Power Cooperative (W), Dayton Hudson Corporation (CR), Dick's Supermarket (SW), Dura Tech Screen Printing, Inc. (W), Eau Claire Press Company (CR), Ellis Stone Construction Company (WRV), En Chem (E), Entomology Research Center (CHI), Environmental Management Technical Center (EMTC) (W), Extrusion Dies, Inc. (CR), Federal Aviation Administration (E), Fort Howard Corporation (E), Foth & Van Dyke (E), Franciscan Skemp Healthcare Systems (W), GE Medical Systems (SR), G. Leblanc Corporation (CHI), Georgia Pacific (NW), Green Bay Botanical Gardens (E), Green Bay Metropolitan Sewerage District (E), Green Bay Packaging (E), Green Bay Plastics (E), Green Bay Water Filtration Plant (E), Gundersen Lutheran (W), Haas Automotive (CM), Hardie Interactive (SW), Harley Davidson (NW & SR), Hubbard Scientific Company (CR), Huntsman Packaging (CR), Hutchinson Technology, Inc. (CR), HyPro Inc. (CHI), IDEXX (CR), Image IT (CM), Independent Printing (E), Integrated Paper Services, Inc. (CM), Jacob Leinenkugel Brewing Company (CR), Johnson Matthey (CR), Karen Johnson Products (CHI), Kell Container Corporation (CR), Kenosha Area Business Alliance (CHI), Kikkoman Foods, Inc. (JM), Krueger International (E), Kurth Sheet Metal (CR), LaCrosse Municipal Airport (W), LaCrosse Tribune (W), Lake of the Torches Casino (NW), Lakeside Nursing and Rehabilitation (CR), Lawrence University Science Department (CM), Lee Markquart, Inc. (CR), Luther/Midelfort Health System (CR), Lynch Display Van (CHI), Manu-Tronics (CHI), Marathon Engineering (CM), Marten Machining (WRV), Martin Peterson Company, Inc. (CHI), Mason Shoe (CR), Materials Recovery Facility (WRV), Mayer Lane Farm (CR), Medical College of Wisconsin (SR), Memorial Medical Center (GG), Menasha Corporation-Promo Edge (CM), Midwest Security Insurance Companies (W), Miller Brewing (SR), Mitchell Airport-Midwest Express (SR), MRM Elgin Corporation (CR), Mt. Carmel Medical and Rehabilitation-Burlington (CHI), National Weather Service (E), Natural Creations (CR), Nicolet Instrument Corporation (JM), Nicolet Paper (E), North American Tool Corporation (JM), Northern Crossarm Company, Inc. (CR), Northern Engraving Corporation (W), Northern States Power Company (CR), Northwestern Bank (CR), Notable Impressions (WRV), Ocean Spray Cranberries, Inc. (CHI), Ocenco Inc. (CHI), Omni Tech Corp. (SR), Origin Center/A Phillips Plastics Company (CR), Paper Machine Tour UW-Stevens Point (WRV), Partners in Design Architects, Inc. (CHI), PDM Bridge (CR), Pepsi Bottling Co. (E), Peterson Health Care (NW), Phillips Plastics Corporation (CR), Physical Therapy Association (WRV), PLACON, Inc. (JM), Plexus Technology Center (CM), Plover Water Systems (WRV), Presto Products Company (CM), Promega Corporation/BTCI (JM), Quad Graphics (SR), Racine Area Manufacturers & Commerce, Inc. (CHI), Racine Water and Wastewater Utilities (CHI), Radix Corp. (CR), Rayovac Corporation (SW), Reinhart Institutional Foods, Inc. (W), Rex Systems, Inc. (CR), REXAM Medical Packaging (JM), R.H. Rettler & Associates (WRV), Rockwell Automation at Allen-Bradley (SW), Rooney Printing Company, Inc. (CR), Sacred Heart Hospital (CR), Schneider National (E), Schreiber Foods (E), Sentry Insurance Industrial Hygiene Lab (WRV), Signature Press Inc. (WRV), Silicon Graphics Inc. (CR), Skipperliner Marine (W), Skyward Inc. (WRV), Snap-On Inc. (CHI), St. Elizabeth Hospital (CM), St. Joseph's Hospital (CR), St. Michael's Hospital (WRV), St. Vincent Hospital (E), Sta-Rite Industries, Inc. (JM), STS Consultants (E), The Copps Corporation (WRV), The Title Company, Inc. (W), The Trane Company (W), The UW College of Engineering, UW-Madison (JM), Thunder Lake Marsh (NW), Tosca, Ltd. (E), Triumph Twist Drill (NW), United Health/Appleton Inc. (CM), U.S. Web (SR), Valmet-Appleton Inc. (CM), Victor Allen's Coffee and Tea, Inc. (JM), Voith Sulzer Paper Technology (CM), Waukesha Engine (SR), Waukesha Foundry (SR), Waukesha Memorial Hospital (SR), W.H. Brady Co. (SR), W.S. Darley & Company (CR), Wal-Mart Distribution Center (CR), Walnut Hollow Farm (SW), Watson Industries, Inc. (CR), Waxdale (CHI), West Allis/West Milwaukee Police Department (SR), Winnebago Software (W), WPS (NW), Wisconsin Physicians Service Insurance Corporation (JM), Wisconsin Public Service (E) & (WRV), Wisconsin Rural Water Systems (WRV), Wisconsin Tissue Mills (CM), Wissota Tool & Machine, Inc. (CR), WJFW 12 - NBC (NW), WKTY Radio (W), WLUK-Fox 11 (E), Workforce Development Center (SR), Worzalla Publishing Company (WRV), XMI Tie (CR)

Legend for initials after tour site name:

CHI	Chiwaukee Academy	NW	Northwoods Academy
CM	Christa McAuliffe Academy	SR	Sally Ride Academy
CR	Cray Academy	ST	Star Academy
E	Einstein Academy	SW	Southwest Academy
GG	Gitche Gumees Academy	W	Washburn Academy
JM	John Muir Academy	WRV	Wisconsin River Valley Academy



Mathematics, Science and Technology for Teachers



WASDI Academies 1999

Business and Industry Partnerships

Listed below are the businesses, agencies, individuals or institutions which made financial or in-kind contributions to the Academies:

Mathematics, Science and Technology for Teachers

3M Company-Menomonie (CR), ABC Supply Company, Inc. (JM), ABR Employment Services (WRV), Academy Committee (E), Advisory Board (SR), Affordable Maytag Home (WRV), Air Wisconsin Airlines Corporation (CM), Akrosil, Division of International Paper (CM), Aldrich Chemical (SR), Alwin Manufacturing Company (E), American Astronomical Society (SW), American Family Mutual Insurance Company (JM), American Medical Security (E), AmerPrint Graphics (CM), Ameritech (CM, CR, SR), Amplas, Inc. (E), Anamax Corp. (E), Anchor Bank (JM), Andes Candies, Inc. (JM), AON/Alexander & Alexander (E), Appleton Area School District (CM), Appleton Papers, Inc.-Lock Mills (CM), Appleton Water Filtration Plant (CM), Apple Computer, Inc. (CR), Ashland School District (GG), Ashwaubenon Teacher's Association (E), AT&T (JM), ATO Findley, Inc. (SR), Ayres Associates (CR), B&R Services (E), Bank One-Appleton (CM), Barnstead/Thermolyne (SW), Baus Catering (W), Bay Towel/Royal Cleaners (E), Belmark, Inc. (E), Belson Co. (E), Berners-Schober Associates (E), Blackhawk Engineering (SW), Bloomer Plastics, Inc. (CR), Board of Directors (E, JM, SW), Brio Corp (SR), Brown County Medical Alliance (E), Business Steering Committee (W), Byron Walters Family Trust (E), C.A. Lawton Co. (E), Cardinal Stritch University (SR), Carnes Company (JM), Carolina Biological Supply Company (SR & E), CASL Technologies (SR), Cellular One (CHI), Cellular Plus Communications (CR), Century Foods International (W), Century Telephone of Wisconsin (W), CESA 1 (SR), CESA 10 (CR), CESA 11 (CR), CESA 2 Staff Development (JM), CESA 3 Dwight David Eisenhower Consortium (SW), CESA 4 (W), CESA 6 (CM), CHADD (W), Children's Museum (W), Chileda (W), Chippewa Area Catholic Schools (CR), Chippewa Brass & Aluminum Foundry (CR), Chippewa Falls School District (CR), Chippewa Herald (CR), Chippewa Valley Technical College (CR), Coating Place, Inc. (JM), Coca-Cola Bottling Company (E and CM), Communications Systems International, Inc. (CR), Community Industries Corp. (WRV), ConCAD Technologies (W), Consolidated Thermoplastics (CR), Consolidated Papers (WRV), Copp's (E), Cornell Corporation (CR), Cornerstone Foundation of Northeastern WI (E), Cotter Funeral Home (E), Coulee Region United Educators (W), Coulee Children's Center (W), Coulee Region United Educators (W), Coulee State Bank (W), County Concrete Corporation (CR), Courtesy Corporation/McDonald's (W), Covance (JM), Cummins Great Lakes (E), Curriculum and Operations Committee (SR), Daanen & Janssen, Inc. (E), Dahl Ford, Subaru, Mitsubishi, Inc. (W), Dairyland Power Cooperative (W), DAKA International (SR), Daleo Machine (SW), Davy Engineering (W), Dayton Hudson Corporation (CR), Delavan-Darien High School (JM), Dean Foods Vegetable Co. (E), Denmark PTO (E), Department of Natural Resources (W), De Pere Optimist Club (E), De Pere Teacher's Association (E), De Soto Schools - Prairie View Garden Project (W), Dick's Supermarket (SW), Discovery World Museum (SR), DuBois Formal Ware (E), Dunn County News (CR), Duplicating Systems (E), Dura-Tech Screen Printing, Inc. (W), Egan Foundation (E), E.O. Johnson (CR), Earth Shuttle Educational Travel Programs (CM), Eau Claire Press Company (CR), Edgewood College (JM) Employers Health Insurance (E), Entertainment Publications (SR), Environmental Management Technical Center (W), Evjue Foundation, Inc. The Charitable Arm of the Capital Times (JM), Exec PC (SR), Extrusion Dies, Inc. (CR), FABCO Equipment (E), Family Resource Center (W), Federal Aviation Administration (E), First Northern Savings Bank (E), Firstar Bank (JM), Firstlogic (W), First Security Credit Union (E), Fisher Family (E), Foley & Lardner, Attorneys at Law (JM), FMC Corporation (E), Fort James Corporation (E), Foth & Van Dyke (E), Fox Cities Alliance For Education (CM), Fox Cities Chamber of Commerce & Industry (CM), Fox Valley Technical College (CM), Franciscan Skemp Healthcare Systems (W), Gambo-Johnson (WRV), Gelatt Roberta K. and Daniel (W), Gelatt Phillip M. Foundation (W), GenCorp Polymer Products (E), General Casualty (JM), General Mills Corporation (W), George Kress Foundation (E), Goals 2000 Mini Grant (JM), Good Humor Ice Cream (E), Grace Tec Systems (E), Granulation Technology (E), Greater Green Bay Community Foundation (E), Greater Green Bay Kiwanis Club (E), Green Bay Auto Dealers Association (E), Green Bay Bankers Association (E), Green Bay Builders Association (E), Green Bay Drop Forge (E), Green Bay Metropolitan Sewerage District (E), Green Bay Optimist Club (E), Green Bay Packers Foundation (E), Green Bay Press Gazette (E), Green Bay Rotary Club (E), GTE Foundation (JM), Gundersen Adolf and Virginia (W), Gundersen Lutheran (W), Haas Automotive (CM), Hardie Interactive (SW), Harley-Davidson (SR), Hawkings, Ash, Baprie and Co. (W), Heintzkill Chiropractic (E), Herbert H. Kohl Charities, Inc. (JM), Heyde Companies (CR), Hoida Lumber Co. (E), Holmen High School & Staff (W), Holt, Rinehart, Winston (SW), Howard-Suamico Optimist Club (E), Howard-Suamico Teacher's Assoc. (E), Hubbard Scientific Company (CR), Hutchinson Technology, Inc. (CR), Hypro Inc. (SW), Image IT (CM), Imperial Inc. (E), Independent Printing (E), Industrial Recyclers of Wisconsin (WRV), Infinity Technology (E), Integrated Paper Services, Inc. (CM), International Paper Co. Foundation (E), Internet Connect (CR), Jacob Leinenkugel Brewing Company (CR), J.C. Penney Co. (E), Johnson Matthey (CR), Julie C. Stafford (CR), Junior Achievement (WRV), Kell Container Corporation (CR), Kikkoman Foods, Inc. (JM), Kiwanis Club of Greater Green Bay (E), Klein Insurance Group (W), Konop Vending (E), Kroll's West (E), Kubiak Pools (E), Kurth Sheet Metal (CR), Kwik Trip, Inc. (W), LaCrosse County Human Services (W), LaCrosse Family and Childrens Services (W), LaCrosse Footwear (W), LaCrosse Municipal Airport (W), LaCrosse Tribune (W), Lakeside Nursing and Rehabilitation (CR), Lakeside Nursing and Rehabilitation (CR), Lawrence University Science Department (CM), Leader Telegram (CR), Lee Markquart, Inc. (CR), Leicht Transfer & Storage (E), Lindquist Machine Corporation (E), Lochner Kathy & Jon (E), Lord's Dental (E), Los Banditos (E), Luther/Midelfort Health System (CR), Lutsey Family Insurance (E), M&I Bank of Madison (JM), Madison Gas & Electric (JM), Marathon Engineering (CM), Marathon Travel & Cruise Shops (WRV), Marten Machining, Inc. (WRV), Mayer Lane Farm (CR), MCL Industries (E)

Legend for initials after business partner name:

CHI	Chiwaukee Academy	NW	Northwoods Academy
CM	Christa McAuliffe Academy	SR	Sally Ride Academy
CR	Cray Academy	ST	Star Academy
E	Einstein Academy	SW	Southwest Academy
GG	Gitche Gumee Academy	W	Washburn Academy
JM	John Muir Academy	WRV	Wisconsin River Valley Academy

WASDI Academies 1999

Business and Industry Partnerships cont.

Listed below are the businesses, agencies, individuals or institutions which made financial or inkind contributions to the Academies:

Academies:

McMonagle Lumber (E), Medical College of Wisconsin (SR), Menasha Corporation (CM), Meyer Family Foundation (E), Mid-State Technical College (WRV), Midwest Security Insurance Companies (W), Miller & Sons Super Market, Verona (JM), Miller Brewing Company (SR), Millprint, Inc. (E), Modern Screen Printing, Inc. (CR), Moore Response Marketing Services (E), Morning Glory Farms (E), MRM Elgin Corporation (CR), NASCO (SW & SR), Nelco, Inc. (E), Newton's Apple (SR), Nicolet Instrument Corporation (JM), NMT Corporation (W), Norman Bassett Foundation (JM), North American Tool Corporation (JM), Northern Crossarm Company, Inc. (CR), Northern Engraving Corporation (W), Northern States Power Company (CR), Northland Cold Storage (E), Northwestern Bank (CR), Onalaska High School (W), Onalaska Middle School (W), Onalaska School District Staff (W), Onalaska Show Choir (W), Oneida Tribe of Indians of Wisconsin (E), Origin Center/A Phillips Plastics Company (CR), Ovation Marketing (W), Packerland Packing Co, Inc. (E), Paper Converting Machine Co. (E), Passarelli's Pizzeria (CHI), PDM Bridge (CR), Pepsi-Cola (E), Pepsi-Cola General Bottlers (CHI & SR), Perini America, Inc. (E), Phi Delta Kappa (E), Piechowski Dr. Sue (E), Pizza Hut-Chippewa Falls (CR), PLACON, Inc. (JM), Plexus Technology Center (CM), Plover Wastewater Systems (WRV), Pomp's Tire Service Inc. (E), Pope & Talbot-Eau Claire (CR), Portage Co. Job Center (WRV), Program Planning Committee (W), Presto Products Company (CM), Program Advisory Committee (JM), Promega Corporation/BTCI (JM), Pulaski Teachers Association (E), Rayovac Corporation (SW), Reinhart Family D.B. and Marjorie Foundation (W), Reinhart Institutional Foods, Inc. (W), Rex Systems, Inc. (CR), REXAM Medical Packaging (JM), River's Bend Supper Club (E), Rock Garden Supper Club (E), Rockman's Catering (WRV), Rockwell Automation at Allen-Bradley (SW and SR), Romco, Inc. (E), Rooney Printing Company, Inc. (CR), Sacred Heart Hospital (CR), Sam's Club (E), Schauer & Schumacher (E), Schlueter David (W), Scholastic, Inc. (SR), Schreiber Foods, Inc. (E), Senn Blacktop, Inc. (CR), Serigraphics Screen Print, Inc. (W), Service League of Green Bay (E), Service Master (E), Shopko Stores, Inc. (E), Shopping News (SW), Silicon Graphics Computer Systems (CR), Skipperliner Marine (W), Skyward Inc. (WRV), Spectrum Industries (CR), St. Elizabeth Hospital (CM), St. Joseph's Hospital (CR), Sta-Rite Industries, Inc. (JM), State Bank of LaCrosse (W), Steering Committee (CM), Steen-Macek Paper Co. Inc. (E), Stock Lumber, Inc. (E), STS Consultants (E), Super Sports (CHI), T-Bo Studio (CR), Tectron Tube (E), The C.A. Laston III Family (E), The Falk Corporation (SR), The Pineries Bank (WRV), The Procter & Gamble Paper Products Co. (E), The Scope Shop (SR), The Selmer Company (E), The Title Company, Inc. (W), The Trane Company (W), Therma-Tron-X, Inc. (E), Thursday Morning Optimist Club (E), Triangle Distributing (E), Tosca, Ltd. (E), Tri-State Business Machines (W), Tufco Industries (E), Tweet-Garot Mechanical, Inc. (E), United Health/Appleton Medical Center (CM), University of Dubuque Flight Operations Center (SW), U.S. Paper Mills Foundations, Inc. (E), UW College of Engineering, UW-Madison (JM), UW-Eau Claire (CR), UW-LaCrosse (W), UW-Milwaukee (SR), UW-Oshkosh (CM), UW-Parkside (SR), UW-Stout (CR), Valley Cabinet (E), Valmet-Appleton, Inc. (CM), Verene Crane, (CR), VerHalen, Inc. (E), Verona School District (JM), Victor Allen's Coffee and Tea, Inc. (JM), Volunteer Center (E), Voith Sulzer Paper Technology (CM), W.H. Brady Co. (SR), W.S. Darley & Company (CR), Wal-Mart Distribution Center (CR), Walgreens (SR), Wal-Mart (E), Walnut Hollow Farm (SW), Washburn Academy Business Steering Committee (W), Washburn Academy Volunteers (W), Watson Industries, Inc. (CR), Waukesha County Technical College (SR), Waukesha School District, Nicolet High School (SR), West Allis/West Milwaukee School District (SR), Wettstein's (W), Winnebago Software (W), Wisconsin Educational Communications Board (CM, CR, E, JM, SR, SW and W), Wisconsin Manufacturers & Commerce (CR), Wisconsin Physicians Service Insurance Corporation (JM), Wisconsin Power & Light Company (JM), Wisconsin Power and Light Foundation (JM), Wisconsin Public Service (E & WRV), Wisconsin Rural Water (WRV), Wisconsin Tissue Mills (CM), Wissota Tool & Machine, Inc. (CR), WKTY Radio (W), W.O.S. Inc. (E), Wright Industrial (E), Wrightstown Teacher's Association (E), W.S. Patterson (E), W.W. Grainger (E), WWTC (W), Zoll Stone (E)

Legend for initials after business partner name:

CHI	Chiwaukee Academy	NW	Northwoods Academy
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CR	Cray Academy	SW	Southwest Academy
E	Einstein Academy	W	Washburn Academy
GG	Gitche Gumee Academy	WRV	Wisconsin River Valley Academy
JM	John Muir Academy		



Mathematics, Science and Technology for Teachers



WASDI Academies 1999



Mathematics, Science and Technology for Teachers



Elementary Workshops - Mathematics



Investigations in Number, Data, and Space: Teaching Investigations - Grades K-5 (JM Williams Bay & CR)

Presenter at JM: Kerri Wood, River Heights Elementary, Menomonie, WASDI Lead Teacher

Presenter at CR: Jan Mokros, TERC Co-Director, Cambridge, MA

Investigations is a staff development program aimed at helping elementary teachers understand how math reform plays out in your own classrooms as you use the highly-acclaimed curriculum Investigations in Number, Data, and Space. The curriculum used in this workshop is a series of comprehensive units that comprise a complete K-5 mathematics curriculum designed to guide students and teachers in the complementary roles of investigation and inquiry. Teachers will explore the curriculum within the strands of the Wisconsin State Standards of mathematical processes, number relationships, geometry, measurement, statistics and probability and algebra. The final project of the course will be a curriculum map for teaching math in the upcoming school year based on the investigations curriculum within an overlay of how standards are met.

Hands-on, Minds-on Authentic Learning Experiences in Mathematics - Grades K-2 (SR West Allis)

Presenters: Diana Duffey, WASDI Lead Teacher and Penny Krafczyk, Willow Glen Elementary

This workshop will emphasize interactive learning, hands-on activities, and child-centered mathematical instruction. Topics to be addressed include number sense, problem solving, data and graphing, geometry, probability and measurement. Teachers will learn to identify activities and lessons that foster the NCTM and Wisconsin Standards. Assessment tools and strategies will be examined throughout the workshop.

Mathworks: Trim Down and Shape Up Your Mathematics Curriculum - Grades 1-5 (SR West Allis)

Presenters: Shelley Long and Chuck Paulson, Southern Bluffs Elementary, LaCrosse, WASDI Lead Teachers

Participants will be learning how to develop their own curriculum by using supplementary materials and their own creative talents. This workshop approach to mathematics instruction is an interactive, hands-on, student driven curriculum. Topics such as graphing, number sense, problem solving, geometry and other topics will be covered. You will be actively involved in small group and large group interactions.

So How Do You Integrate Math Anyway? - Grades 3-5 (SR Waukesha)

Presenter: Vicki Slafter, Kenosha Unified School District, WASDI Lead Teacher

In this workshop, we will take an indepth look at the practical integration of science, social studies and language arts with mathematics. Participants will investigate the mathematics standards and their implications toward student learning and assessment. We will closely study the standards of number operations/relationships, geometry/measurement and statistics/probability through participation in manipulative-based, student-centered activities.

Concentrate on Concepts: Building Basics with Better Understanding - Grades K-2 (SW, CHI & WRVA)

Presenter: Maggie Paoletti, Forsyth County School District, GA, WASDI Lead Teacher

This workshop is designed to emphasize the use of problem solving, literature and manipulatives in a constructivist classroom. Participants will review how best to manage the classroom using math center activities which concentrate on the standards. Friday's work will include a make and take session to recreate materials for use in your classroom. Number sense and numeration, probability, geometry, communication and connections and guided practice of CGI problem types are some of the areas which will be covered.

Designing Learning Environments for Developing Understanding of Geometry and Space - Grades K-4 (SW)

Presenter: Mazie Jenkins, Madison Public Schools

This geometry and measurement workshop will focus on the research-based framework developed by Prof. Richard Lehrer and others from the University of Wisconsin. Participants will examine dimension, form, classification and representation of two and three dimensional structures. We will explore units and intervals in measurement, distance and direction in the study of wayfinding, explore ideas of symmetry and similarity in a variety of contexts, and examine the use of geometry to model world experiences and situations.

Green Globbs, the Wild West and More!!! - Grades 3-8 (NW)

Presenters: Michelle Parks and Barb Riedel, Eau Claire Public Schools, WASDI Lead Teachers

Participants will be engaged in activities using several sunburst computer software programs and videodisc programs. Participants will actively experience geometric concepts, algebraic concepts, and more using technology through a constructivist model. Throughout the workshop, classroom management ideas, research and the learning process will be discussed.

WASDI Academies 1999

Elementary Workshops - Mathematics cont.



AIMS - Math Connections: Patterns, Problem Solving, and Practice - Grades 3-5 (WRVA)

Presenter: TBA

Students will find the AIMS approach to the study of numbers refreshing and interesting. In geometry, the approach differs from that in common use. Studies begin with solids, the geometric objects most familiar to students. The connection between mathematics and science becomes more meaningful within the AIMS curriculum in which combinations of measurements are studied for their production of new units of measurement. Number Sense and Operations, Geometry and Spatial Sense, Dealing with Data and Chance and Patterns and Functions will be covered in this workshop.

Meeting the Challenge of the State Math Standards - Grades 3-6 (WRVA)

Presenter: Elaine Hutchinson

This workshop is designed to give teachers experiences that focus on the goals of the Wisconsin Academic Standards. Hands-on activities will relate the concepts of number operations and relations, geometry, measurement, probability, statistics, and algebraic relationships to the overarching goals of developing mathematical processes. Participants will work in group problem solving situations. They will be given exposure to activities and learning processes similar to those described in the State Standards and then be expected to use the experiences from the workshop to develop materials that can be used in their classrooms.

Tapestries for Learning - Grades K-2 (CR)

Presenter: Maggie Paoletti, Cummings, GA, WASDI Lead Teacher

What do How Many Bugs in a Box? Science and Mathematics concepts have in common? Inside this colorful book is the means to teach counting to children using whimsical insects as the teaching tool. This workshop is designed to immerse participants in an integrated learning setting which can be recreated in the classroom. Learn to choose and use literature to expand math and science concepts. Explore a variety of computer software applications as tools for teachers and students and discover curriculum links to Internet sites which can be used in a single computer classroom.

Everyday Math (Developed by the University of Chicago) - Grades 2-5 (CHD)

Presenters: Tracy Taylor-Johnson and Shelly Long, WASDI Lead Teachers

This course will aid participants in the implementation of this new math curriculum. Learn how to enhance math instruction with supplemental materials and your own creative talents. This is an interactive, hands-on approach to teaching math. Participants will work on all math topics and will investigate alternative and authentic assessment.

From the Land of Ahhhs...Adventures in Math (and Science) for the Senses - Grades 4-6 (CHD)

Presenter: Bobbette Bruce, Lublin, WASDI Lead Teacher

Teachers won't be able to stay in their seats during this workshop! You will experience math and science kinesthetically, as well as, aesthetically. Investigate and create interesting sights, sounds and motions while learning science and mathematics.

Mathline - Grades K-12 (CHD)

Presenter: Susan Cook, Oconomowoc, WASDI Lead Teacher

Learn how to use the Mathline videos to plan lessons and units that help students learn important math content, the ability to communicate and reason mathematically and be more confident problem solvers. The Wisconsin/PBS MATHLINE project is a nationally recognized, year-long program for K-12 teachers. The workshop includes an on-line component and a video series featuring classroom teachers modeling exemplary NCTM based lessons with their students.

Read Any Good Math Lately - Grades K-2 (W Onalaska)

Presenters: Barb White and Mary Johnson, Holmen

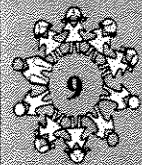
Turn math into an exciting adventure for your students. Through the use of literature, cooperative games and hands-on activities, make math come alive in your classroom. This workshop will help participants develop lessons that correlate with the national and state standards in math.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999



Elementary Workshops - Mathematics cont.



CPR - Put Some Life Into Your Math Curriculum - Grades 3-6 (W Onalaska)

Presenter: Judy Fadness, Eau Claire, WASDI Lead Teacher

In this workshop you will learn a powerful way to incorporate children's literature into the teaching and learning of mathematics, how to make the key communication skills of representing, talking, listening, and writing an integral part of your mathematics curriculum, to use calculators as a valuable tool for learning mathematics, to use problem-solving approaches to investigate and understand mathematical content, ways to provide children with opportunities to apply their reasoning skills and ways to assess standards-based mathematics.

So We Have Math Standards. Now What? - Grades K-6 (ST)

Presenter: Kerri Wood, Menomonie, WASDI Lead Teacher

This workshop is for those of you who have been feeling the pressures of standards and testing. Participants will leave with unit plans that are focused on essential learning for all students.

Bridges to Classroom Mathematics - Grades K-6 (CR Core Program)

Presenters: Becky Bartlett and Kathleen Pitvorec, University of Chicago

This workshop will help participants understand the mathematics and pedagogy behind curricula such as USCMP's Everyday Mathematics and TERC's Investigations in Number, Data and Space. The workshop will approach topics such as number theory, probability, geometry and statistics in ways consistent with these reform curricula. Teachers will experience on their own level the kind of mathematics reformers want them to provide for their students. Because these new programs provide numerous classroom activities, this workshop focuses more on deepening participants' understanding of mathematics than on activities that are immediately applicable to the classroom.

Mathematics Their Way - Grades K-2 (WRVA)

Presenter: Chris Weinhold

This workshop introduces mathematical topics through practical and meaningful activities which inspire thinking and curiosity in the learner. The emphasis of the workshop is to help the learner understand interrelated mathematical processes within the context of rich experiences rather than mastery of isolated skills. Mathematics Their Way provides teachers with a variety of classroom methods and materials which allow children to develop and use mathematical concepts. The goal of this program is to teach children how to learn.

TIEM+ (Elementary Plus) - Grades K-6 (WRVA & GG)

Presenter: Provided by Texas Instruments

This five-day (30 hour) workshop is to engage teachers in mathematically worthwhile activities that illustrate the unique experiences that the TI Math Mate™ AOS™ four functions calculator and the TI Math Explorer fraction calculator brings to the learning of mathematics in the elementary grades. Topics addressed include numeration, operations, patterns, geometry, measurement, probability, statistics, and graphing.

Math Under Construction: "Redesign and Rebuild Your Math Curriculum" - Grades 2-5 (WRVA & E)

Presenters: Shelly Long and Chuck Paulson, WASDI Lead Teachers, WRVA

Shelly Long and Tracy-Taylor Johnson, WASDI Lead Teachers, E

Math Under Construction will help you redesign and rebuild your math curriculum. It will teach you to focus on your district's scope and sequence, the National and State Standards, and individual and multi-age developmental levels. You will learn how to add or replace parts of your curriculum by using supplemental materials and your own creative talents. You will be actively involved in topics such as measurement, geometry, problem solving, graphing and so much more.

Assessing the Standards in Mathematics - Grades K-12 (SR Waukesha)

Presenter: Jim Marty, Waukesha, WASDI Lead Teacher

The purpose of this workshop is to get individual teachers more familiar with the Wisconsin Model Academic Standards in Mathematics and the Standards 2000 project currently being undertaken by the National Council of Teachers of Mathematics. You will examine an assortment of samples of assessment materials and then working in small groups by grade level, develop assessment instruments which reflect the Standards at that grade level to take back to your classroom.

WASDI Academies 1999

Elementary Workshops - Mathematics cont.



Cognitively Guided Instruction - Grades K-3 (JM Verona) & Grades 1-3 (SR Waukesha)

Presenters: Susan Gehn, Nichols Elementary, Monona at JM and Paul Becher, Waukesha at SR

Participants will learn about children's understanding of place-value concepts and the development of strategies for adding/subtracting and multiplying/dividing multidigit numbers as natural extensions of the procedures that children use to solve problems involving single digit numbers. We will also look at some of the concepts and strategies that children use in developing rational number concepts.

Computer Tech-Knowledge-Gee! - Grades 3-8 (JM Verona)

Presenter: Jeff Lucas, Spring Road School, Neenah, WASDI Lead Teacher

Learn how MacIntosh computers can upgrade your teaching. Many ideas and activities for integrating computers into your math and technology curriculums will be explored using drawing, painting, word processing, database and spreadsheet ClarisWorks applications. These integrated curricular activities teach computer procedures as they expand classroom learning using authentic computer files. You will also learn to use the computer as a professional tool for assessment, record keeping, and creating a variety of other useful classroom products.

Classroom Miniature Golf - Grades 3-6 (E)

Lori Williams, Manitowoc, WASDI Lead Teacher

Participants will use the design process from the technology education standards to construct a mini golf course within specifications given by the instructor. Participants will find that limitations force students to solve problems and think mathematically. Teachers will also choose state standards which they would like to include in units of their own and will create outlines for integrated units.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999



Mathematics, Science and Technology for Teachers



Elementary Workshops - Science



"I" is for Math, Science and Technology Education - Grades K-2 - (CR Core Program), (CM, W Onalaska & SR West Allis)

Presenters: Candy Nerge and Rosanne Cowan, WASDI Lead Teachers

Investigate a theme a day the math, science and technology way! Ignite interest in your students with research based ideas and games to incorporate into thematic units. Incorporate quality children's literature and authentic assessments into your curriculum. This workshop invites K-2 teachers to explore hands-on science strategies, questioning techniques and the applications of technology in an exemplary cohesive science program (FOSS). You will learn how to structure similar inquiry based learning activities by exploring Earth, Life and Physical Science through FOSS science kits.

Balancing Crowds, Stream Beds and Swingers - Grades 3-6 - CR (Core Program)

Presenters: Don Primmer and Bruce Oxley, WASDI Lead Teachers

This program provides a fresh approach to science instruction and assessment for students in grades three through six. It is a carefully planned and coordinated science curriculum. Many of the strategies make hands-on science engaging for teachers as well as students. The program's instructional features are: science background information for the teacher, detailed lesson plans that are easy to follow and adaptable to many teaching styles. Students investigate, experiment, gather data, organize results and draw conclusions based on their own actions. This workshop is intended for intermediate teachers who are planning to implement a national standards-based science program using materials from nationally recognized curricula developed with support from the national Science Foundation. The curriculum presented utilizes a modular design and can be used either as stand alone or supplementary units.

Farther Beyond the Dog & Pony Show - Grades 3-6 (CM) and Grades 3-8 (NW)

Presenters: Bruce Oxley and Don Primmer, WASDI Lead Teachers

You will be presented with a wide variety of life, earth, physical, and environmental science activities that can be infused and integrated into your existing curriculum. Together we will explore science magic to arrive at ways to develop and increase your students science process skills. In addition, you will take a thorough look at the activities' relevance, applications, integrations, extensions and assessments, as well as their connections with Wisconsin's state standards.

Third Rock from the Sun - Grades K-5 (ST)

Presenter: Jane Wisniewski, WASDI Lead Teacher

Participants will explore methods of teaching geology and earth science topics. Along with a \$100 stipend for the first 20 registered, there will be free resources, speaker ideas, and local field trip sites included.

Summer Academy Chemistry Course - Grades K-4 (ST)

Presenter: Martin Ondrus

This is a hands-on look at the Wisconsin Science Standards that relate to the classification of matter, the collection and interpretation of data, types of chemical reactions, classification strategies along with an overview of the people that have contributed major ideas in science.

Building Responsible Environmental Behavior - Grades K-8 (GG)

Presenter: Sandra Roggow, Minocqua 1997 Wisconsin Environmental Educator of the Year

This hands-on interactive workshop will address both the "why" and "how" of integrating environmental education across the curriculum. Participants will create units which will help students build the knowledge and skills needed to become stewards of our natural resources. The use of journals will be closely examined as a tool for students to record information, reflect on learning and connect actions to real-life situations. Participants will also develop assessment tools to evaluate critical and creative thinking.

Classroom Tested and Approved Science - Grades 3-8 (SR Waukesha)

Presenter: Sharon TeRonde, Franklin & Dave Kowal, Wauwatosa

Join us in an active, problem-solving workshop which will involve you in numerous discrepant events, challenges, puzzles and activities designed to challenge one's thinking. These inquiry-based ideas can be easily adapted for your own classroom. These classroom tested (and approved) activities use simple and inexpensive materials.

WASDI Academies 1999

Elementary Workshops - Science cont.



Using Toys to Teach Science - Grades 4-12 (CM) and Grades 3-12 (JM Williams Bay)

Presenter: Larry Scheckel, Tomah High School

This course will teach you how to use toys effectively as part of the science curriculum. Classroom friendly toys are an effective means of harnessing students' natural enthusiasm. Lesson plans, concept development, hands-on learning, and the learning cycle will all be part of this exciting week. Over two-hundred science related toys will be demonstrated. Participants will make and take several dozen toys and receive many handouts.

Nature-alizing Your Students - Grades K-8 (WRVA, CM & SR West Allis, Grades 2-6 SW, Grades 1-8 W Onalaska)

Presenter: Scott Lee

It doesn't matter what the season, what resources you have available how knowledgeable you are of our natural world or what age you teach. There is a lot you can do to help your students learn about the natural environment. Many hands-on activities, make-and-take projects and games to teach about nature to all age levels will be presented throughout the week. You will be presented many ideas to "environment-alize" and "nature-alize" your students in a fun and educational way.

Language Arts and Science: Working Hand-in-Hand - Grades K-5 (SR Waukesha)

Presenters: Melody Orban, Kenosha Unified School District and

Richard Seng, Denison Middle School, WASDI Lead Teachers

During this workshop, participants will realize how effectively they can coordinate their Language Arts lessons with some of the concepts in their science curriculums. There will be make and take opportunities to build science apparatus for use in your own classrooms. This program will be filled with proven classroom activities. Each day there will be information of different Children's Literature and science.

Science Connections - Grades K-3 (SR Waukesha, CM & JM Verona)

Presenter: Karen Kinyon, Franklin School, Manitowoc, WASDI Lead Teacher

Come and explore fascinating activities such as magic and magnetic sand, seltzer surprises, treasure rocks, mystery crystals and light sticks. These are some of the science connections that will integrate science into all aspects of a curriculum of your choice. Particular integrations for language arts, mathematics and art will be used in the hands-on, minds-on experiences. Participants will leave the workshop with a wealth of hands-on activities relating to color and light, insulation, surface tension, sound, measurement, pressure and states of water. You will participate in and leave with the directions to set up a Family Night Science and Halloween experience for your class that seem like magic but are chemistry in action.

T.O.Y.S. (Teach Our Youth Science) - Grades K-4 (SR Waukesha, CM, Grades K-8 WRVA & CHI, Grades K-6 CR)

Presenter: Jaime Malwitz, Eden Elementary School, Eden, WASDI Lead Teacher

This program uses toys as a launching pad to teach science, integrated with mathematics and technology, in the classroom setting. Not only is it hands-on, but it is also a minds-on approach to actively involve all students in grades kindergarten through fourth grade while applying the Benchmarks for Science Literacy to mathematics, science and technology. DUPLOS, beads, gummi bears, and GAK are some of the manipulatives used in the activities to introduce the novice teacher to the user-friendly aspects of science, mathematics and technology through an inexpensive, yet comprehensive application of materials readily available to teachers and students. For the more experienced teacher, toys will be used as extensions of their current curriculum and include helpful additions to SCIS, FOSS and GEMS.

The Wonderful World of Water - Grades 4-6 (SW)

Presenter: Don Tincher, Berlin Middle School

Through the course of the week participants will do experiments exploring the physical properties of water, make an aquarium and become familiar with a wide variety of activities they can share with their students to enhance their understanding of water. Teachers will be able to use the activities they learn to impress upon students the importance of preserving water quality for generations to come. As an added bonus for the week, all participants will receive the new Project WET guide. This guide is filled with ninety activities which may be used with students from early elementary through high school.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999



Elementary Workshops - Science cont.



Trees, Technology and Tomorrow, Grades K-6 (NW)

Presenter: Dawn Nordine, Phelps School District, WASDI Lead Teacher

Participants will experience hands-on activities and strategies such as Dimensions of Learning strategies to infuse environmental education into their classroom and all areas of the curriculum. Teachers will explore outdoors and indoors the many possibilities to place EE into their busy teaching day. Using technology such as the internet, a digital camera, software programs such as Microsoft Word, PowerPoint, Inspiration and Hyperstudio, K-6 teachers will learn to enhance their environmental education curriculum.

Chemistry and Physics Activities for Primary Grades - Grades K-3 (JM Williams Bay)

Presenters: George and Shirley Coulter, New London

This workshop will stress hands-on chemistry and physics activities using inexpensive and readily obtainable substances and materials. Participants will be provided with a list of substances and materials that can take the place of those kinds of items usually ordered from a catalog, but which can be purchased locally. Participants will make several chemistry and physics activity kits that their students can easily use in class.

Dinosaurs to Black Holes - Grades 3-8 (JM Williams Bay & CM)

Presenter: Don Vincent, West High School, Madison, WASDI Lead Teacher

Participants will experience hands-on methods for teaching about our Earth. From both an environmental and physical perspective, we will concentrate on Geology, Meteorology, Oceanography and Astronomy activities. You will learn many great, safe, inexpensive and teacher tested labs and demos. An emphasis will be on using and making low cost science equipment. Each participant will receive a packet of handouts in addition to making and taking materials that will be ready to take to school next fall.

Crime Puppies! Introductory Forensic Science - Grades 2-7 (JM - Verona), Grades 3-6 (CHI)

Presenter: Janet Hurley, West Cedar Elementary, Waverly IA

Interest in science will reach an all-time high when you present activities as crimes for students to solve! Activities will include investigating crime scenes, analyzing colors by chromatography, comparing handwriting samples, analyzing human and animal hair, visualizing and lifting invisible fingerprints, and making casts of footprints and tool marks. Throughout these activities the process skills of observing, collecting data, analyzing, interpreting, and working as a team member are emphasized. Other forensic science resources, such as videotapes, speakers, books and games, as well as suggestions for teaching across the curriculum will be discussed. Each participant will receive an extensive packet of information and activities.

Language Arts and Sciences - Working Hand in Hand - Grades K-5 (JM Williams Bay & Verona)

Presenters: Richard Seng, Denison Middle School, Lake Geneva, WASDI Lead Teacher and
Melody Orban, Jefferson Elementary School, Kenosha, WASDI Lead Teacher

During this workshop, participants will realize how effectively one can coordinate their Language Arts lessons with some of the concepts in their Science curriculums. Language Arts lessons will be used that can easily connect with earth, environmental, physical and life sciences. There will be make and take opportunities to build science apparatus for use in their own classrooms.

Terra's Tots: Earth's Tiny Stewards - Grades PreK-1 - (WRVA & W Onalaska)

Presenter: Janet Hurley

This course is designed to create and nurture a love for the natural world. Participants will be involved in activities that will develop an awareness and appreciation for plants, animals, and the environment. Developmentally appropriate activities will address multiple intelligences through a thematic approach. Come and experience drama, songs, poems, finger plays, the creation of models and much more. Topics covered will include habitats and wildlife, seasons, every growing thing, bugs and butterflies, and every day is earth day. Return to the classroom with ready-to-use materials and a notebook full of ideas.

WASDI Academies 1999

Elementary Workshops - Science cont.



Water Works - Grades 2-6 (WRVA & W Onalaska)

Presenters: Joel Anderson and Randall Colton, WASDI Lead Teachers

The workshop goal is to promote awareness, appreciation, knowledge, and stewardship of water resources. Experience a collection of innovative, inquiry-based, interdisciplinary, water-related activities that are hands-on and easy to use. The workshop will incorporate a variety of formats including large group and small group learning. Field trips and resource people will be part of the week. Instructors will model strategies from brain-based research. Participants will learn about networking which connects water education, business, industry, and related agencies.

Detectives, Dangers, Deductions: Dastardly Deeds! A Multidisciplinary Unit on Mysteries, Crimes and Forensic Science - Grades 4-9 (WRVA)

Presenter: Christine Pace

Join us for the adventure of solving a real-life mystery! This class is not for the faint hearted! Teacher/Detectives will experience first hand crime solving techniques. Exciting centers, computer programs, field trips, simulations, puzzles, fascinating labs, and speakers will be components of the course. Fingerprinting, chromatography, blood/hair/dental/fiber analysis, criminology, autopsies, critical thinking, and problem solving skills are course highlights.

Wisconsin Energy Education Program (KEEP) - Grades K-12 (WRVA & ST)

Presenter: Jennie Lane

Through hands-on activities and class discussions, learn how you can enhance students' understanding of what energy is, where it comes from, and how it affects their lives. You will also receive a copy of KEEP's comprehensive, easy-to-use Energy Education Activity Guide and be introduced to additional energy-related educational materials. This course is designed for teachers who want to experience it today and teach it tomorrow.

Science Writing-Writing to Learn - Grades 2-5 (CR)

Presenters: Rhoda Maxwell, Emeritus, UWEC and Becky Aberg, Eau Claire School District

Discover the many ways you can use writing to enhance science learning for your students. Through hands-on science activities, you will sharpen your observations, make connections, and explore new ideas using writing as your tool and guide. By engaging in writing experiences which prompt your own science understandings, as well as sharing with other workshop participants, you will have opportunities to make valuable connections on how writing can be used as a strong learning tool in your own science teaching.

Putting Inquiry in the Center - Grades PreK-2 (CR)

Presenters: Janet Butterbrodt, Cadott School District & Rebecca Schneider, Chippewa Falls School District

Explore strategies that motivate children to pursue what intrigues them while still meeting your standards-based curricular responsibilities. Participants will be challenged to reverse their thinking about planning and implementing lessons; rather than utilizing textbooks and past successful lessons as the basis for curriculum, we will use student background knowledge, questions, and natural curiosity as a springboard for teaching.

Using the Outdoor Classroom to Teach Science Concepts - Grades K-5 (CR)

Presenter: Char Besanson, St. Olaf College

During this activity-based session, participants will explore a variety of outdoor classroom sites, experience interdisciplinary activities and learn the science behind the activities. Teaching and class management techniques which improve students understanding of science concepts as well as the scientific process will be shared. Based on the Wisconsin Model Academic Standards, participants will explore science and environmental education concepts including plants, animals, life cycles, adaptations, habitats, weather events and snow studies, erosion and site mapping, nature journaling, poetry and writing lessons will provide opportunities to express growing awareness of the world.

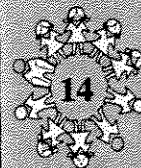
From the Land of Ahhhs...Adventures in Math (and Science) for the Senses - Grades 4-6 (CHI)

Presenter: Bobbette Bruce, Lublin, WASDI Lead Teacher

Teachers won't be able to stay in their seats during this workshop! You will experience math and science kinesthetically, as well as, aesthetically. Investigate and create interesting sights, sounds and motions while learning science and mathematics.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999



Elementary Workshops - Science cont.



Health Care: Using Mathematics, Science and Technology to Save Lives Grades K-12 (CR)

Presenters: Margaret Dickens-Grosskopf, Kay Scham, Karen Taylor, Steve Schreiner, Corey Weinfurter, Patricia Griffen, Patricia Traphagan, All CVTC Instructors

During this week-long workshop, participants will focus on the many applications of math, science and technology in the health care industry. Participants will analyze tissues and disease-causing organisms, apply sonographic technology in scanning body organs, discover how computers enhance X-ray diagnosis, and explore how technology is applied in the critical few moments when a heart has stopped beating. Using a hands-on approach, participants will discover how math and science, applied K-12 support these cutting-edge technologies in saving lives. This workshop will be conducted from the Phillips building on the CVTC campus in Eau Claire.

GEMS (Great Explorations in Math and Science Developed by UC-Berkeley) - Grades 4-8 (CHI)

Presenter: Anne Reichel, Grayslake, IL

During this interactive workshop, participants will have the opportunity to gain first hand experience with an inquiry based approach to science. Activities from GEMS (Great Explorations in Math and Science) will serve as the foundation for investigating science concepts and processes through a guided-discovery approach. Course activities will be linked to standards and performance assessments.

Science in a Box: Using Materials Developed in an NSF Project to Teach Inquiry Based, Hands-On Elementary Science - Grades K-2 (CHI)

Presenter: Melody Orban, Kenosha, WASDI Lead Teacher

Look at materials and participate in activities for life science, physical science, earth science and technology. Participants will enjoy hands-on science activities and learn how to establish a classroom environment conducive to implementing science standards.

Science in a Box: Using Materials Developed in an NSF Project to Teach Inquiry Based, Hands-On Elementary Science - Grades 3-4 (CHI)

Presenter: Barry Thomas, Kenosha

Look at materials and participate in activities for life science, physical science, earth science and technology. Participants will enjoy hands-on science activities and learn how to establish a classroom environment conducive to implementing science standards.

Science in a Box: Using Materials Developed in an NSF Project to Teach Inquiry Based, Hands-On Elementary Science - Grades 5-6 (CHI)

Presenter: Jodi Goocher, Kenosha

Look at materials and participate in activities for life science, physical science, earth science and technology. Participants will enjoy hands-on science activities and learn how to establish a classroom environment conducive to implementing science standards.

Wanted: Potential Space Station Residents - Grades K-12 (CHI)

Presenter: Judy Beck, LaCrosse

Numerous hands-on activities will illustrate the range of materials and training opportunities available through activity guides, videos, CD ROM's and Internet websites. This course will introduce participants to the opportunities available to educators through the NASA Regional Educator Resource Centers. Participants will leave with plenty of materials to use in their classroom and many more ideas!

Rock Camp - Grades K-12 (CHI)

Presenters: Tom Repine, Don Primmer, Deb Hemler, Robert Behling, Paula Waggy & Karen Parlett, West Virginia and Wisconsin

Look at rock, mineral, and fossil samples, take "field trips", and evaluate earthquakes. Construct life size topographical maps, dig for fossils and check out the insects from the Paleozoic era. Explore mineral resources in everyday life and local links to Wisconsin geology. All participants will receive an activity book and tons of great ideas!

WASDI Academies 1999

Elementary Workshops - Science cont.



Earth's History: Wisconsin Geologic Landscape - Grades 3-5 (SR Waukesha)

Presenter: Susan Inkmann, Cedarburg, WASDI Lead Teacher

This workshop will allow teachers to become comfortable with the geologic history of Wisconsin. Teachers will learn hands-on lessons, lab techniques and field exercises to enhance their understanding of Wisconsin's rich geology. The new Wisconsin State Science Standards will be used to illustrate many principles and concepts.

Watershed Stewardship: Using Scientific Skills and Technology to Address Environmental Concerns - Grades K-12 (GG)

Presenters: Sue O'Halloran, Dr. Mary Balcer, Dr. Jack Zaengle, Dr. Susan Heidi and Jeri Schwerin, UWS and Extension Staff

This workshop will provide teachers with the scientific background needed to understand watershed ecology and will familiarize them with the methods for conducting water quality monitoring. The focus will be on basic watershed hydrology concepts. Participants will gain experience in taking standardized quantitative measurements of water quality. Teachers will be introduced to the Global Learning and Observations to Benefit the Environment program and protocol and activities. This workshop will be in the new Northern Great Lakes Visitor Center with field days provided on-board the UW-Superior research vessel and at local natural resources agencies. Participants will have access to a bus provided for daily transportation to and from the class.

Snails, Tales, and Math that Sails: An Integrated Approach to Standards Based Science and Math Instruction - Grades K-4 (GG)

Presenters: Barbara Borgwardt, Galesville and Mary Beth Hutchinson, Osseo-Fairchild, WASDI Lead Teachers
Experience hands-on activities for science and math investigations using materials selected from FOSS, AIMS, TERC and other standards-aligned resources. Objectives of this workshop are to delight in finding new literature connections, dive into a world of scientific processes and inquiry, discover alternative assessment strategies, decipher the Wisconsin State Math and Science Standards and how they connect to your curriculum, determine appropriate problem-solving measurement and estimation skills and decide on performance tasks which will meet the needs of your students.

Critters in the Classroom - Grades K-2 (E)

Presenter: Gloria Boone

Children have a natural curiosity about the living creatures around them. If properly cared for, animals in the classroom setting can provide learning opportunities that are unique. With animal models children can develop social skills, overcome fears, learn respect for life and stimulate many questions about their world. This workshop will integrate science, math, reading and the arts at the K-2 level. Information on the care and handling of animals, precautions to be taken and hands-on activities with live animals will be explored.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999



Elementary Workshops - Technology



Children as Designers: Elementary Tech Ed - Grades K-5 (Cray Core Program)

Presenter: Meredith Wade, Synergy Learning

Technology education activities can be used to integrate the study of technology with related concepts from other disciplines such as mathematics, science, social studies and the humanities. When students work as designers, they gain experience drawing, planning, designing, problem-solving, building, testing and improving their solutions to respond to a specific problem or challenge. The design process develops a variety of experiences, skills and knowledge for all learners.

Fun With Technology - Grades K-6, (NW) & Grades 2-6 (ST)

Presenter: Pete McConnell, Merrill School District

This is a "do it 'til you drop" workshop. The focus of energy will be concentrated on integrated activities in math and science with technology as the foundation. Teachers in grades K-6 will be taught to adopt activities to "fit" specific goals and objectives that currently exist in their curriculums. No need to reinvent the wheel - you just make it fun with technology. Each participant will take home oodles of activities and "props" for classroom instruction. Bring a camera, lots of energy and your enthusiasm.

Computer Tech-Knowledge-Gee! - Grades 3-8 (JM Verona)

Presenter: Jeff Lucas, Spring Road School, Neenah, WASDI Lead Teacher

Learn how MacIntosh computers can upgrade your teaching. Many ideas and activities for integrating computers into your math and technology curriculums will be explored using drawing, painting, word processing, database and spreadsheet ClarisWorks applications. These integrated curricular activities teach computer procedures as they expand classroom learning using authentic computer files. You will also learn to use the computer as a professional tool for assessment, record keeping, and creating a variety of other useful classroom products.

Ready-Design-Go - Grades 4-6 (WRVA)

Presenters: Judy Shookman, WASDI Lead Teacher & Ruth Shookman

Does your "tired" classroom need a "SHOT" in the arm? Are you frustrated with problem-solving projects that are impractical and just don't work? DESIGN-READY-GO is a week of designing, measure, sawing, wiring, hammering, gluing, and testing that will provide you with projects and experiences to be carried back to your classroom, exploring the themes of design technology and, MORE IMPORTANTLY, exciting and preparing your students for the work-place of the 21st century.

Technology Institute for Educators - Grades K-12 (CHI)

Presenters: Marie Ellis, WASDI Lead Teacher and Associates

Use technology to enhance learning and address the Wisconsin Model Academic Standards. The format of this program is in three phases-summer institute, follow-up and sharing results. Developed for educators, by educators. Participants **must** sign up for the 2 credit registration option.

Impact Learning and Teaching Through Technology - Grades K-8 (SR Waukesha)

Presenter: Jeanne Anderson, Waukesha

This workshop will feature classroom-tested projects and methods for using current technologies and resources in the K-8 classroom. Participants will discuss how to best integrate technology into curriculum areas to support both learning and teaching. The class will focus on best practices, implementation issues and ways to measure the effectiveness of technology in the classroom.

Cool Things That Work - Grades 1-6 (W Onalaska)

Presenter: Paul Skarda, Clintonville, WASDI Lead Teacher

Students love to build things that work. In this class you will learn how to integrate projects into your existing reading, math, and science curriculum. All of the projects will be low or no cost and fit with the Wisconsin Model Academic Standards. Major themes could include electricity, measurement, wheels and axles, pneumatics, levels, support structures, solar energy, manufacturing, and inclined planes. This class guarantees you'll be excited about making your curriculum come alive by making cool things that work!

WASDI Academies 1999

Middle School Workshops - Mathematics



Immersion in Rational Numbers - Grades 6-8 - (CR)

Presenters: Jane Howell and Jodean Grunow

Experience activities that help students to truly understand rational numbers with materials that develop student knowledge and understanding of rational numbers that is rich in connections. Participants will explore unit excerpts from the Connected Math Project, Launch, Explore, Summarize (LES) instructional model, share and discuss professional experiences related to the content being studied and the strategies used to teach and learn about related alternative assessment strategies.

Green Globes, the Wild West and More!!! - Grades 3-8 (NW)

Presenters: Michelle Parks and Barb Riedel, Eau Claire Public Schools, WASDI Lead Teachers

Participants will be engaged in activities using several sunburst computer software programs and videodisc programs. Participants will actively experience geometric concepts, algebraic concepts, and more using technology through a constructivist model. Throughout the workshop, classroom management ideas, research and the learning process will be discussed.

Computer Tech-Knowledge-Gee! - Grades 3-8 (IM Verona)

Presenter: Jeff Lucas, Spring Road School, Neenah, WASDI Lead Teacher

Learn how MacIntosh computers can upgrade your teaching. Many ideas and activities for integrating computers into your math and technology curriculums will be explored using drawing, painting, word processing, database and spreadsheet ClarisWorks applications. These integrated curricular activities teach computer procedures as they expand classroom learning using authentic computer files. You will also learn to use the computer as a professional tool for assessment, record keeping, and creating a variety of other useful classroom products.

Hot Numbers With Skillet - Grades 6-8 (WRVA)

Presenter: Lynn Scala, WASDI Lead Teacher

Participants will use an investigative approach to the following math strands: geometry, problem solving, measurement, number sense, ratio, and statistics. Teachers will work in small groups to focus on mathematics and implementation of the NCTM standards, technology and mathematics, math in the business world and alternative assessments. Participants will have an introduction to the use of Hyperstudio in the math classroom. TI 80 graphing calculators and interactive television will also be used.

AIMS - Math Connections: Patterns, Problem Solving, and Practice - Grades 6-9 (WRVA)

Presenter: TBA

Students will find the AIMS approach to the study of numbers refreshing and interesting. In geometry, the approach differs from that in common use. Studies begin with solids, the geometric objects most familiar to students. The connection between mathematics and science becomes more meaningful within the AIMS curriculum in which combinations of measurements are studied for their production of new units of measurement. Number Sense and Operations, Geometry and Spatial Sense, Dealing with Data and Chance and Patterns and Functions will be covered in this workshop.

Graphing Calculators: From the Box to Your Classroom - Grades 7-10 (ST)

Presenter: Rich Sterry, Menomonie, WASDI Lead Teacher

This workshop takes the participant from the ground floor up with graphing calculators. TI-92's and CBL devices will be integrated into the session that offers real-world models.

Math Standards: The Formula to Improved Student Performance - Grades 6-12 (W Holmen)

Presenter: Bonnie Olson and Robert Deml, Onalaska

This workshop will help middle and high school teachers translate the new math standards into improved student performance in the classroom. Participants will learn how to analyze the standard, how to embed the standards into their own curriculum, and how to assess and document student achievement. Emphasis will be on the role of the teacher as a facilitator.

Math in Context - Grades 5-8 (E)

Presenter: TBA

MIC provides a new contextual approach to mathematics instruction and assessment for students in grades 5-8. Mathematics is a network of interconnected concepts and properties describing number, shape, uncertainty and change. It is described as a language to study patterns and a way of thinking and is learned best by doing.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999



Middle School Workshops - Mathematics cont.



Algebra More Concrete - Grades 6-8 - (CR - Core Program) CMP

Presenters: Jane Howell and Jodean Grunow

This workshop is designed for middle school teachers in grades 6-8 who are looking for examples in which algebra understandings can be built during the middle grade years. Algebraic ideas are approached through investigations and problems which allow students to search for patterns and relationships in data, and to find ways to express these patterns, first in words and then algebraic symbols. Materials and activities used during the workshop will be taken from the Connected Mathematics Project. Participants will experience activities from the CMP units titled Moving Straight Ahead, Thinking with Mathematical Models and Growing, Growing, Growing.

T³ Graphing Calculators - Grades 5-8 - (CR Core Program)

Presenter: Stephen Davies, Texas Instruments

The majority of this workshop will be devoted to mathematics content prior to formal algebra while investigating mathematics as problem-solving, communication, reasoning and connections. You will develop familiarity and facility teaching mathematics with the TI-Explorer calculators and TI-73. You will explore and investigate a mode of teaching middle grades mathematics including patterns and functions, number theory, statistics and probability, geometry and measurement, and algebraic thinking. You will be introduced to the programming capabilities of the TI graphing calculators.

Algebra in Engineering - Grades 5-8 (CM & CHD)

Presenter: Jane Patterson, Fritsche Middle School, Milwaukee, WASDI Lead Teacher

This workshop is designed to give middle school mathematics teachers hands on, inquiry based engineering lessons that are not only rich in algebraic concepts, but are deeply founded in the state and national standards. Participants will experience and develop various forms of assessment. Some things you will learn include building balsa bridges, human suspension bridge, creative cardboard engineering, quick engineering projects, parachutes and designing packages for products.

Technology, Toys & Teaching Math - Grades 7-12 (CM, E, WRVA & JM Williams Bay & Verona)

Presenter: John Katz, Menomonee Falls, WASDI Lead Teacher

This course will help you use both computer software and TI-92 graphing calculators to transform a traditional math classroom into an interactive hands-on learning environment your students will look forward to entering. Activities will include applications to geometry using Geometer's Sketchpad software, use of the Cabri II geometry software on the TI-92, use of the calculator based laboratory (CBL), integration of science and math using graphical analysis experiments, application of the TI-92 courses to algebra and calculus, and hands-on experience applying geometric transformation to miniature golf and billiards.

Let's Talk About It: Fostering Discourse in the Mathematics Classroom - Grades 5-8 (SW & W Onalaska)

Presenters: Faye Hilgart, Blair-Taylor Middle School, WASDI Lead Teacher and

Jane Patterson, Fritsche Middle School, Milwaukee, WASDI Lead Teacher

This workshop provides middle school mathematics teachers multiple opportunities to explore concept-rich, hands-on, inquiry-based lessons grounded in state and national standards. Selected materials from the Connected Mathematics Project, NCTM Addenda Series, Mathline and The Linked Learning in Mathematics Project focus on the development of age-appropriate algebraic thinking. Workshop participants will examine appropriate use of calculators in a standards-based curriculum and experience a variety of assessment tools including rubrics.

Connected Mathematics Project (CMP) - Grades 5-8 (JM Williams Bay) and Grades 6-8 (SR Waukesha) Grades 5-8 (GG)

Presenters: Jane Patterson, Fritsche Middle School, Milwaukee, WASDI Lead Teacher (JM)

Elizabeth Freeman and Nancy Jo Grochowski, Milwaukee (SR)

Michelle Parks and Barb Riedel, Eau Claire, WASDI Lead Teachers (GG)

This workshop is designed to give middle school mathematics teachers experience in and resources for constructivist learning, reinforcing the vision of the NCTM Curriculum and Evaluation, Teaching and Assessment Standards. Using the CMP materials as a foundation, the workshop is organized around interesting problem settings and real situations. It will allow participants to experience the inquiry, exploration and summarization of investigations in the strands of number, measurement, geometry, probability and statistics and algebra.

WASDI Academies 1999

Middle School Workshops - Mathematics cont.



Everything you Need to Know about Using Graphing Calculators (TI-83) and Computer Based Laboratory (CBL) in your Classroom From Start to Finish - Grades 7-12 (E)

Presenter: Tony Pickar, WASDI Lead Teacher

Activities will be provided for math, science, biology, physics, chemistry. Participants will use the TI-Graph Link to interface between calculator and computer and will download software and programs off the internet. Graphing equations, plotting statistics, storing graph data bases, transferring data and downloading programs from TI and Vernier will be some of the activities covered. Participants will be allowed to try their own experiments in the workshop to help them feel comfortable enough to use in their classrooms.

Meteorology for the Teacher - Grades 6-12 (E)

Presenter: Bruce Smith, AMS Atmospheric Education Resource Agent

The teaching of weather is going through a revolution. American Meteorological Society through Project Atmosphere provides materials and training to bring this new world of weather and climate into your classroom. The course will make use of teaching modules developed through Project Atmosphere. More than 15 classroom-ready modules will provide the basis for an exciting and effective curriculum in weather for upper elementary, middle and high school students. In addition, this course will provide an introduction to accessing weather information via the internet. Each day will begin with a weather briefing including looking at the latest satellite images, radar data and computer forecasts.

Take Those Standards on the Road: Mathematics - Grades 6-8 (IM Verona & WRVA)

Presenter: Polly Goepfert, River Bluff Middle School, Stoughton, WASDI Lead Teacher

In this workshop you will experience many investigations of CMP, increase the awareness of the philosophy behind the CMP project, connect the standards to the investigations, make a cube by paper folding, apply authentic assessment to the geometry strand and develop a better understanding of the vision the standards are seeking.

Mathline - Grades K-12 (CHI)

Presenter: Susan Cook, Oconomowoc, WASDI Lead Teacher

Learn how to use the Mathline videos to plan lessons and units that help students learn important math content, the ability to communicate and reason mathematically and be more confident problem solvers. The Wisconsin/PBS MATHLINE project is a nationally recognized, year-long program for K-12 teachers. The workshop includes an on-line component and a video series featuring classroom teachers modeling exemplary NCTM based lessons with their students.

Algebra for All - Grades 8-10 (SR Waukesha)

Presenter: MaryLane Blomquist, Milwaukee, WASDI Lead Teacher

This workshop is designed to give middle school and high school mathematics teachers experience in NCTM standards rich, inquiry-based learning. Using a variety of resources including: The Graphing Calculator, Connected Mathematics Project (CMP) materials, Core Plus materials, PBS Mathline, and some teacher developed materials. Participants will learn to identify and create activities, lessons and assessment that will foster algebraic thinking.

Using Dynamic Sketching Software to Enhance the Teaching of Geometry and Algebra - Grades 8-12 (SR Waukesha)

Presenter: Lee Schmidt and Jim Truszynski, Waukesha

Participants will primarily use the Geometer's Sketchpad as a means to foster an active learning atmosphere in their geometry and algebra classrooms. Attention will be focused on mastering the mechanics of this software package and establishing effective ways to implement it in the classroom.

Assessing the Standards in Mathematics - Grades K-12 (SR Waukesha)

Presenter: Jim Marty, Waukesha, WASDI Lead Teacher

The purpose of this workshop is to get individual teachers more familiar with the Wisconsin Model Academic Standards in Mathematics and the Standards 2000 project currently being undertaken by the National Council of Teachers of Mathematics. You will examine an assortment of samples of assessment materials and then working in small groups by grade level, develop assessment instruments which reflect the Standards at that grade level to take back to your classroom.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999



Middle School Workshops - Science



May the Force Move You! - Grades 5-8 (SR West Allis, CHI, GG & E)

Presenters: Polly Knoll, Superior High School, WASDI Lead Teacher
Dan Rosa, Arrowhead Union Head High School, WASDI Lead Teacher

Learn basic physical science concepts through fun, hands-on activities developed by top notch teachers throughout the nation for Operation Physics. Constructivist and multiple intelligence approaches will be explored, and all material will be directly linked to our Wisconsin Eighth Grade Standards. Writing and assessment strategies will be developed and discussed, and ways to add technology will be demonstrated. Participants leave with practical "make and take" items to use in their own classrooms.

The Science, Mathematics and Technology of Aerospace: A Passport for Learning - Grades 4-8 (SR West Allis)

Presenter: Bob Friedel, Washington High School, Germantown

Weather, air pressure, bubbleology, surface tension, the center for gravity, magnetism and electricity, recycling and the environment, bottle and model rocketry plus additional aerospace topics will also be investigated with their applications for classroom integration. Participants will take back to their classrooms a wide assortment of materials and hand-outs including instructional videos, computer disks, and technology aides. Participants will receive packets of ideas, tips and plans as how to integrate the science, mathematics, and technology of aerospace into the curriculum.

Using Toys to Teach Science - Grades 6-12 (SW), Grades 3-12 (JM Williams Bay), Grades 7-12 (CR)

Presenter: Larry Scheckel, Tomah High School

Learn how to use toys to help students develop genuine inquiry problem-solving and higher level thinking skills. Emphasis will be on how to use toys effectively as part of the science curriculum. Lesson plans, concept development, hands-on learning and the learning cycle will all be part of this exciting week. Over two hundred science-related toys will be demonstrated. Participants will make and take several dozen toys and also receive many hand-outs.

Farther Beyond the Dog & Pony Show - Grades 3-6 (CM) and Grades 3-8 (NW)

Presenters: Bruce Oxley and Don Primmer, WASDI Lead Teachers

You will be presented with a wide variety of life, earth, physical, and environmental science activities that can be infused and integrated into your existing curriculum. Together we will explore science magic to arrive at ways to develop and increase your students science process skills. In addition, you will take a thorough look at the activities' relevance, applications, integrations, extensions and assessments, as well as their connections with Wisconsin's state standards.

Dinosaurs to Black Holes - Grades 3-8 (JM Williams Bay)

Presenter: Don Vincent, West High School, Madison, WASDI Lead Teacher

Participants will experience hands-on methods for teaching about our Earth. From both an environmental and physical perspective, we will concentrate on Geology, Meteorology, Oceanography and Astronomy activities. You will learn many great, safe, inexpensive and teacher tested labs and demos. An emphasis will be on using and making low cost science equipment. Each participant will receive a packet of handouts in addition to making and taking materials that will be ready to take to school next fall.

Hands-on Activities, Projects and Explorations - Grades 5-10 (JM Williams Bay)

Presenter: Peter Watts, Riverside Middle School, Watertown, WASDI Lead Teacher

This workshop will focus on a number of activities aimed at making science meaningful and fun. We'll look at surface tension, light and optics, aerodynamics, and density. We'll investigate bubbles, fingerprinting, catapults, bridges, flic-flacs, Rube Goldberg-like contraptions, and lots more stuff to make science come alive for students and parents alike.

Criminalistics: An Introduction to Forensic Science - Grades 7-12 (WRVA, W & CHI)

Presenter: James Hurley

Participants in this workshop will examine a one semester high school criminalistics course and the activities involved, survey books and videotapes related to introductory forensic science and perform experiments written as crime scene investigation scenarios.

WASDI Academies 1999

Middle School Workshops - Science cont.



Wisconsin Initiative for Space Education (WISE): Addressing the Science, Math and Technology Standards Through Space Science Education - Grades 5-9 (JM Williams Bay & Verona, E)

Presenters: Sanjay Limaye, Planetary Scientist, Rosalyn Pertzborn, Research/Outreach Specialist,

Space Science & Engineering Center UW Madison (Teams Encouraged)

Teachers will have the opportunity to work with scientists and educators to explore selected content rich, instructionally effective programs and hands-on activities that can be easily adapted for use in your own curriculum. Space exploration topics will include a student designed space mission to a solar system target, hands-on astronomy including an evening field trip to a local observatory, and an exploration of planets and other objects within our own solar system. Teachers will be encouraged to ask questions and work directly as partners with researchers and experts to develop their own classroom curriculum plans and ideas. At the end of the workshop you will be expected to formulate a preliminary plan for a classroom curriculum program, project or activity. Up to three credits may be earned for this workshop.

Crime Puppies! Introductory Forensic Science - Grades 2-7 (JM Verona)

Presenter: Janet Hurley, West Cedar Elementary, Waverly IA

Interest in science will reach an all-time high when you present activities as crimes for students to solve! Activities will include investigating crime scenes, analyzing colors by chromatography, comparing handwriting samples, analyzing human and animal hair, visualizing and lifting invisible fingerprints, and making casts of footprints and tool marks. Throughout these activities the process skills of observing, collecting data, analyzing, interpreting, and working as a team member are emphasized. Other forensic science resources, such as videotapes, speakers, books and games, as well as suggestions for teaching across the curriculum will be discussed. Each participant will receive an extensive packet of information and activities.

Cooperative Competitions in Physical Science and Physics - Grades 7-12 (JM Verona)

Presenter: Jim Hurley, Shell Rock High School, Waverly, IA

Fire up your students with competitions directly related to your course content! Design footwear that allows you to walk on water (you might want to bring your swimsuit or trunks!), construct mousetrap-powered dragsters, predict ranges for water balloon launches, compute the power generated by a tiny simple motor, and design and test catamarans (for the Rain Gutter Regatta!), catapults, parachutes, exotic paper airplanes, and pipette rockets. While these and other activities and projects culminate in competitions, the processes of hypothesizing, testing and modifying and working cooperatively are emphasized. Participants will receive an extensive packet of reproducible activities and have a lot of fun!

Detectives, Dangers, Deductions: Dastardly Deeds! A Multidisciplinary Unit on Mysteries, Crimes and Forensic Science - Grades 4-9 (WRVA)

Presenter: Christine Pace

Join us for the adventure of solving a real-life mystery! This class is not for the faint hearted! Teacher/Detectives will experience first hand crime solving techniques. Exciting centers, computer programs, field trips, simulations, puzzles, fascinating labs, and speakers will be components of the course. Fingerprinting, chromatography, blood/hair/dental/fiber analysis, criminology, autopsies, critical thinking, and problem solving skills are course highlights.

What's It Like Where You Live? - Grades 5-8 (WRVA)

Presenter: Traci Roth, WASDI Lead Teacher

What's It Like Where You Live? is a curriculum developed by the Missouri Botanical Gardens that investigates the biomes of the world. Participants will get a peek at this multi-media curriculum, targeted at the intermediate grades and its activities, as well as other resources that can be used to develop an inquiry-based study of the world's biomes. Participants should come prepared to share ideas and resources.

Aviation - Grades 7-12 (WRVA & E)

Presenter: Dan Fara

Explore the wonderful world of flight, with some hands-on experiences in aviation. This session is designed for the individual who wishes to learn about airplanes and how they fly. Participants will become familiar with the basic fundamentals of aeronautics. They will build a glider, work with aerodynamics, navigation, radio communication, FAA regulations, physiology of flight, map reading, flight simulation, reading weather reports, and go on an actual flight.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999

Middle School Workshops - Science cont.



Wisconsin Energy Education Program (KEEP) - Grades K-12 (WRVA & ST)

Presenter: Jennie Lane

Through hands-on activities and class discussions, learn how you can enhance students' understanding of what energy is, where it comes from, and how it affects their lives. You will also receive a copy of KEEP's comprehensive, easy-to-use Energy Education Activity Guide and be introduced to additional energy-related educational materials. This course is designed for teachers who want to experience it today and teach it tomorrow.

Sorting Through Educational Reform: Classroom Implementation Activities for the Sciences - Grades 5-9 (E)

Presenter: Floyd Henschel

This course will give detailed lesson plans and show you how to translate new theories into science classroom activities. Participants will learn how to incorporate hands-on science units utilizing Gardner's Multiple Intelligences in Integrated Curricula, Jensen's research on Brain Compatibility and Glasser's Instructional Strategies. Education reform science activities will be presented through a variety of teaching strategies: presentations, demonstrations, small and large group activities in cooperative learning groups, along with slides and videos.

Meteorology for the Teacher - Grades 6-12 (E)

Presenter: Bruce Smith, AMS Atmospheric Education Resource Agent

The teaching of weather is going through a revolution. American Meteorological Society through Project Atmosphere provides materials and training to bring this new world of weather and climate into your classroom. The course will make use of teaching modules developed through Project Atmosphere. More than 15 classroom-ready modules will provide the basis for an exciting and effective curriculum in weather for upper elementary, middle and high school students. In addition, this course will provide an introduction to accessing weather information via the internet. Each day will begin with a weather briefing including looking at the latest satellite images, radar data and computer forecasts.

Developing a Notion about Motion: Putting the Student in the Driver's Seat - Grades 6-9 (E)

Presenter: Brad Staats, WASDI Lead Teacher

This "hands-on" course will demonstrate the use of low expense virtual reality software and "make and take" projects to assist students in learning challenging concepts about motion. The entertaining areas of space, flight, and auto racing will be the center piece for your student's motivation. Through these areas, this grade 6-9 workshop will focus in on integrating science, mathematics, technology, geography and history. It will also assist your confidence in finding, choosing, and using appropriate software for your classroom.

Getting Onboard! Here come the Standards - Grades 6-9 (CR Core)

Presenters: Kris Schilling, Rice Lake School District, WASDI Lead Teacher

Annya Fahey, Edgerton School District, WASDI Lead Teacher

You will explore a plethora of standards-based modules, programs and activities you can easily implement into your existing curriculum. Learn how this standards-based material can be incorporated into your existing curriculum or be used as a year-long course. Modules include concepts, processes and techniques that will make your middle school science relevant to the experiences of your students through personal, community experiences and global perspectives.

Health Care: Using Mathematics, Science and Technology to Save Lives Grades K-12 (CR)

Presenters: Margaret Dickens-Grosskopf, Kay Scham, Karen Taylor, Steve Schreiner, Corey Weinfurter, Patricia Griffen, Patricia Traphagan, All CVTC Instructors

During this week-long workshop, participants will focus on the many applications of math, science and technology in the health care industry. Participants will analyze tissues and disease-causing organisms, apply sonographic technology in scanning body organs, discover how computers enhance X-ray diagnosis, and explore how technology is applied in the critical few moments when a heart has stopped beating. Using a hands-on approach, participants will discover how math and science, applied K-12 support these cutting-edge technologies in saving lives. This workshop will be conducted from the Phillips building on the CVTC campus in Eau Claire.



WASDI Academies 1999

Middle School Workshops - Science cont.



I Didn't Know you Could Do That in Science! - Grades 5-8 (CHI)

Presenter: Linda Neiman, Kenosha

Learn how to enhance the teaching and learning of science through the use of literature, the language arts - reading, writing, speaking and listening as well as the implementation of rubrics and portfolio assessment in your science classroom. During this workshop's interactive approach you will use writing to increase comprehension of scientific principles, learn the principle of portfolio assessment, implement the use of rubrics, use literature to enhance the teaching and learning of science and create a science unit incorporating the language arts.

Activity-Based Integrated Science - Grades 6-8 (CHI)

Presenter: TBA

This standards based workshop will present middle level science teachers with solid content in earth/space, life and physical sciences in an integrated curriculum. The focus will be on best teaching/learning practices which result in higher students achievement on standardized testing. Be prepared to experience inquiry based activities which use constructivist, multiple intelligence, and other brain based theories. Opportunities for cross curricular integration will also be explored

Chemistry/Biology Institute - Grades 8-12 (CHI)

Presenter: TBA

Presented by Teachers Teaching with Technology. Secondary science and math teachers will explore biology and chemistry concepts using the TI-83 graphing calculator, Calculator Based Laboratory System (CBL), and electronic probes. Explore innovative ways to teach concepts and emphasize new ways to collect and analyze data. See how this portable, low-cost technology provides an exciting and effective way to integrate math and science.

GEMS (Great Explorations in Math and Science Developed by UC-Berkeley) - Grades 4-8 (CHI)

Presenter: Anne Reichel, Grayslake, IL

During this interactive workshop, participants will have the opportunity to gain first hand experience with an inquiry based approach to science. Activities from GEMS (Great Explorations in Math and Science) will serve as the foundation for investigating science concepts and processes through a guided-discovery approach. Course activities will be linked to standards and performance assessments.

T.O.Y.S. (Teach Our Youth Science) - Grades K-8 (CHI & WRVA) Grades K-6 (CR & SR Waukesha)

Presenter: Jaime Malwitz, Eden, WASDI Lead Teacher

This program uses toys as a launching pad to teach science, integrated with mathematics and technology, in the classroom setting. Not only is it hands-on, but it is also a minds-on approach to actively involve all students in grades kindergarten through fourth grade while applying the Benchmarks for Science Literacy to mathematics, science and technology. DUPLOS, beads, gummi bears, and GAK are some of the manipulatives used in the activities to introduce the novice teacher to the user-friendly aspects of science, mathematics and technology through an inexpensive, yet comprehensive application of materials readily available to teachers and students. For the more experienced teacher, toys will be used as extensions of their current curriculum and include helpful additions to SCIS, FOSS and GEMS.

Wanted: Potential Space Station Residents - Grades K-12 (CHI)

Presenter: Judy Beck, LaCrosse

Numerous hands-on activities will illustrate the range of materials and training opportunities available through activity guides, videos, CD ROM's and Internet websites. This course will introduce participants to the opportunities available to educators through the NASA Regional Educator Resource Centers. Participants will leave with plenty of materials to use in their classroom and many more ideas!

Rock Camp - Grades K-12 (CHI)

Presenters: Tom Repine, Don Primmer, Deb Hemler, Robert Behling, Paula Waggy & Karen Parlett, West Virginia and Wisconsin

Look at rock, mineral, and fossil samples, take "field trips", and evaluate earthquakes. Construct life size topographical maps, dig for fossils and check out the insects from the Paleozoic era. Explore mineral resources in everyday life and local links to Wisconsin geology. All participants will receive an activity book and tons of great ideas!



Mathematics, Science and Technology for Teachers



WASDI Academies 1999

Middle School Workshops - Science cont.



Classroom Tested and Approved Science - Grades 3-8 (SR Waukesha)

Presenter: Sharon TeRonde, Franklin & Dave Kowal, Wauwatosa

Join us in an active, problem-solving workshop which will involve you in numerous discrepant events, challenges, puzzles and activities designed to challenge one's thinking. These inquiry-based ideas can be easily adapted for your own classroom. These classroom tested (and approved) activities use simple and inexpensive materials.

Watershed Stewardship: Using Scientific Skills and Technology to Address Environmental Concerns - Grades K-12 (GG)

Presenters: Sue O'Halloran, Dr. Mary Balcer, Dr. Jack Zaengle, Dr. Susan Heidi and Jeri Schwerin, UWS and Extension Staff

This workshop will provide teachers with the scientific background needed to understand watershed ecology and will familiarize them with the methods for conducting water quality monitoring. The focus will be on basic watershed hydrology concepts. Participants will gain experience in taking standardized quantitative measurements of water quality. Teachers will be introduced to the Global Learning and Observations to Benefit the Environment program and protocol and activities. This workshop will be in the new Northern Great Lakes Visitor Center with field days provided on-board the UW-Superior research vessel and at local natural resources agencies. Participants will have access to a bus provided for daily transportation to and from the class.

Where's the Beef? Real Science for All Students - Grades 7-10 (GG)

Presenter: Wayne Snyder, Caltech Precollege Science Initiative

In this workshop, participants will increase their awareness and understanding of implementing an inquiry-based science curriculum, analyze and discuss development and implementation of student assessment, increase awareness of the unifying patterns and processes in science and participate in several mini-curricula which represent a cross section of the science content areas and relate the lessons to the areas of standards, curriculum, technology, methodology, and assessment.

Building Responsible Environmental Behavior - Grades K-8 (GG)

Presenter: Sandra Roggow, Minocqua 1997 Wisconsin Environmental Educator of the Year

This hands-on interactive workshop will address both the "why" and "how" of integrating environmental education across the curriculum. Participants will create units which will help students build the knowledge and skills needed to become stewards of our natural resources. The use of journals will be closely examined as a tool for students to record information, reflect on learning and connect actions to real-life situations. Participants will also develop assessment tools to evaluate critical and creative thinking.

Nature-alizing Your Students - Grades K-8 (WRVA, CM & SR West Allis), Grades 2-6 (SW), Grades 1-8 (W)

Presenter: Scott Lee

It doesn't matter what the season, what resources you have available how knowledgeable you are of our natural world or what age you teach. There is a lot you can do to help your students learn about the natural environment. Many hands-on activities, make-and-take projects and games to teach about nature to all age levels will be presented throughout the week. You will be presented many ideas to "environment-alize" and "nature-alize" your students in a fun and educational way.

Aerospace Education Services Program (NASA) - Grades 7-12 (ST)

Presenter: Ralph Winrich, Aerospace Education Specialist

This workshop enables the participant to gain a perspective of Aerospace Education through a hands-on look at the Wisconsin Earth and Space Science standards. At the end of this session, participants will be certified to receive lunar and meteorite samples for classroom use.

Science and Standards: A Motley Mix for Student Success in the New Millennium - Grades 6-12 (W Holmen)

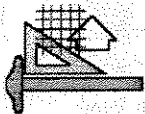
Presenter: Kerry Hogan, Western Wisconsin Technical College, LaCrosse

Participants will become proficient in applying the principles of performance-based instruction while embedding the new Science Model Academic Standards into the curriculum. Topics to be addressed include performance-based instruction, types of academic standards, approaches to embedding the standards, performance assessments, and the high school graduation exam. Effective practices from local practitioners will be shared.



WASDI Academies 1999

Middle School Workshops - Technology



Ingenuity Engineering - Grades 5-9 - (CR - Core Program)

Presenter: Mike Jensen, Paonia High School, Paonia CO

Engineering through activities is the mode of this workshop. Engineering engages math, science and technology to solve for problems in kite flight, structures, materials and aerodynamics. Designing and developing technological systems will aid in the problem solving process. Creating projects and examples to take into your classroom will demonstrate your abilities in the processes and knowledge of technology education standards. Totally activity oriented with knowledge embedded in every fun-filled project. The processes and knowledge aspects of the standards will be addressed with an emphasis on the linkages that occur in technology education, several contexts will be pursued.

Computer Tech-Knowledge-Geel - Grades 3-8 (JM Verona)

Presenter: Jeff Lucas, Spring Road School, Neenah, WASDI Lead Teacher

Learn how MacIntosh computers can upgrade your teaching. Many ideas and activities for integrating computers into your math and technology curriculums will be explored using drawing, painting, word processing, database and spreadsheet ClarisWorks applications. These integrated curricular activities teach computer procedures as they expand classroom learning using authentic computer files. You will also learn to use the computer as a professional tool for assessment, record keeping, and creating a variety of other useful classroom products.

Key For Success: Motivation, Experimentation and Competition - Grades 7-12 (WRVA)

Presenters: Charles Berben and Mark Vrieze

Boggle your brain with Robo Pong, satisfy your need for economy with a mousetrap-powered vehicle. Cross a chasm with only kite sticks and an ounce of glue. Within lies the problems; you supply the solvent in making them dissolve. Problem-solving activities that have proven to be great incentives in the classroom using technology, math and science.

Technology Institute for Educators - Grades K-12 (CHI)

Presenters: Marie Ellis, WASDI Lead Teacher and Associates

Use technology to enhance learning and address the Wisconsin Model Academic Standards. The format of this program is in three phases-summer institute, follow-up and sharing results. Developed for educators, by educators. Participants must sign up for the 2 credit registration option.

World In Motion II - Grades 6-8 (SR Waukesha)

Presenters: Sandra Swietlik, Milwaukee, WASDI Lead Teacher and Kim Gleffe, Milwaukee Association of Scientists and Engineers

This workshop will teach you how to introduce young students to the excitement of integrating mathematics, science, engineering and technology concepts in the context of an authentic engineering design experience. Teachers will work with this ground-breaking curriculum unit to design, build and market a new toy. Participants will receive a "Request for Proposal" from the fictitious toy company, "Mobility Toys," asking them to submit design for a motorized toy vehicle that can be marketed to a 6-10 year old population. Professionals from the engineering field work side-by-side with teachers.

Impact Learning and Teaching Through Technology - Grades K-8 (SR Waukesha)

Presenter: Jeanne Anderson, Waukesha

This workshop will feature classroom-tested projects and methods for using current technologies and resources in the K-8 classroom. Participants will discuss how to best integrate technology into curriculum areas to support both learning and teaching. The class will focus on best practices, implementation issues and ways to measure the effectiveness of technology in the classroom.

Best Practices in Technology Education - Grades 7-12 (SR Waukesha)

Presenters: Dennis Skurulsky, Waukesha and Alan Gomez, Madison

Participants will have the opportunity to get hands-on experience and evaluate contemporary learning activities from across the nation. Participants will be exposed to engineering case studies, material science experiments, and modular technology activities and projects that contribute to a successful program that will help prepare students for the next millennium.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999



High School Workshops - Mathematics



Using Dynamic Sketching Software to Enhance the Teaching of Geometry and Algebra - Grades 8-12 (SR Waukesha)

Presenter: Lee Schmidt and Jim Truszynski, Waukesha

Participants will primarily use the Geometer's Sketchpad as a means to foster an active learning atmosphere in their geometry and algebra classrooms. Attention will be focused on mastering the mechanics of this software package and establishing effective ways to implement it in the classroom.

Assessing the Standards in Mathematics - Grades K-12 (SR Waukesha)

Presenter: Jim Marty, Waukesha, WASDI Lead Teacher

The purpose of this workshop is to get individual teachers more familiar with the Wisconsin Model Academic Standards in Mathematics and the Standards 2000 project currently being undertaken by the National Council of Teachers of Mathematics. You will examine an assortment of samples of assessment materials and then working in small groups by grade level, develop assessment instruments which reflect the Standards at that grade level to take back to your classroom.

Connecting Mathematics and Science - Grades 9-12 (GG)

Presenter: TI Instructor

The primary focus of the CMS institute is collection of data and the analysis of it from both scientific and mathematical standpoints. Participants will gain hands-on experience collecting data with the CBL/CMR and modeling it with the powerful statistical tools of the TI-83. This program is for secondary math, physical science and physics teachers designed around the TI-83 graphics calculator and the Calculator-Based Laboratory System and the Calculator-Based Ranger.

CPM Math 1 - Grades 9-12 (GG)

Presenter: Duane Frankiewicz, Spooner

CPM is an investigative mathematics program that has developed from teachers' input. The following philosophical statements guide the program: change takes time, effort and support; in a balanced program skill development is based upon problem solving and beginning understanding; teachers are responsible for actively guiding, supporting, and summarizing; students must be actively involved in their learning. Follow-up sessions to this workshop will be conducted in the fall.

Graphing Calculators: From the Box to Your Classroom - Grades 7-10 (ST)

Presenter: Rich Sterry, Menomonie, WASDI Lead Teacher

This workshop takes the participant from the ground floor up with graphing calculators. TI-92's and CBL devices will be integrated into the session that offers real-world models.

Math Standards: The Formula to Improved Student Performance - Grades 6-12 (W Holmen)

Presenter: Bonnie Olson and Robert Deml, Onalaska

This workshop will help middle and high school teachers translate the new math standards into improved student performance in the classroom. Participants will learn how to analyze the standard, how to embed the standards into their own curriculum, and how to assess and document student achievement. Emphasis will be on the role of the teacher as a facilitator.

When Are We Ever Going to Use This? - Grades 9-12 (W Holmen)

Presenter: Michael Nerbovig, Chippewa Falls, WASDI Lead Teacher

This workshop will present a non-traditional curriculum which replaces applied math courses and is tied together as a life experience simulation of real-life financial transactions and activities. Each participant will be given the complete curriculum on six disks along with a historical perspective and rationale. The content will be examined, discussed and then modified to suit the needs of individual school districts. Participants will develop necessary models for various activities and use pertinent software. At the conclusion of the workshop, each individual will have a 300 plus page document ready to implement in the fall of 1999.

WASDI Academies 1999

High School Workshops - Mathematics cont.



TIAC²E-II Institute - Grades 9-12 (WRVA)

Presenter: Provided by Texas Instruments

This workshop is a week-long professional development program for teachers of Algebra I and high school algebra. The primary focus of the activities is to explore algebra concepts and problems using hand-held calculator/computer technology as a tool for teaching and learning. The goal of the institute's program is to instruct teachers in new and innovative ways to effectively teach mathematics using technology in the spirit of NCTM's Curriculum and Evaluation Standards for School Mathematics and Professional Teaching Standards.

TI IM92 (Integrated Math for the TI92) - Grades 9-12 (WRVA)

Presenter: Provided by Texas Instruments

IM92 is a one-week institute for all high school mathematics teachers. The institute will introduce participants to a wide range of context-based investigations emphasizing the relationships of topics within mathematics as well as between mathematics and other disciplines. Each topic will incorporate many of the features of the Texas Instruments TI-92 and the multiple perspectives this tool enables. Pedagogical and classroom management issues related to the routine use of the TI-92 level of technology will be addressed. Assessment, testing and grading issues will be approached "hands-on" during each day of the institute. Time is also set aside each day to focus on a variety of critical meta-issues such as how algebra understanding should be developed in an integrated mathematics environment based on technology.

Everything you Need to Know about Using Graphing Calculators (TI-83) and Computer Based Laboratory (CBL) in your Classroom From Start to Finish - Grades 7-12 (E)

Presenter: Tony Pickar, WASDI Lead Teacher

Activities will be provided for math, science, biology, physics, chemistry. Participants will use the TI-Graph Link to interface between calculator and computer and will download software and programs off the internet. Graphing equations, plotting statistics, storing graph data bases, transferring data and downloading programs from TI and Vernier will be some of the activities covered. Participants will be allowed to try their own experiments in the workshop to help them feel comfortable enough to use in their classrooms.

Advanced Algebra, Data and Technology - Grades 9-12 (CR)

Presenter: Provided by Texas Instruments

Experience a model learning environment, teaching approach and curriculum that will give your students opportunities to think, create, analyze and predict together. Participants will engage in hands-on learning investigations and discover how to better use graphing calculators (TI-83's), Calculator-Based Laboratory Systems (CBL's) and Calculator-Based Rangers (CBR's) to develop and reinforce algebraic concepts, in the spirit of the NCTM standards. Teachers will receive and use the new 1998 Key Curriculum Press text *Advanced Algebra Through Data Exploration: A Graphing Calculator Approach*, which integrates graphing calculators, hands-on investigations and data exploration into a meaningful and useful algebra curriculum.

Mathline - Grades K-12 (CHD)

Presenter: Susan Cook, Oconomowoc, WASDI Lead Teacher

Learn how to use the Mathline videos to plan lessons and units that help students learn important math content, the ability to communicate and reason mathematically and be more confident problem solvers. The Wisconsin/PBS MATHLINE project is a nationally recognized, year-long program for K-12 teachers. The workshop includes an on-line component and a video series featuring classroom teachers modeling exemplary NCTM based lessons with their students.

Algebra for All - Grades 8-10 (SR Waukesha)

Presenter: MaryLane Blomquist, Milwaukee, WASDI Lead Teacher

This workshop is designed to give middle school and high school mathematics teachers experience in NCTM standards rich, inquiry-based learning. Using a variety of resources including: The Graphing Calculator, Connected Mathematics Project (CMP) materials, Core Plus materials, PBS Mathline, and some teacher developed materials. Participants will learn to identify and create activities, lessons and assessment that will foster algebraic thinking.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999



High School Workshops - Mathematics cont.



Making an Integrated Fashion Statement - Grades 9-12 (CR - Core Program)

Presenters: Lorna Vasquez and Doug Dalman, WASDI Lead Teachers

Curriculum materials are now appearing which teach high school mathematics in an integrated fashion. That is, each year covers some topics from each of the major areas of study in mathematics with a strong emphasis on connections. This workshop will introduce such materials, work through many activities present in these curricula, answer concerns about classroom organization for maximizing learning under these formats, address issues of articulation with post-secondary education, and model the constructivist teaching style necessary to implement these curricula.

Technology, Toys & Teaching Math - Grades 7-12 (CM, JM Williams Bay & Verona, E, WRVA)

Presenter: John Katz, Menomonee Falls, WASDI Lead Teacher

This course will help you use both computer software and TI-92 graphing calculators to transform a traditional math classroom into an interactive hands-on learning environment your students will look forward to entering. Activities will include applications to geometry using Geometer's Sketchpad software, use of the Cabri II geometry software on the TI-92, use of the calculator based laboratory (CBL), integration of science and math using graphical analysis experiments, application of the TI-92 courses to algebra and calculus, and hands-on experience applying geometric transformation to miniature golf and billiards.

The Five C's of Mathematics: Toy Cars, Computers, Calculators, CBLs, and CBRs! Grades 9-12 (SR West Allis & WRVA)

Presenter: Lauren Jensen, Wisconsin Heights High School, WASDI Lead Teacher

Along with toy cars, participants will be working with other "toys" (weights/rubberbands/string, playground balls, and other easy to find equipment), with graphing calculators (TI-83 and TI-92), CBLs (Calculator Based Laboratory), and CBRs (Calculator Based Ranger) to obtain realistic data. You will explore various models of the data with the use of residuals. Internet projects and an investigation of geometry with the Geometer's Sketchpad will be included.

The Real World of Math - Grades 9-12 (SW)

Presenters: Ann Krause, Blackhawk Technical College, WASDI Lead Teacher and

Judy Jones, Madison Area Technical College, WASDI Lead Teacher

At this workshop you will explore projects that emphasize connections within and across disciplines, take measurements traditionally and with CBL's, find your way to internet resources, use the computer for student projects, reflect on activities with alternative assessments, take back to your school a better understanding of mathematics needed for the real world, a better understanding of what business and industry wants in employees, activities to use in all secondary level math courses, experience different teaching/learning strategies including technology as a tool and a bibliography of resources.

Uses for the Graphing Calculator in Math - Grades 9-14 (NW)

Presenter: Barb Bredel, Crandon School District, WASDI Lead Teacher

This workshop is for secondary and post-secondary math teachers who are somewhat familiar with the graphing calculator and would like some help incorporating it into the classroom. Applications will cover Algebra I through Pre-Calculus. Materials will include lessons from the Graphing Calculator Enhanced Algebra Project and the Core-Plus Mathematics Project. Participants will be provided a TI-83 graphing calculator for the week and will have a chance to try the TI-92.

Core-Plus Mathematics Project (CPMP) - Grades 9-12 (WRVA, CHI, ST & W Onalaska)

Presenters: Mary Rosin and Marcia Olson, WASDI Lead Teachers (WRVA)

Bob Lovell (CHI)

Jim Adams, Chetek, WASDI Lead Teacher (W & ST)

This workshop offers an exciting opportunity to explore an integrated high school curriculum. The Core-Plus Mathematics Project is based on the philosophy that all students can learn mathematics, if it is presented in a way that makes sense to them. The curriculum is challenging, yet accessible to all students who are willing to learn. The four major strands which run through this curriculum are algebra/functions, geometry, trigonometry, statistics/probability, and discrete mathematics. This project incorporates technology and relevant problems as a means for learning and doing mathematics.

WASDI Academies 1999

High School Workshops - Science



Using Toys to Teach Science - Grades 6-12 (SW), Grades 7-12 (CR)

Presenter: Larry Scheckel, Tomah High School

Learn how to use toys to help students develop genuine inquiry problem-solving and higher level thinking skills. Emphasis will be on how to use toys effectively as part of the science curriculum. Lesson plans, concept development, hands-on learning and the learning cycle will all be part of this exciting week. Over two hundred science-related toys will be demonstrated. Participants will make and take several dozen toys and also receive many handouts.

Chemystery: Environmental Science and Health - Grades 6-12 (NW)

Presenter: Tom Zinnen, UW-Madison Biotechnology Center

What can cause cancer and birth defects? How do we know if our water is safe, our air is clean, our food is pure? How can toxins affect how our bodies work and develop? Environmental health sciences combine ecology, biology and chemistry to provide a base for making public policy and improving public health. Use hands-on experiments and case study activities to develop science savvy in environmental issues.

Hands-on Activities, Projects and Explorations - Grades 5-10 (JM Williams Bay)

Presenter: Peter Watts, Riverside Middle School, Watertown, WASDI Lead Teacher

This workshop will focus on a number of activities aimed at making science meaningful and fun. We'll look at surface tension, light and optics, aerodynamics, and density. We'll investigate bubbles, fingerprinting, catapults, bridges, flic-flacs, Rube Goldberg-like contraptions, and lots more stuff to make science come alive for students and parents alike.

Cooperative Competitions in Physical Science and Physics - Grades 7-12 (JM Verona)

Presenter: Jim Hurley, Shell Rock High School, Waverly, IA

Fire up your students with competitions directly related to your course content! Design footwear that allows you to walk on water (you might want to bring your swimsuit or trunks!), construct mousetrap-powered dragsters, predict ranges for water balloon launches, compute the power generated by a tiny simple motor, and design and test catamarans (for the Rain Gutter Regatta!), catapults, parachutes, exotic paper airplanes, and pipette rockets. While these and other activities and projects culminate in competitions, the processes of hypothesizing, testing and modifying and working cooperatively are emphasized. Participants will receive an extensive packet of reproducible activities and have a lot of fun!

Foods/Biology: Using Foods to Teach Biological Concepts - Grades 9-12 (WRVA)

Presenter: Mark Totten

A basic "hands-on" course, providing activities using plants, bacteria, fungi, and DNA. Intended for general Biology, Advanced Biology, and teams of Family and Consumer Education and Biology teachers. This course will use everyday food materials to teach biological concepts.

Basic Molecular Biology Techniques - Grades 9-12 (WRVA)

Presenter: Teresa Barta

Genetics has become the fastest developing branch of biology. The goals of this course are to give hands-on experience performing some basic molecular biology techniques and to show how those procedures are used to answer biological questions. This is an introductory course for high school biology teachers who are looking for ideas to incorporate molecular biology into their courses, or those who simply wish to have a better understanding of the science in order to discuss current issues in their classes. The course may be taken for one week (1 credit) or two weeks for (2 credits).

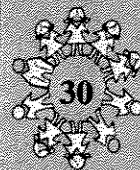
Aviation - Grades 7-12 (WRVA & E)

Presenter: Dan Fara

Explore the wonderful world of flight, with some hands-on experiences in aviation. This session is designed for the individual who wishes to learn about airplanes and how they fly. Participants will become familiar with the basic fundamentals of aeronautics. They will build a glider, work with aerodynamics, navigation, radio communication, FAA regulations, physiology of flight, map reading, flight simulation, reading weather reports, and go on an actual flight.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999

High School Workshops - Science cont.



Wisconsin Energy Education Program (KEEP) - Grades K-12 (WRVA & ST)

Presenter: Jennie Lane

Through hands-on activities and class discussions, learn how you can enhance students' understanding of what energy is, where it comes from, and how it affects their lives. You will also receive a copy of KEEP's comprehensive, easy-to-use Energy Education Activity Guide and be introduced to additional energy-related educational materials. This course is designed for teachers who want to experience it today and teach it tomorrow.

Researching Science the Write Way - Grades 7-12 (E)

Presenter: Rhoda Maxwell, UW-Eau Claire

Join Rhoda as she leads you through her research process using writing as its base. You will experience a questioning approach to research, learn how levels of writing support this approach and how to access information via electronic means. Integrated into the learning of the research process will be strategies for searching the Internet to answer the questions you want to research.

WOW Material Science: A World of Wonder! - Grades 9-12 (CR Core)

Presenter: Ken Turner, Jr., Schaumburg School District

Supplement your courses with inquiry-driven units on composites, smart sensors, infrastructure, liquid crystals, carbon chemistry and biosensors. Your students can grow a diamond thin-film, make a card that changes color with temperature, or a plastic that produces a voltage when touched. These are very adaptable, project-based, student-centered modules on the most current topics in materials science. They have a strong math component and are especially suited to chemistry, physics, and physical science courses; although all science teachers will find applications. You will be provided with content, materials, instruction, and resources.

Health Care: Using Mathematics, Science and Technology to Save Lives Grades K-12 (CR)

Presenters: Margaret Dickens-Grosskopf, Kay Scham, Karen Taylor, Steve Schreiner, Corey Weinfurter, Patricia Griffen, Patricia Traphagan, All CVTC Instructors

During this week-long workshop, participants will focus on the many applications of math, science and technology in the health care industry. Participants will analyze tissues and disease-causing organisms, apply sonographic technology in scanning body organs, discover how computers enhance X-ray diagnosis, and explore how technology is applied in the critical few moments when a heart has stopped beating. Using a hands-on approach, participants will discover how math and science, applied K-12 support these cutting-edge technologies in saving lives. This workshop will be conducted from the Phillips building on the CVTC campus in Eau Claire.

Physical Science and the Mathematics Tools that Drive It - Grades 9-12 (CR)

Presenters: Provided by Texas Instruments

Using TI-83 graphics calculators, Calculator-Based Laboratory systems, and probeware, participants will explore a variety of ways to collect and analyze data from both scientific and mathematical perspectives. Participants will gain hands-on experience collecting data with the CBL and CBR and modeling it with the powerful statistical tools of the TI-83. Participants will investigate traditional and alternative teaching and assessment techniques that utilize technology in a balanced program of reasoning, connections, and communications.

Chemistry/Biology Institute - Grades 8-12 (CHD)

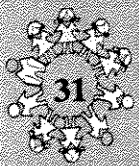
Presenter: TBA

Presented by Teachers Teaching with Technology. Secondary science and math teachers will explore biology and chemistry concepts using the TI-83 graphing calculator, Calculator Based Laboratory System (CBL), and electronic probes. Explore innovative ways to teach concepts and emphasize new ways to collect and analyze data. See how this portable, low-cost technology provides an exciting and effective way to integrate math and science.

Hot or Cold? It's Nuclear! - Grades 9-12 (CHD)

Presenters: Diane Gerlach and Roy Sackscheewsky, Kenosha

What is the big deal about $E=MC^2$? Is it fission or fusion? Is mass really conserved in all reactions? We will explore these questions, examine basic atomic structure, and explore the dynamics of atomic nuclei undergoing transition. We will apply these concepts to the issue of nuclear power generation and the medical use of radionuclides to diagnose and treat disease.



WASDI Academies 1999

High School Workshops - Science cont.



Wanted: Potential Space Station Residents - Grades K-12 (CHI)

Presenter: Judy Beck, LaCrosse

Numerous hands-on activities will illustrate the range of materials and training opportunities available through activity guides, videos, CD ROM's and Internet websites. This course will introduce participants to the opportunities available to educators through the NASA Regional Educator Resource Centers. Participants will leave with plenty of materials to use in their classroom and many more ideas!

Material World Modules (Smart Sensors & Composites) - Grades 9-12 (CHI)

Presenter: Bob Chang, Evanston IL

As a participant in the Research Experience for Science Teachers (REST) program you will have the opportunity to engage in exciting materials research, and develop a network of scientific colleagues. You will learn the latest scientific and technological developments, and discover ways to transfer this knowledge back to your classroom.

Rock Camp - Grades K-12 (CHI)

Presenters: Tom Repine, Don Primmer, Deb Hemler, Robert Behling, Paula Waggy & Karen Parlett, West Virginia and Wisconsin

Look at rock, mineral, and fossil samples, take "field trips", and evaluate earthquakes. Construct life size topographical maps, dig for fossils and check out the insects from the Paleozoic era. Explore mineral resources in everyday life and local links to Wisconsin geology. All participants will receive an activity book and tons of great ideas!

The Application of Hand-held and Computer Technologies in the Teaching of Science - Grades 9-12 (SR Waukesha)

Presenter: Jack Samuelson, Waukesha

Participants in this workshop will be given hands-on experience in using calculator-based lab (CBL) and computer technologies in the collection of scientific data. Teachers will learn how to use CBL's and computers in their favorite lab activities as well as learn about new labs they could incorporate into their teaching.

Connecting Mathematics and Science - Grades 9-12 (GG)

Presenter: TI Instructor

The primary focus of the CMS institute is collection of data and the analysis of it from both scientific and mathematical standpoints. Participants will gain hands-on experience collecting data with the CBL/CMR and modeling it with the powerful statistical tools of the TI-83. This program is for secondary math, physical science and physics teachers designed around the TI-83 graphics calculator and the Calculator-Based Laboratory System and the Calculator-Based Ranger.

Watershed Stewardship: Using Scientific Skills and Technology to Address Environmental Concerns - Grades K-12 (GG)

Presenters: Sue O'Halloran, Dr. Mary Baicer, Dr. Jack Zaengle, Dr. Susan Heidi and Jeri Schwerin, UWS and Extension Staff

This workshop will provide teachers with the scientific background needed to understand watershed ecology and will familiarize them with the methods for conducting water quality monitoring. The focus will be on basic watershed hydrology concepts. Participants will gain experience in taking standardized quantitative measurements of water quality. Teachers will be introduced to the Global Learning and Observations to Benefit the Environment program and protocol and activities. This workshop will be in the new Northern Great Lakes Visitor Center with field days provided on-board the UW-Superior research vessel and at local natural resources agencies. Participants will have access to a bus provided for daily transportation to and from the class.

Bringing Modern Genetics Into the Classroom - Grades 9-12 (GG)

Presenter: Ralph Seelke, UW-Superior

This workshop will provide high school biology and chemistry teachers with a series of exercises that will give students hands-on experience with manipulating DNA. Participants will also use the DNA to transform the genetic make up of organisms and how DNA fingerprinting can be used to identify individuals as well as specific genetic traits in people. As part of this workshop, participants will develop a plan for implementation of the exercises in their classrooms and will examine ways in which these exercises help implement the Standards.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999

High School Workshops - Science cont.



Mathematics, Science and Technology for Teachers



Where's the Beef? Real Science for All Students - Grades 7-10 (GG)

Presenter: Wayne Snyder, Caltech Precollege Science Initiative

In this workshop, participants will increase their awareness and understanding of implementing an inquiry-based science curriculum, analyze and discuss development and implementation of student assessment, increase awareness of the unifying patterns and processes in science and participate in several mini-curricula which represent a cross section of the science content areas and relate the lessons to the areas of standards, curriculum, technology, methodology, and assessment.

Criminalistics: An Introduction to Forensic Science - Grades 7-12 (WRVA, W Onalaska & CHD)

Presenter: James Hurley

Participants in this workshop will examine a one semester high school criminalistics course and the activities involved, survey books and videotapes related to introductory forensic science and perform experiments written as crime scene investigation scenarios.

Aerospace Education Services Program (NASA) - Grades 7-12 (ST)

Presenter: Ralph Winrich, Aerospace Education Specialist

This workshop enables the participant to gain a perspective of Aerospace Education through a hands-on look at the Wisconsin Earth and Space Science standards. At the end of this session, participants will be certified to receive lunar and meteorite samples for classroom use.

Science and Standards: A Motley Mix for Student Success in the New Millennium - Grades 6-12 (W Holmen)

Presenter: Kerry Hogan, Western Wisconsin Technical College, LaCrosse

Participants will become proficient in applying the principles of performance-based instruction while embedding the new Science Model Academic Standards into the curriculum. Topics to be addressed include performance-based instruction, types of academic standards, approaches to embedding the standards, performance assessments, and the high school graduation exam. Effective practices from local practitioners will be shared.



WASDI Academies 1999

High School Workshops - Technology



Engineering and Material Science: The Next Step Beyond Principles of Engineering - Grades 9-12 (CR - Core Program)

Presenter: Damon Smith, WASDI Lead Teacher

Are you looking for some new engineering courses for your school? Are you looking for some activities to supplement your existing engineering curricula? What about technology education content which is aligned with the Academic Standards? Curricular content from Project Lead the Way's Introduction to Engineering Design, Digital Electronics, Principles of Engineering, Computer Integrated Manufacturing and Engineering Design and Development will be presented. This National curricula when combined with traditional mathematics and science courses prepares students for the rigor and discipline of engineering. Participants will receive all of the information necessary to supplement their existing Principles of Engineering course or make an informed decision for implementing Project Lead the Way's engineering curricula into existing high school technology programs. All elements of this program implement and reinforce the new technology education rationale and standards.

Key For Success: Motivation, Experimentation and Competition - Grades 7-12 (WRVA)

Presenters: Charles Berben and Mark Vrieze

Boggle your brain with Robo Pong, satisfy your need for economy with a mousetrap-powered vehicle. Cross a chasm with only kite sticks and an ounce of glue. Within lies the problems; you supply the solvent in making them dissolve. Problem-solving activities that have proven to be great incentives in the classroom using technology, math and science.

AutoCad R14 Fundamentals and Advanced AutoCad R14 - Grades 9-12 (WRVA)

Presenter: Thomas J. Whelan

This course will provide participants with a chance to learn how computers and computer-aided drawing programs can improve their current manual drafting program, and prepare students for the challenge of the information age. Be exposed to a variety of challenging exercises utilizing the software AutoCad R14, the most widely used international design program in industry today. All participants will gain hands-on experience with this software which can in turn be incorporated into individual classrooms. Advanced exercises involving Architectural Design, Mechanical Design, and Engineering will be explored.

Technology Institute for Educators - Grades K-12 (CHD)

Presenters: Marie Ellis, WASDI Lead Teacher and Associates

Use technology to enhance learning and address the Wisconsin Model Academic Standards. The format of this program is in three phases-summer institute, follow-up and sharing results. Developed for educators, by educators. Participants **must** sign up for the 2 credit registration option.

Best Practices in Technology Education - Grades 7-12 (SR Waukesha)

Presenters: Dennis Skurulsky, Waukesha and Alan Gomez, Madison

Participants will have the opportunity to get hands-on experience and evaluate contemporary learning activities from across the nation. Participants will be exposed to engineering case studies, material science experiments, and modular technology activities and projects that contribute to a successful program that will help prepare students for the next millennium.

Computer Applications in a Technological World - Grades 8-12 (W Holmen)

Presenter: Dennis Skurulsky, Waukesha

This workshop will demonstrate the ways computers affect our lives today and will affect our lives in the future. Participants will be introduced to some of the latest applications of the computer world. Workshop participants will receive hands-on training in areas such as voice recognition, artificial intelligence, robotics, multimedia, CAD, CNC, the Internet, importing and exporting audio and video with computers, and the associated software programs.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999



Mathematics, Science and Technology for Teachers



Integrated Workshops All Levels

Making Standards Work - Grades K-6 (SR West Allis)

Presenter: Dr. Douglas B. Reeves, Center for Performance Assessment, Denver, CO

This workshop will provide opportunities to implement standards into classroom instruction, design performance assessments, design and construct scoring guides and learn how grading and standards work together. This will be a practical, interactive workshop where participants will actually design performance assessments based on the Wisconsin Standards.

CO-NECT: Project-Based Teaching and Learning - Grades K-12 (SR West Allis)

Presenter: Karen Powell, CO-NECT Schools

During this workshop, participants will explore and find answers to these central questions: How do we ensure that hands-on projects and other such activities lead to real learning? What should be the relationship between project work and other instructional modes (such as traditional teacher-led classes)? In what ways, if any, should projects involve students in activities beyond the school walls? How do we prepare teachers and students to engage successfully in challenging, project-based, student-centered work? This workshop will revolve around four main areas: Student-Centered Conversations, Characteristics of High Quality Projects, Integrating Project Work and Basic Skills, and Community Involvement. This workshop is for teachers and schools participating in Project CO-NECT.

Music and Technology - Grades K-12 (SR West Allis)

Presenter: Julie Stringer, West Allis

This workshop will introduce the user to exciting and engaging computer music programs. Explore composing, sequencing, keyboarding and composition. Student utilization will be emphasized. Content and activities will involve MIDI interfaces, computers and keyboards. This workshop will utilize the MIE program.

Dimensions of Learning - Grades K-12 (GG)

Presenter: Diana Pearson, Kenosha

Dimensions of Learning is an instructional framework based on the best of what researchers know about learning. Its premise is that five types of thinking are essential to successful learning. Dimensions offers teachers instructional strategies and a model for planning standards-based curriculum, instruction and assessment taking into account all five critical aspects of learning. Participants will interpret the model's potential as they experience the dimensions through interactive activities.

Youth Service Learning - Grades K-12 (GG)

Presenter: Carol Klopp, CESA 2

Youth Service Learning is an instructional strategy that engages students in identifying a need in the community, proposing and implementing a strategy to address the need and evaluating the impact of this work in meeting the need. Participants will be able to develop a Service Learning Strategy that can be incorporated into curriculum, design evaluation and reflection activities that can be used as assessment tools to determine students attainment of academic standards and engage students in a decision making process that allows them to link academic work in the classroom to the world outside of school.

Performance Assessment - Grades K-12 (GG)

Presenter: Susan Udelhofen, Education Consultant

This workshop will help teachers understand that assessment literacy is dependent upon an understanding of current sound assessment practices and ways they are intricately interwoven into instruction. Participants will learn the principles of sound assessment and how to create performance assessment, and the framework for valid, informative, quality assessment connected to curriculum and standards. The process of creating scoring guides (rubrics) for these assessments will also be covered.

IIPS, - Innovation, Invention and Problem-Solving - Grades 6-12 (W Onalaska)

Presenters: Ron Fisher, Holmen, WASDI Lead Teacher and Jay Ruetten, LaCrosse, WASDI Lead Teacher

IIPS is an activity-based journey into the realm of innovation and invention. Integrate this experience directly into your math, science and tech ed courses. Provide your students with proven activities that incorporate standards-based instruction. **Not only hands-on, but minds-on and fun, too!**

WASDI Academies 1999

Integrated Workshops All Levels cont.

Linking Assessment, Curriculum and Learning: Building a Standards-Based, Student-Centered Curriculum, August 2-3 and Creating Assessment Systems in Student-Centered Learning Environments August 5-6 - Grades K-8 (W Onalaska)

Presenter: Eileen Griffin, Griffin Center for Human Development

On Monday and Tuesday this workshop will address the real need to translate and integrate the standards into meaningful, relevant and active curriculum. Participants will focus on the thought processes, skills, and strategies needed to implement Standards-Based, Student-Centered Curriculum, Integrated Thematic Units of Study, Core/Knowledge Curriculum, Prioritized Curriculum, and the Project Approach will be shared as ways to engage both students and teachers in worthy, enjoyable, and meaningful work. Participants will also attend the Wisconsin Multiage Conference at the LaCrosse Convention Center on August 5-6 (Thursday and Friday). Eileen Griffin will continue with her Washburn Academy focus, offering a keynote address and sectional on "Creating Assessment Systems in Student-Centered Learning Environments."

Standards and Assessment: Steps to Success - Grades K-12 (W Holmen)

Presenter: Jerry Redman, Director, Standards and Assessment Center, CESA 4

The new challenge for Wisconsin schools is to improve student learning and performance. Participants in this workshop will examine the Wisconsin Model Academic Standards, explore various assessment strategies and learn how to document evidence of student achievement. Best practices from local districts will be shared.

It's Not Just About Achievement! D.E.P. for the WSAS--Doing More, Expecting More, Producing More - Grades 3-8 (W Holmen)

Presenters: Barb Field and Sue King, Whitehall

Using your own course materials, lessons, and curriculums, learn and share information about strategies, technologies and current research that work to improve student success across the content areas. Participants will be able to develop and practice classroom techniques that do more, expect more and produce more from their students.

Changing Perspectives - Grades K-12 (ST)

Presenters: Nancy Berkas and Cynthia Pattison, NCREL

This workshop allows an entire school team access to an excellent collection of resource materials along with an interactive CD ROM that can be used within their district setting to develop an individual school improvement plan.

Creating Independence Through Student-Owned Strategies (CRISS) - Grades 4-12 (ST)

Presenter: Connie Russell

This three-day one credit event will outline the principles and philosophy of CRISS which provides strategies for presenting CORE knowledge through active listening, reading and learning. Discussion and instructional conversations will focus on topics integral to CRISS.

Standards, Assessment and Your Classroom - Grades K-12 (ST)

Presenter: TBA

This session will provide general and special education teachers a forum to come together and develop models that meet the needs of all students. Emphasis will be on strategies relating to the Wisconsin State Performance Standards, WSAS, the IEP, and alternate and alternative assessment and the IEP will be emphasized.

Brain-Based Research - Grades K-12 - (ST)

Presenter: David Sousa

This is a rare opportunity to work up close and personal with this nationally recognized authority on brain-based learning. Former Chemistry Teacher and Superintendent, David Sousa has written several successful books and will be working with participants on how to integrate his ideas into their own classrooms.

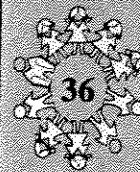
Rethinking Social Studies Education - Grades 9-12 (W Holmen)

Presenter: Paul Rykken, Black River Falls

Practical methods of implementing and assessing the model academic standards in social studies will be the focus of this workshop. After examining the standards themselves, various teaching techniques will be explored with an emphasis on the constructivist approach.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999

Integrated Workshops All Levels cont.

Healthy Environments for Teaching and Learning - Grades PreK-12 (W Holmen)

Presenter: Sponsored by CESA #4 Prevention Wellness

A healthy environment for teaching and learning exists within a school when the culture and climate support the physical, mental, emotional and social well being and safety of both teachers and learners. This workshop brings together three recognized presenters speaking on topics related to optimum learning environments. Team Building with Mike McGowan; Standards, Effective Class Instruction and Healthy Choices with Dr. Joan Oganowski and Educare: Brain-Compatible Teaching and Learning with Tim Burns.

Colleagues in the Classroom - Grades PreK-12 (W Holmen)

Presenter: Pam Foegen, LaCrosse

This workshop is designed to provide teachers with the information they need to work more effectively with preeducators and other support personnel in the classroom setting. The purpose of the workshop will be to enhance the working relationships of classroom personnel so that instruction to students is consistent and effective, classroom activities are well coordinated and the stress that sometimes develops between adults in the classroom is decreased.

Assistive Technology in the Classroom: Software, Strategies, and Solutions - Grades PreK-12 (W Holmen)

Presenter: Mary Wirkus-Pallaske

This workshop will provide philosophies, strategies, implementation methodologies, and hands-on opportunities with a variety of assistive technology. Hardware and software supports for a broad array of subject areas including reading, written communication, handwriting, math, science, as well as communication, alternate computer access, vision, hearing, learning/studying, recreation and leisure, mobility, and environmental control and other areas of adaptations will be explored.

The ART of Teaching Gifted Students in the Regular Classroom - Grades K-8 (W Holmen)

Presenter: Alice Moersch, Northfield MN

In this workshop, teachers will learn basic strategies which will make this difference easily attainable (and survivable!) The concepts will include "Attitude" for Successful Differentiation (A); "Respect" for Students' Interests and Strengths (R); and "Techniques" and Tricks for Meeting All Students' Needs (T). That's the ART of teaching gifted students in a regular classroom!

Essentials of Mentoring - First Steps - Grades K-12 (W Holmen)

Presenter: Fred Poss, Eau Claire

In this workshop, the basics of establishing successful mentoring - all of the necessary program, policy, liability, contractual, and people issues - are examined in detail. Active learning lessons will guide participants in developing the initial legal safeguards and win/win approaches to the critical **first steps** of doing mentoring the right way. This first of a two-course sequence provides the strategies, safeguards, and resources it will take to meet the requirements of the new laws being developed in the state legislature.

Mentoring - The Next Steps - Grades K-12 (W Holmen)

Presenter: Cathy Atkinson, Waukesha

In this workshop, participants confront **in-depth** the challenges of actually having to guide and to change beginning teachers. Using knowledge and resources gained as veteran teachers and mentors, participants will be able to expand their people skills and negotiating strategies.

Business World - Grades K-12 (W Holmen & CHD)

Presenter: Jim Morgan, Wisconsin Manufacturers & Commerce and Larry Cozad, UW-LaCrosse

This workshop is modeled after and offered in cooperation with the successful Business World program sponsored by Wisconsin Manufacturers & Commerce for educators to experience regional businesses and industries. Through tours of companies, interaction with local business leaders and small group activities, participants will learn about the economic conditions and challenges of Wisconsin companies.



WASDI Academies 1999

Integrated Workshops All Levels cont.

"I" is for Math, Science and Technology Education - Grades K-2 (CM, CR, SR West Allis & W Onalaska)

Presenters: Rosanne Cowan, McLane School, West Bend, WASDI Lead Teacher

Candy Nerge, Crestwood Elementary, Madison, WASDI Lead Teacher

This course invites K-2 teachers to implement numerous hands-on activities that integrate language arts, math, science and technology education. You will engage in purposeful activities that match the NCTM and NSES standards to take back to your classroom on time to start the school year, learn how to structure similar inquiry based learning activities, incorporate quality children's literature, design authentic assessments and integrate these into your curriculum and investigate a theme a day the math, science and technology way.

Wings, Wheels and Wonderment: An Integrated Process Approach to Science, Math and Technology Grades K-5 (CM) and Grades 2-5 (JM Verona)

Presenters: Shelly Long and Chuck Paulson, Southern Bluffs Elementary, LaCrosse, WASDI Lead Teachers

Participants will be actively involved in the construction of movable, workable projects. These projects will be integrated within other subjects that occur in a thematic-based elementary classroom with a heavy emphasis in math integration. The course will revolve around constructivist approaches to quality instruction. The life cycle of a butterfly, rubber band power, simple machines, balancing, weighing, sinking and floating and chemical changes will be covered.

Shrink Wrap - Grades 1-5 (CM & WRVA)

Presenters: Mary Richards, Waupaca Learning Center, WASDI Lead Teacher

Debra Wood, Grove Elementary School, Wisconsin Rapids, WASDI Lead Teacher

Shrink Wrap will provide methods and hands-on models and how to package your lessons reflecting the multiple intelligences. We will discuss standards, relate literature to math, science and technology activities, distinguish between ed tech and tech ed and experience technology as a learning/teaching tool.

Tech-Talk: Developing Technical Communication Skills - Grades 6-12 (CM, ST & CR)

Presenter: Jim Adams, Chetek High School, Chetek, WASDI Lead Teacher

This course is designed for teachers interested in helping students develop communicating skills. Areas of emphasis include reading, writing, speaking and presenting technical material. Participants will learn how to help students describe motion, read and write technical information use illustrations, and make presentations. This course will model various group activities as well as use word processors, spread sheets and presentation software such as PowerPoint. We will develop at least one classroom communications activity each day.

A World in Motion II: The Design Experience - Grades 6-8 (CM)

Presenter: Sandra Swietlik, WASDI Lead Teacher

Teachers will work with this ground-breaking curriculum unit (developed by the Educational Development Center) to design, build and market a new toy. Participants will receive a "Request for Proposal" from a fictitious toy company, "Mobility Toys," asking them to submit designs for a motorized toy vehicle that can be marketed to a 6 to 10 year old population. Professionals from the engineering field work side by side with teachers. The challenge culminates in final presentations to the "Mobility Toys" reps.

Teaching with Diversity - Grades 3-9 (SR - Waukesha)

Presenter: Bob Friedel, Consultant, Burlington

This workshop will concentrate on the most stimulating and thought-provoking science, mathematics and technology concepts considered essential for educational excellence in today's schools. All activities and concepts will be referenced to state and national standards of instruction and content. Weather, air pressure, density, surface tension, the center of gravity, magnetism and electricity, recycling and the environment, plus additional integrated topics will also be investigated with their applications for classroom instruction. Participants will receive packets of ideas, tips and plans as how to integrate mathematics, science and technology concepts into the curriculum.

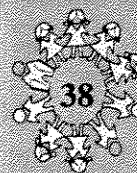
Cutting Edge of Special Education - Grades Early Childhood - 12 (SW)

Presenters: CESA 3 Special Education Department

The following areas will be covered during the week in this workshop: changes in IDEA, modifications of the general ed curriculum, nuts and bolts of IEP's, assistive technology, test taking accommodations and alternative assessment and inclusion.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999



Integrated Workshops All Levels cont.

Exploring Science & Math With Young Children -Grades Pre-K-1 (SW)

Presenters: Jane Maki and Cathy Burge, Port Edwards School District and Jackie Wilhelmi, Pittsville School District

This workshop will explore appropriate development curriculum for young children in the areas of science and math. Participants will engage in a vast array of activities that can easily be transferred into their own curriculum and classrooms. We will explore ways to teach young children science and math concepts using children's literature, Big books, manipulatives, "hands-on, minds-on" activities, the new standards based math curriculum, thematic units, the alphabet and many wonderful resources.

Creating and Balancing Best Practice Principles in a Literacy Framework - Grades K-3 (SW)

Presenter: Cynthia R. Terrill, Pecatonica Schools

This one week workshop will compare and contrast past reading methods with the newer literacy practices supported by research. Participants will be asked to analyze their current programs and to create an action plan that will reflect their new knowledge. All key components of a balanced literacy program will be presented. Participants will spend the majority of each afternoon collaborating and creating materials that will improve the management and the quality of literacy activities in their classrooms. Projects might include poetry boxes, task board for literacy centers, book leveling, phonemic awareness activities, interactive writing charts, alternative assessments, reader's theater selections, home/school connections, etc.

M.A.G.I.C. of Thinking and Teaching Better - Grades 3-9 (SW)

Presenter: Bod Budgins, Glendale, WASDI Lead Teacher

Making activities genuinely interesting consistently for your students is the promise and focus of this workshop. The purpose of this mind-enhancing, hands-on workshop is to give participants an informed overview of current research of brain compatible instruction and how it pertains to teaching science, math and technology. Participants will use constructivism in a baggy to see the part constructivism plays in concept attainment. We will create and format interactive reflection journals that improve student emotional intelligence by fostering thinking. Participants will be expected to create hands-on teaching activities that demonstrate brain-based teaching and share them with workshop members for critique.

Hooked on Learning - Grades 2-5 (SW)

Presenter: Kathy Romsos, Denmark Elementary, WASDI Lead Teacher

This workshop will explore how to make learning meaningful by involving your students in a variety of hands-on, problem-solving activities that will enhance your existing curriculum. Participants will experience first hand how pupils develop and apply their knowledge when drawing, planning, designing, problem solving, building, testing and improving their solutions to problems. Participants will learn to develop and plan activities that integrate constructivist and cooperative learning beliefs, use inexpensive and easy to find supplies, and allow for the multiple intelligences of students. Activities will include building towers, cars, and roller coasters; launching rockets, using literature to design projects and creating your own activities to take back to your class.

Teaching the Whole Child: Dimension of Learning - Grades K-8 (NW)

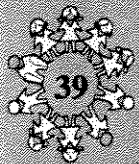
Presenter: Pat Tyunaitis, WASDI Lead Teacher

Explore and develop a new framework for a learning-centered education for your K-12 classroom. Dimensions of Learning can provide a thinking and doing framework for instructional planning and curriculum design. You will be provided with a practical way to transform traditional schooling into a learning-doing centered approach, shaping a holistic view of the learning process.

Writing on Demand - Grades K-12 (JM Verona)

Presenter: Denise Wenger, Ph.D., Consultant, Pewaukee

Writing On Demand takes the mystery out of teaching Writing On Demand for K-12 teachers. It explores the needs of learners as On Demand writers, and it provides the nuts and bolts that teachers need to prepare K-12 learners for writing tasks required by Wisconsin State Writing Assessments (WSAS) at grades 4, 8, 12. It engages teachers in activities that expand their understanding of learners' needs, helps teachers develop "eyes to see" structure in writing, and helps teachers learn to use probes, prompts and cues to prepare learners for writing on demand assignments. Teachers experience a menu of models and systems they can adapt for their own classrooms. They plan hands-on Writing On Demand training they can use to help their students meet and exceed WSAS writing standards at any grade level and share their plans with colleagues.



WASDI Academies 1999

Integrated Workshops All Levels cont.

Integrating Multiple Media: Investigate, Celebrate and Explore Wisconsin - Grades 4-5 (JM Williams Bay)

Presenters: Linda Hanson, Director, Instructional Production & School Services, WECB - Madison

Peggy Garties, Multimedia Analyst, WECB - Madison

The focus of this workshop will be to integrate multiple technology resources (video, CD-ROM, internet) to engage students in learning about Wisconsin. Participants will work in teams to construct student-centered learning experiences. Teachers will have access to the internet, the CD-ROM Wisconsin: Celebrating People, Place and Past, instructional television series Investigating Wisconsin History and Exploring Wisconsin Our Home and many other resources. All of the resources used by the teachers will be directly correlated to a specific performance standard from the Wisconsin Model Academic Standards for Social Studies.

The ABC'S of Grantwriting and Resource Networking - Audience Administrators, Interested Educators (JM Verona)

Presenter: Dr. Eric Smith, CESA 2 Dane County Director, Madison

Each participant in the ABC's Seminar will be presented with a wealth of practical ideas plus a complete resource binder to use back home. Tips range from writing techniques, to finding the right grant, to learning about what grant readers look for in reviewing a grant. Specific techniques to plan will be highlighted. The seminar is lively, informative, and focused on the needs of the educator with little or no grant writing experience.

Assessment Workshop: Investigating Mandated Standardized Tests, Portfolios as a Learning Tool and Assessment - Grades K-8 (WRVA)

Presenters: Faye Miller and Mary Lou Harris-Manske

This workshop is designed for teachers who are interested in preparing students for mandated standardized tests and how to interpret results to parents and the public. Teachers will also explore how portfolios can enhance assessment and classroom practices. Participants will have the opportunity to develop strategies and rubrics that can be easily integrated into current instruction and a variety of curriculum areas.

Unlock the Door: Open the Communication - Grades 3-6 (JM Williams Bay & WRVA)

Presenters: Jan Drehmel, Parkview Elementary, Chippewa Falls, WASDI Lead Teacher and Janet Alekna, Grove Elementary, Wisconsin Rapids, WASDI Lead Teacher

This workshop is designed to get you, your students, and parents involved in meaningful activities based on math, science and technology standards. Activities are versatile enough for parents and students to explore in a school or home setting. Research shows that these kind of connections strengthen relationships between parents, teachers, students, and the community. Workshop leaders will share their experiences with implementing home-school connections: problems, successes, promotions, and activities.

Leadership Workshop for Building Effective Family Involvement in Early Childhood..Math and Science - Grades PreK-2 (WRVA)

Presenter: Marta Larson

Playtime is Science (PS) and Family Math for Young Children (FMYC) are model programs that are nationally recognized for their excellence in math and science education, their ability to involve hard-to-reach parents, and their focus on providing educational opportunities for girls and children from cultural groups that are traditionally under-represented in the skills scientific workforce. These models incorporate hands-on activities which foster a cooperative learning environment for families to approach math and science as a fun, everyday event in which anyone can participate. This leadership workshop will help teachers and school staff facilitate family classes in their own communities. Class participants will be eligible to earn additional credit from UW-Stout for leading parent-child workshops using materials and lessons from this course. Participants are asked to attend as part of a team that includes a minimum of three persons from the same school.

In-Tech-Great!! - Grades K-6 (WRVA & W Onalaska)

Presenters: Stefanie Boggs and Bill Giese, WASDI Lead Teachers

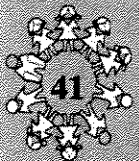
Learn strategies to enliven your elementary classroom! Science, math, and reading strategies which cause students to THINK as they utilize a hands-on, problem-solving approach will be presented. Leave with ideas that are easily implemented in your classroom. This fast paced hands-on workshop will allow teachers to become familiar with the new Technology Education State Standards through engaging activities they can emulate in their own classrooms. Participants will be required to produce finished projects and participate in the design process. Additionally, a written theme-based unit based on the participants' grade levels will be assessed and presented at week's end.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999



Integrated Workshops All Levels cont.

Adventure in the Classroom - Grades K-12 (WRVA)

Presenter: Dave Lockett

The primary thrust of this course is to provide teachers with instructional techniques and applications of adventure learning. Individuals will become acquainted with a variety of adventure activities that can be used in the classroom. They will also be provided with an opportunity to participate on a high and low ropes course. Seminar discussions will focus on the foundations of adventure education as well as philosophical issues including experiential learning theory, risk taking, and the aims of adventure education.

Developing Multiple Intelligence Learning Kits for Interactive Teaching - Grades K-12 (WRVA)

Presenters: Dave Masterson and Jon Griffith, WASDI Lead Teachers

Have you ever found a way to reach each individual student? You know, find out what they learned in their own way? This workshop is geared towards helping participants identify students' intelligence (learning style), developing standards-based activities that use students' intelligences, and developing assessment tools that use those intelligences effectively to display what the student has learned.

Weird and Wacky Ways to Integrate Science and Math - Grades 4-6 (WRVA)

Presenters: Sue Hall and Betsy Muhvic

Put on your lab coats and become a super sleuth as we investigate innovative problem-solving activities. Participants will discover new ways to integrate science and math with literature, social studies and art. Get ideas on using mysteries, inventions and problem-solving techniques that meet national standards that can be recreated in your classroom.

TI CMS (Connecting Math and Science) - Grades 9-12 (WRVA)

Presenter: Provided by Texas Instruments

This institute is a week-long professional development program for secondary mathematics, physical science and physics teachers designed around the TI-83 graphics calculator and the Calculator-Based Laboratory System (CML), a calculator interface used to collect data through probes or sensors, and the Calculator-Based Ranger (CBR). The primary focus of the CMS institute is collection of data and the analysis of it from both scientific and mathematical standpoints. Participants will gain hands-on experience collecting data with the CBL/CMR and modeling it with the powerful statistical tools of the TI-83. Working in groups, teachers will use this knowledge to develop a lesson focusing on the integration and connection of mathematics, physical science and physics.

Resiliency: Schools and Students Working Together - Grades K-12 (NW)

Presenter: Kathy Druেকে, Brookfield School District

Students will explore the concept of resiliency as it relates to the development of children and adults, their problem solving and goal setting strategies and resiliency's impact on the school system. Research on resiliency and the 40 assets will be used to incorporate proactive classroom methodologies that will promote resiliency in the school learning environment. The text for this class will be Henderson and Milstein, "Resiliency in Schools."

Milk It! Multiple Intelligence Learning Kit Through Interactive Teaching - Grades 1-6 (CHI) Grades K-12 (GG)

Presenters: Dave Masterson, Stevens Point, WASDI Lead Teacher (CHI)

Dave Masterson, Stevens Point and Jon Griffith, Spooner, WASDI Lead Teachers (GG)

We are all aware of brain based and multiple intelligence learning. How do you assess what students are doing effectively? As a result of this workshop you will know what the seven intelligence's are and how to identify each student's learning style; develop standards based activities based on those learning styles; and develop tools to provide authentic assessment of student learning.

Integrating Multi Media and the Wisconsin Standards Into Social Studies - Grades 3-6 (ST)

Presenter: Trish Graves, CESA 11

The focus of this three-day workshop will be to integrate media and technology resources that actively engage students in learning. The specific emphasis will be on instructional broadcasting programs (NIBS) that emphasize US and Wisconsin history. Educators will work in teams to construct student centered learning experiences that are aligned with the state standards.

WASDI Academies 1999

Integrated Workshops All Levels cont.

Brain Friendly Classroom - Inside and Out - Grades 1-6, (NW)

Presenters: Kris Dimock, Bloomer Schools, WASDI Lead Teacher and
Pat Rahn, Chippewa Falls School, WASDI Lead Teacher

Research says that most of our students are only using between 1% and 20% of their brain's capacity. Research has also found that our students see no relevant connection between what we teach and what is happening in their daily lives. Research has found that we can expect to have our students' attention for only 20% of the time that they are with us. If these facts alarm you, this workshop is for you! By involving your students in hands-on activities you will increase their power to learn. Combining that power with brain strategies and inquiry based activities will foster a classroom where minds are always turned on.

Technology and the Future Work World - Grades K-14 (NW)

Presenter: Dr. Donald D. Jorgenson, Marian College

This is a hands-on course which will involve a workshop format and field trips to area employers. Participants will gather information that will be useful in their schools for students, parents and other educators and enhance their ability to help implement School to Career programs in their schools. They will also better appreciate the important role educators can play in the career development of their students as well as appreciate the needs of business and industry and the changes that are taking place in the world of work.

The Seven Habits of Highly Effective People - Grades K-14 (NW)

Presenters: Jolene Johnson and Ginny Leith, Nicolet Area Technical College

The Seven Habits course introduces a process that combines character building with good management practices. The course teaches "Inside-Out" improvement, focusing on developing trust, commitment, empowerment, self-management, teamwork and synergy. Practice of the Seven Habits can make your life more effective in both your personal and occupational relationships. Participants will learn to deal effectively with challenges common to all organizations.

Creating a School Climate for Student Success - Grades K-14 (NW)

Presenter: Melissa Keyes, Ph.D., Keyes Consulting Inc.

In this workshop, participants will develop a process for ensuring that all students are able to learn in an environment that is safe and supporting. The framework presented in this workshop will allow for participant vision, assessment of a school site, planning for change and implementation and evaluation strategies designed to maximize learning for the maximum number of students. Attention will focus on equity in school climate, instruction and curriculum.

Technology in the Classroom: The Teaching Tool for the 21st Century - Grades 3-9 (JM Williams Bay)

Presenter: Bob Friedel, Consultant, Burlington

This workshop will help you engage and excite your students with the science and math of technology. The topics of digital information, computers, photography, science and math standard concepts, and the world of solutions will be explored. A special session on "the world of instant photography" will be presented. Computer lab time will be provided with instructional guidance for classroom application. Information and free materials will be given out from over a dozen sources to help spark student learning.

Internet and E-mail for Everyone, Beginner Level - Grades K-12 (CHI)

Presenter: Collin Csuy, Wausau, WASDI Lead Teacher

Navigate the internet, create a web page and examine issues related to internet use in the classroom. Self-paced tasks will lead to mastery of e-mail and internet skills. Participants will have practice using math, science, and technology standards to design internet-based classroom lessons.

Internet and E-mail for Everyone, Advanced Level - Grades K-12 (CHI)

Presenter: Aaron Trautwein, Carthage College, Kenosha

Learn how to design and construct web pages using Netscape Communicator and how to use e-mail. Participants in this workshop will learn how to incorporate their own web pages and student designed web pages into traditional lesson plans. Participants in this workshop will learn how to navigate the world wide web using Netscape Communicator, evaluate search engines to find "good sites", create web pages for instruction and student enrichment and become aware of some of the concerns both parents and community groups have regarding the internet.



Mathematics, Science and Technology for Teachers



WASDI Academies 1999

Educational Technology Workshops - All Grade Levels

Enhancing Teaching with the Internet - Grades K-12 (JM Williams Bay & GG)

Presenter: Andrew Kuemmel, Edgerton High School, Edgerton, WASDI Lead Teacher

In this workshop K-12 teachers from beginners to experts will learn how to effectively infuse the internet into their existing curriculum. A course web page will be maintained throughout the following year to demonstrate course projects and to give updates on new sites.

Getting Connected - Linking and Webbing Your Classroom - Grades K-12 (JM Verona & WRVA)

Presenter: Steven Stevenoski, Wisconsin Rapids, WASDI Lead Teacher

This workshop is intended to be a hands-on, experiential institute with teachers interested in designing and implementing cross-disciplinary units that allow students the freedom and the opportunity to solve real world and highly complex problems using computers, the internet and other low cost digital technology. The workshop will be conducted in three parts: 1) Learning the language of the internet and computers; 2) Putting the computer to work in the classroom and; 3) Navigating the internet.

HyperStudio in the Classroom - Grades 4-12 (WRVA)

Presenter: Tony Gordon

Bring multi-media into your classroom by adapting your existing projects for use with HyperStudio. HyperStudio is multimedia authoring software based on the metaphor of index cards. Each slide created is called a card. A group of cards is called a stack. A stack operates in much the same way a Web site does. A hands-on approach will be employed during this course to ensure participants will have enough knowledge to use the program in a classroom setting. Skills such as importing pictures, recording sounds, and overall HyperStudio stack development will be covered.

Lights, Camcorder, Action! - Grades 7-12 (CR)

Presenter: Jim Schmitt, WASDI Lead Teacher

Bring "Wheel of Fortune", "Monday Night Football", bungee jumping, shooting baskets, driving cars, and a variety of other real-life activities into your classroom with the use of a camcorder and VCR. This method of data collection can easily be used to study motion in the physical science classroom and the modeling of mathematical functions in the math classroom. During the week, participants will learn how to master this data collection technique, discuss assessment techniques, as well as make and share supporting materials to assist the immediate implementation of this strategy in the classroom

Communication Electronics - Grades 7-12 (WVRA)

Presenter: Todd Vander Loop

Experience the ins and outs of running a cable access T.V. channel. Participants will take over the daily operations of Channel 99 and the electronics projects completed in the class, Communication Electronics. This is a hands-on workshop that will expose you to video (editing, production, broadcasting, etc.) and the electronics that make it all possible.

ClarisWorks for Teachers - Grades K-12 (CHD)

Presenter: Mary Salani, Kenosha

Introduction to word processing, graphics and slideshow features of ClarisWorks. Use the tools in the tool palette to create, select, move, resize and reshape objects. Learn about a ClarisWorks document and how to enhance text with graphics, make and modify ClarisWorks templates and create your own templates for your classroom. Teachers will also learn how to use a spreadsheet to create a chart for use in a word processing document or to use the database to create a form letter.

Just the Facts! Ways Primary Children Read and Write Information Books! - Grades 1-2 (JM Verona)

Presenter: Margaret Jensen, Hugel Elementary School, Madison

Let's look at the information books available for emerging and developing readers. Which ones are great read-alouds, independent and/or guided reading selections, and books for browsing? What are the criteria we should use to evaluate these books? How do we help children build the vocabulary needed to understand new information. How do we help them gain important word identification and comprehension strategies? We will explore all of the issues and develop materials to use next year in our classrooms!

