

Illinois Mathematics and Science Academy Annual Report 1993-94

r≝IMSA

## TRANS forming through connections



Adding wings to caterpillars does not create butterflies– it creates awkward and dysfunctional caterpillars. Butterflies are created through transformation.

- Stephanie Pace Marshall, Ph.D.



### TO OUR<sub>shareholders</sub>

Dear IMSA Shareholders,

It is our privilege to share with you the eighth annual report of the Illinois Mathematics and Science Academy. The 1993-94 year was a turning point for IMSA and our annual report helps to tell the story of our continued transformation from that of "school" to that of "educational laboratory/resource for the state of Illinois."

During 1993-94, the board of trustees officially approved a new strategic plan and mission statement declaring a bold commitment to the *transformation* of mathematics and science teaching and learning through connections. To answer that call, the Academy radically redesigned its internal organizational structure and as a result, has expanded statewide partnership initiatives to 50 secondary and elementary schools across Illinois.

This year we were privileged to have Governor Jim Edgar give the commencement address to the Class of 1994 and are extremely grateful for the gift he brought to us that day; the release of \$1.7 million in capital development funds to further our distance learning initiatives and partnerships with schools throughout Illinois.

This year proved to be a remarkable one for curriculum innovation and research at IMSA. The Academy implemented several new courses for incoming sophomores such as Integrated Science using the IMSA Integrative Learning System (ILS) as a framework for curriculum development. In partnership with the Association for Supervision and Curriculum Development, we are sharing the ILS with 16 schools in Illinois and throughout the country that are interested in advancing the practice of integrative teaching and learning.

On behalf of the Academy's board of trustees, faculty, staff, students, parents and alumni, it is our privilege to share with you the Academy's 1993-94 annual report and to thank you for investing in another year of transformation, partnership and service to Illinois.

Sincerely,

Atgetonic Marshall

Stephanie Pace Marshall, Ph.D. Executive Director

Kam D Kear

James D. Pearson President, Board of Trustees





The mission of the Illinois Mathematics and Science Academy, a pioneering educational community, is to transform mathematics and science teaching and learning by developing ethical leaders who know the joy of discovering and forging connections within and among mathematics, science, the arts, and the humanities by means of an exemplary laboratory environment characterized by research, innovative teaching, and service.

1

### HIGHLIGHTS special events

### Fall

- Third Annual James R. Thompson Leadership Lecture-Poet Maya Angelou presented An Afternoon with Maya Angelou, co-sponsored with the City of Aurora's Youth Services Department. Approximately 1600 guests including students and teachers from schools in Chicago, Aurora and several Chicago suburbs attended her lecture. (see photo-below left)
- National Merit Scholarship Corporation- Sixty-four IMSA seniors (30%) were named semifinalists including two students who received the only perfect scores in Illinois.
- American College Test (ACT) exam- IMSA's Class of 1993 led the nation with an average score of 30.6 (*Chicago Tribune*). This is the fourth consecutive year it was reported that IMSA led the nation on the ACT exam.
- Chicago Area Administrators Forum- IMSA hosted Let's Talk Curricular Improvement & Collaborative Partnerships attended by administrators from 65 schools.

### Winter

- 1993 Knowledge Master Open- A team of 15 IMSA students finished first in Illinois and the nation in this test which covered 15 curriculum areas. Students were scored on the basis of accuracy and speed in answering 200 multiple choice questions.
  - Illinois High School Association (IHSA) Official
    Tournament Band- IMSA's Pep Band was one of two
    bands in Illinois selected to perform during the State
    Final AA Boys Basketball Tournament.



NBC-TV's Dateline anchor Jane Pauley with IMSA seniors Rebecca Reichert and Deneb Bates.

- USA Weekend and NBC-TV's Dateline- IMSA's calculusbased physics/mechanics course, one section of which was all girls, was featured in reports on gender equity in education. The all-girls section was part of the first phase of a year-long study designed to learn more about how studentteacher, student-student, and student-content interaction affect learning. (see photo-above)
- **1994 Presidential Scholars Program-** Fourteen IMSA seniors were named semifinalists in this national program recognizing the nation's most distinguished graduating high school seniors.

### Spring

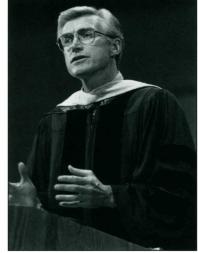
• American High School Math Exam- IMSA students received a perfect team score, the highest achieved since the advent of the current scoring system in 1986. IMSA also had the highest number of students achieve national honor roll and merit roll status.

Poet Maya Angelou

- *Redbook* Award- For the second time, IMSA was named one of "America's Best Schools" and was one of seven winners in the "classroom innovation" category. Winners were cited for flexible scheduling, interdisciplinary courses and integration of the latest technology into the classroom.
- 4th Annual Create Your Dream Prom Contest- IMSA seniors won a \$5,000 grand prize for their essay in this contest sponsored by YM (*Young and Modern*) magazine and donated \$2,500 to the Make-A-Wish Foundation of Northern Illinois. IMSA's donation enabled a six-year-old leukemia patient and her family to travel to Disney World.
- Third Annual Richard L. Horwitz Lecture on Ethics-Dr. Laurel Burton, the Bishop Anderson Professor of Religion and Medicine at Rush University in Chicago lectured on *Leadership: The Role of Personal Values in Health Care Ethics.*
- National Conference on Undergraduate Research- For the third year, IMSA was the only high school invited to participate, with 16 IMSA students presenting their research. More than 1,000 undergraduates and faculty advisors who were involved in scholarly research attended the conference held at Western Michigan University.
- CADRE- Approved by the board of trustees in May, "Career Development Reinforcing Excellence" is a new framework detailing the supervision and professional growth process for IMSA faculty. In CADRE, faculty are evaluated by their peers, showing their high expectations and accountability of each other.

### Summer

- International Mathematical Olympiad- As one of six students on the U.S. team, IMSA student Stephen Wang received a gold medal at the international competition in Hong Kong. The U.S. team placed first overall.
- Commencement of Class of 1994- Illinois Governor Jim Edgar gave the commencement address on June 4 to IMSA's sixth senior class at Aurora's Paramount Arts Centre. (see photo-right)
- Summer 'AD'Ventures in Mathematics, Science and Technology program- 280 Illinois students in grades 7-10 attended sessions in either Aurora or Charleston. The sessions included discovery-based laboratory activities, guest lectures by visiting scientists and researchers, and field trips to laboratories, companies and universities.
- IMSA Leadership Conference- Approximately 300 Illinois educators who were involved in the IMSA/Motorola University "District Learning Leadership Teams" initiative to improve mathematics and science education attended the annual conference. Conference topics included schoolbusiness partnerships, action research and the process of change.
- Neison and Bette Harris Institutes on Problem-Based Learning- For the second year, IMSA held its summer workshops on problem-based learning for 100 educators from across the nation. This year, two separate sessions were held including an introductory session and one for those who participated in the first institute.



Illinois Governor Jim Edgar

## TRANSforming through teaching and learning

In 1993-94, IMSA took bold steps away from its focus on "discipline-based courses" to move toward its focus on more "comprehensive integrative core courses", and more opportunities for research and real-world learning. In addition, more focus was placed on the proactive recruitment of students, especially from underrepresented and economically disadvantaged groups.

IMSA provides a living and learning environment for its students to meet their overall wellness needs of academic, personal and social development.

Teaching and learning highlights in 1993-94 include:

### **Academic Program**

While using the IMSA Integrative Learning System (ILS) as a framework for curriculum development in 1993-94, the Academy's academic program provided students with more comprehensive integrative courses. In addition to exploring

the content within a specific discipline, students learn how to integrate content and skills within and across disciplines, demonstrating a broader understanding of important concepts.

- Integrated Science- 36 sophomores were randomly selected for this two-year pilot that uses the IMSA Integrative Learning System (ILS) to present physics, chemistry and biology as a unity rather than separate entities. (see photo-below left)
- American Studies/Sophomore English- 39 sophomores were randomly selected for this integrative humanities pilot that uses the ILS to combine English literature and the American experience.
- World Studies/Junior English- 40 juniors were selected to continue the integrative cultural studies pilot that uses the ILS to merge comparative literature with the study of intellectual history.

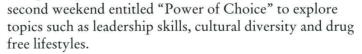
Students in IMSA's Integrated Science class make a triangulation measurement of the distance to a foul pole.

- Assembly Language Programming- 10 students participated in this independent study computer science pilot program. In addition to instruction in this computer language, students wrote programs that illustrated its power and usefulness in other disciplines.
- Algebraic Structures- 27 juniors and seniors participated in this new high level course, addressing areas of abstract and linear algebra for students already at a post-calculus stage.
- Calculus-Based Physics Mechanics- 13 female students participated in an experimental section during the fall semester to experience how the teaching and learning environment at IMSA can support and inhibit young women. Data was gathered for processing and further study.
- Integrative Learning System (ILS)- 16 schools across the country and Canada participated in a consortium to develop interdisciplinary curriculum using IMSA's system.
- Mentorship Program- 150 students conducted on-site research with mentors on topics such as climatology and global warming, neuropathology and organ transplant rejection.
- **Presentation Day-** 130 students presented their research at the sixth annual IMSA Research Presentation Day. Sixty of their mentors came to listen or co-present with students.
- National Conference on Undergraduate Research-16 students were invited to present their research in Kalamazoo, Michigan, at Western Michigan University. Once again, IMSA was the only high school invited to participate.

### **Residential and Support Programs**

• On-Campus Recreation- Activities for students included movies in the Student Union, comedy/variety acts, wing dances, Virtual Reality, a student council carnival and game shows.

- Off-Campus Recreation- Activities for students included trips to movie theaters, shopping malls, Starved Rock State Park, a haunted house and an Olympic gymnastic exhibition.
- Wellness Activities- Students participated in 18 interscholastic sports and 41 cocurricular activities. The Titan Fitness Center, gym, pool and student union were used 22,000 times by students and staff.
- Campus/Community Service- Students fulfilled weekly oncampus work service obligations and offcampus community service obligations by volunteering throughout Illinois.
- Strategies for Success Center- To help strengthen study skills, approximately 600 individual student sessions were held. Peer tutoring and sessions with parents, resident counselors and faculty also were held.
- Mini-Snowball Retreat- Students and staff participated in the

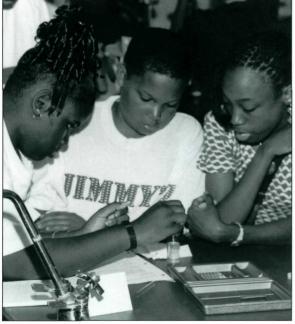




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- EXCELL- Designed for underrepresented and economically disadvantaged students, this program provided sessions on self-esteem, relationships and goalsetting. Students in all classes met monthly to discuss issues relevant to the IMSA experience.
- African American Student Association- Organized with Student Council Charter recognition, the goals include focusing on African-American concerns and ways to unify/integrate with other cultures.
- Natural Helpers- Students and staff attended this early intervention/peer counseling training program focusing on when to make referrals and setting limits.

DIG-IT Photograph



Students in IMSA's 1994 Summer Challenge Program conduct laboratory experiments as part of their role as environmental consultants.

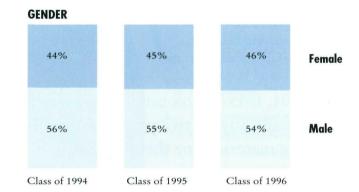
- Sophomore Seminar- Presented by student services staff, this program for incoming sophomores addressed issues such as relationships and homesickness.
- Peer Multicultural Educators-Students met weekly and participated in a two-day on-campus workshop on reducing prejudice and breaking down stereotypes.
- College Counseling/Career Development- Activities included individual counseling sessions, group counseling sessions and college fairs to help students plan their college and career paths.

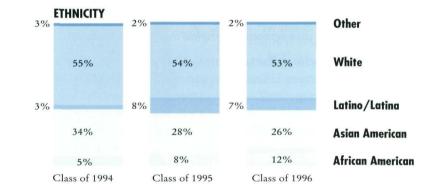
### **Statewide Recruitment**

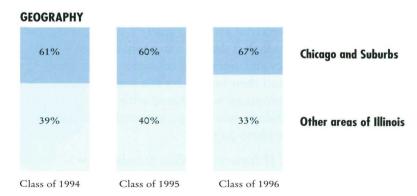
- VIP Days- 2,000 prospective Illinois students and their parents attended Visitor Information Program Days held at IMSA in January and February to learn about the academic and residential programs.
- Informational Meetings- 51 informational meetings were held throughout the state in the fall by admissions counselors.
- SAT Testing- 38 SAT testing sites in Illinois were provided and administered by IMSA to make testing convenient for students and their families.
- Chicago Science Fairs- 10 elementary district science fairs were attended by admissions counselors who met with award-winning seventh and eighth grade science students and their families to discuss the IMSA program.
- Young IMSA Applicant- 30 students who applied as eighth graders but were encouraged to re-apply as ninth graders attended a special reception at the Academy to sustain their interest in IMSA. These young applicants attended several academic and social activities with current students. Members of the IMSA Parents Council also hosted a special reception for the 62 parents of the young applicants.
- Junior Scholars- 71 Illinois seventh and eighth graders and 109 of their parents attended a retreat participating in science and social science activities. In addition, students and parents attended a lecture given by JoAnne Miller, director of software development for Tellabs Operations Inc, and attended numerous sessions by IMSA staff. Parents also had the opportunity to meet a panel of former Junior Scholars who attend IMSA.

- Early Involvement Program- 64 Chicago, Aurora, Elgin, and Joliet ninth graders participated in this minority enrichment initiative held at Loyola University-Water Tower Campus and IMSA. Saturday sessions included "hands-on" and group problem-solving activities as well as some preparation for the Scholastic Aptitude Test. Students conducted wellness assessments and family history surveys, and learned the fiscal operations of a town council. In addition, EIP students and their parents attended a retreat at IMSA.
- **Project School Visit-** 180 seventh and eighth graders and 18 teachers from Chicago, Joliet, Elgin and Aurora came to IMSA in this minority recruitment initiative. This year the program expanded from Chicago to also include minority students from the suburban schools.
- IMSA Sloan Challenge- 22 ninth graders from East St. Louis participated in the last year of this three-year enrichment and recruitment initiative for minority students.
- IMSA Summer Challenge- 130 ninth graders from Chicago, Aurora, Elgin, Joliet, West Chicago and East St. Louis participated in this minority enrichment program made possible through private sector support. (see photo-page 6)
- Explorer Weekends- 48 Rockford and Springfield eighth grade minority students visited IMSA for two days to participate in numerous sessions presented by IMSA faculty and staff. Students were recruited with assistance from the University of Illinois Principal's Scholars Program.

### 1993-94 Student Demographics







# TRANSforming through partnerships

In 1993-94, IMSA took bold steps away from its focus on "outreach" to move toward its focus on "mutually supportive partnerships." Instead of serving Illinois students and teachers by providing materials for them, IMSA is evolving into a resource by entering into partnerships with teachers to transform teaching and learning in mathematics and science. Partners include public schools, colleges/universities, state and federal agencies, and professional organizations.



IMSA sophomore Nina Chinosornvatana and her former teacher, Bernice Davis of Fairview South Elementary School in Skokie, reunite at IMSA's Teacher Recognition Day ceremony.

### Partnership and service highlights in 1993-94 include:

- Illinois School Partnerships- 50 elementary and secondary schools across Illinois are participating with IMSA to transform mathematics and science teaching and learning. Schools could choose from a menu of year-long partnership initiatives with IMSA in interdisciplinary learning, problem-based learning, authentic assessment, integrated science and gender issues. (see graphic-page 9)
- IMPACT II Teacher-to-Teacher Network to Enhance Mathematics and Science Education in Illinois- 244 teachers received awards. Nearly 1,000 are members of the network which is designed to promote excellence in elementary and secondary education by networking teachers and their innovative teaching methods. Awardwinning programs were shared with teachers through annual catalogs, workshops, conferences and interschool visits. (see photo-page 9)
- IMPACT II America Online Scholarship- 30 Illinois IMPACT II winners received one year memberships for electronic access to other winners and their projects.

- District Learning Leadership Teams- 40 Illinois school district teams (500,000+ students) participated with IMSA and Motorola University in this systemic change initiative to improve mathematics and science education.
- Summer 'AD'Ventures in Mathematics, Science and Technology- 280 Illinois students (grades 7-10) attended programs at IMSA and Eastern Illinois University. The first session was for 160 students entering grades 7-8 and was held July 5-15, and the second session for 120 students entering grades 9-10 was held July 6-17.
- State of Illinois Scientific Literacy Grants- Grants of \$246,121 for IMPACT II and \$262,401 for District Learning Leadership Teams were awarded to IMSA to support statewide partnership initiatives.
- IMSA Math Journal- 960 secondary schools throughout Illinois received copies of the journal. Created by IMSA faculty and students, the journal can be duplicated for use both in and outside the classroom. Students from other Illinois schools are encouraged to submit their solutions, reactions, ideas and extensions to journal items.

- Dr. Edward Teller Teacher Video Workshops- 30 Illinois teachers attended workshops on special relativity, atomic physics and general relativity.
- Executive Leadership Institute-50 Illinois principals attended these four-day sessions sponsored by IMSA, the Illinois Principals Association and Motorola University. The institute was designed to challenge principals as leaders and to encourage them to make a difference by creatively changing the educational models in their schools.
- Center for Problem-Based Learning- 80 partners in Illinois and the nation attended staff development or awareness workshops presented by Center staff. This awardwinning instructional strategy features the use of "ill-structured" problems in which students learn content and hone their problem-finding, research, data analysis and teamwork skills as they search for solutions to "messy" real-world problems.
- Neison and Bette Harris Institutes on Problem-Based Learning- 100 educators from Illinois and other states attended the four day separate sessions. This year included an introductory session and a session for participants from last year's institute.

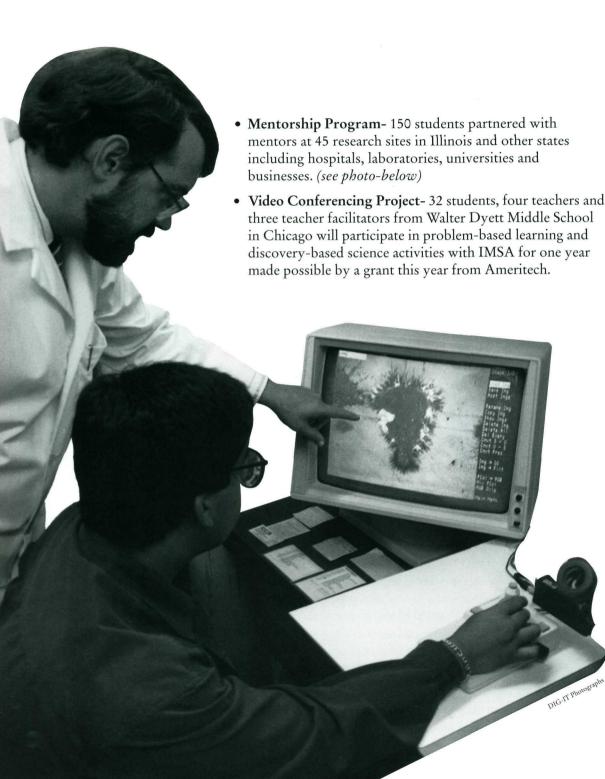
### K-12 School-based Partnership Initiatives

- Interdisciplinary Learning Experiences Involving Mathematics, Science and Technology
- Problem-Based Learning Applications in Mathematics and Science
- Authentic Assessment in Mathematics and Science
- Integrated Science
- Gender Issues in Mathematics and Science Education

- Integrative Learning
  System- Educators in Illinois, other states and Japan attended presentations and workshops on this IMSAdeveloped interdisciplinary curriculum.
- Smithsonian Integrated Curriculum Development Project- Educators in Illinois and other states attended numerous presentations and workshops on integrated topics.
- IMSA Award of Excellence-100 Illinois teachers received the award during a special ceremony honoring them at IMSA. Every year, an IMSA sophomore nominates a former home school teacher for making special contributions to supporting his/her academic, social and personal growth. (see photo-page 8)



Teacher Cheryl Vande Voorde of Hillcrest Elementary School in East Moline shares her award-winning IMPACT II project, Waddle, Slip and Slide Into Learning, with other teachers at the 1994 IMPACT II Conference and Recognition Dinner.



- Foreign Language Immersion Workshop- 200 DuPage County foreign language teachers attended a one day workshop on how to implement immersion experiences for their students in French, German, Latin and Spanish. The event was co-sponsored by IMSA and Wheaton Warrenville South High School.
- Foreign Language Immersion Days- 90 students from throughout Illinois attended a foreign language immersion day in German.
- **Professional Contributions of IMSA Staff-** IMSA faculty and staff gave numerous presentations and workshops throughout Illinois and the nation.
- Classroom Observations- Educators from throughout the nation visited IMSA's campus to observe classes and talk with faculty about new ways of teaching and learning in mathematics, science and other areas.

Dr. Philip Hockberger of Northwestern University Medical School and IMSA student Samir Bangalore use computer-based digital imaging to study the migration of nerve and bone cells on patterned surfaces. Bangalore conducted his research while participating in the IMSA Mentorship Program.

## TECHNOLOGY support and integrative information

IMSA is committed to modeling the optimal use of information and communication technologies in support of IMSA's mission. Innovative technology and integrative information support highlights in 1993-94 include:

### Information Resource Center

- **IRC Collection-** The number of volumes, videos and disks in collection grew to more than 38,000.
- **Barcoding System-** IMSA's library was the first of 40 libraries in the state's Library Computer System/Illinet Online to pioneer its barcoding system, allowing for faster checkout and improved customer service.
- Curriculum Support- Staff conducted sessions on integrated research skills for students in sophomore chemistry and helped support research for other classes including *Integrated Science*, *Cell Biology* and *Science*, *Society and the Future*.

### **Computer Resource Center**

- **Computer Ethics Class-** Staff and work service students conducted classes for all IMSA students on the principles of ethical use of computer and network services.
- Network Upgrade- Several new upgraded network servers were installed allowing for faster and more efficient computer network service.

• High Performance Computing Lab- Construction began on the High Performance Computing Lab, designed to provide specialized computers for faculty and students involved in technology-intensive classroom projects such as scientific visualization.

### Instructional Technology/Toyota Video Production Laboratory

- **Barcoding System-** The ITL/TVPL installed a new bar coded check-out system developed in collaboration with the Computer Resource Center.
- Classroom Projects- Students, faculty and staff produced documentaries, classroom and curriculum projects, and videotapes of IMSA athletic events and special lectures. Students also used the TVPL for mentorship projects in computer graphics and animation.
- External Distribution- Videotapes were made of several professional development conferences sponsored by IMSA and copies were made available to school districts statewide.

## INFRASTRUCTURE *Support* and strategic leadership

IMSA helps to recruit, support and retain a diverse staff. To support and expand the Academy's innovative on-campus and statewide programs, the Illinois General Assembly appropriated an operating budget of \$11.6 million in 1993-94. Expenditures, allocated according to the state comptroller's guidelines, include:

### **Infrastructure Support**

Personal Services: 63.8%

Contractual Services: 22.5% (includes health care services, food services, utilities, etc.)

-Commodities: 3.8%

– Equipment: 1.6%

-Retirement: 2.9%

-Telecommunications: 2.0%

- Electronic Data Processing: 1.2%

-Travel: .9%

Medicare: 1.0%

Operation of Automobiles: .3%

### Other highlights include:

- Capital Construction Projects- Capital projects included the laboratory and greenhouse renovations and the office construction project.
- Student Fees- IMSA parents paid a \$725 fee in 1993-94 to offset some of the costs of cocurricular programs and residential services.

### **Strategic Leadership**

- Strategic Plan- The "new" plan calls for expanded attention to statewide partnership initiatives and a radical redesign of the Academy's organizational structure. IMSA also embraced a new mission to transform mathematics and science teaching and learning through connections within and among the disciplines.
- Staff Development Seminars- Seminars were offered to faculty and staff on such topics as integrative thinking, multiculturalism, gender bias and constructivist learning theory.

## PRIVATE SECTOR support

The IMSA Fund for Advancement of Education works to secure the support and participation of various constituencies including individuals, corporations, foundations, educational institutions and governmental agencies to advance the Academy's mission. For the second year, the IMSA Fund exceeded \$1 million in a given fiscal year. Private sector support highlights in 1993-94 include:

- Partnership with Ameritech Illinois for distance learning initiatives to expand IMSA's Electronic Learning Community by including electronic bulletin boards, electronic mail and video-conferencing capabilities.
- Partnership with The Hitachi Foundation to support the development of a nationwide network of K-12 educators trained in problem-based learning.
- Mini-grants totaling \$9,500 for employees (employee contributions to the IMSA Fund) to support their Innovations and Initiatives projects advancing IMSA's mission.
- Third annual James R. Thompson Leadership Lecture: Poet laureate Maya Angelou.
- Third annual Richard L. Horwitz Lecture on Ethics: Dr. Laurel Burton.

- Enrichment programs for African American, Hispanic and economically disadvantaged students in Aurora, Chicago, East St. Louis, Elgin, Joliet and West Chicago.
- Parent contributions of \$43,588.
- Gifts of \$181,429 from IMSA Fund directors (100%).
- The first alumni reunion for the IMSA Class of 1989.

A list of 1993-94 donors to the IMSA Fund for Advancement of Education is published in the IMSA Fund's annual report. To receive a copy, contact the Office of Institutional Advancement at (708) 907-5040.



IMSA's students use the Grainger Inventors' Workshop at IMSA to build projects for classroom use and various state and national competitions. The workshop was funded by a grant from the Grainger Foundation of Skokie.

### STUDENT achievements

### **Mathematics and Science**

ICTM State Math Contest 2nd place, team

North Suburban Math League 1st place, team

American High School Math Exam Highest team score in nation (perfect score)

International Mathematical Olympiad One student chosen to compete on U.S. team; received gold medal

United States Mathematical Olympiad Six students qualified to take the exam

American Computer Science League 4th place in nation, senior team; 1st place in state, intermediate and senior teams

National 1993 Great ERECTOR Construction Contest 1st place award

Illinois Science Olympiad 2nd place in state, team

### Humanities

National History Day Finalist, computer project

Illinois History Expo Three projects advanced to national competition

Harvard Model Congress One outstanding achievement award; one honorable mention

### United Nations International School/United Nations Student Conference

One of 50 schools worldwide invited to participate; One student was one of six to address conference in General Assembly Hall

National Endowment for the Humanities One student received 1994 Younger Scholars award

National Council of Teachers of English Literary Magazine Competition Excellent award, team

National Morris and Betty Kaplan Foundation Essay Contest Grand Prize, Level I

"Books Change Lives" State Contest 1st place award

### Foreign Language

State Competition of Spoken Russian One student received summer study trip to Russia

National French Contest One recipient of Northern Illinois Chicago Chapter Award

National German Exam Eleven certificate of merit awards

Goethe Institute and German Consulate Awards Four recipients of Outstanding German Student Award

National Latin Exam 12 gold medals (1 perfect score) 8 silver medals

### **Fine Arts**

Illinois Music Educators Association 13 All-State awards

Illinois High School Association State Solo and Ensemble Contest 100 superior ratings 38 excellent ratings

Illinois High School Association Pep Band selected as Official Tournament Band for Class AA Boys Basketball Tournament sessions

Waubonsee Community College High School Art Show 2nd place, ceramics, sculpture, jewelry and fabric category

### Interdisciplinary

Knowledge Master Open (fall and spring contests) 1st place in nation; 1st place in state

Scholastic Bowl 1st place in state

### **Interscholastic Athletics**

IHSA Competition Qualified for state final tournament (girls 3-point shooting contest)

Illinois Drill Team Association 1st place in north super sectional

## TESTING highlights

### American College Testing (ACT) Scores for the Class of 1994

Score Intervals and Means

SUBSCORE	FEMALE N=88	MALE N=101	IMSA MEAN	ILLINOIS MEAN	NATIONAL MEAN
ENGLISH (1-36) Mean	29.3	29.2	29.3	20.5	20.3
MATHEMATICS (1-36) Mean	30.2	32.7	31.5	20.6	20.2
<b>READING</b> (1-36) Mean	31.3	32.6	32.0	21.4	21.2
SCIENCE REASONING (1-36) Mean	29.5	31.9	30.8	21.2	20.9
COMPOSITE Mean	30.2	31.7	31.0	21.1	20.8

### Percentages of IMSA Students in Test Score Intervals

SCORE INTERVALS	ENG M	LISH	MATHE M	MATICS F	REAL	DING	SCIENCE R	СОМР	OSITE	
27-36	84	84	97	89	95	83	94	82	94	91
22-26	16	15	3	11	4	13	6	16	1	9
19-21	0	0	0	0	1	5	0	2	0	0
1-18	0	1	0	0	0	0	0	0	0	0

### Achievement Scores for the Class of 1994

Middle 50% Ranges and Means

TEST	TOTAL IMSA SCORES REPORTED	MIDDLE 50% RANGE	IMSA MEAN	ILLINOIS MEAN	NATIONAL MEAN		
ENGLISH Composition Literature	179 10	580-670 580-710	611 652	572 582	520 532		
MATHEMATICS Level I Level II	28 154	580-670 710-800	645 749	590 701	550 662		
SCIENCES Biology Chemistry Physics	63 45 64	610-700 620-690 650-760	633 670 680	594 621 642	555 582 604		
HISTORY American	5	NA*	590	576	526		
<b>LANGUAGES</b> French Spanish	23	NA* NA*	NA* NA*	560 572	549 562		

### Preliminary Scholastic Aptitude Test (PSAT) Scores

Test (PSAT) Scores Class of 1995 — Middle 50% Ranges and Means

	VER	BAL	MATH					
	Mid 50% Range	Mean	Mid 50% Range	Mean				
Female (N=73)	53-65	58.6	52-67	67.2				
Male (N=91)	52-67	58.4	68-76	71.3				
IMSA (N=164)	53-65	58.5	65-74	69.5				
Illinois Mean		41.2	-	47.0				
Nat'l Mean		41.1		45.8				

### Scholastic Aptitude Test (SAT) Scores for the Class of 1994

Middle 50% Ranges and Means

	FEMA	LE (N=89)	MALE	(N=116)	TOTAL (N=205)			
CLASS OF 1994	VERBAL	MATH	VERBAL	MATH	VERBAL	MATH		
IMSA Mid 50% Range	540-660	650-740	580-680	730-770	560-670	700-760		
IMSA Mean	593	691	631	745	614	722		
IL Col Bound Sr. Mean	473	524	483	569	478	546		
All Col Bound Sr. Mean	421	460	425	501	423	479		

### Advanced Placement (AP) Examination Scores for the Class of 1994

AP GRADE	Biology	Chemistry	European History	Computer Science AB	Economics Micro	Economics Macro	English Lang. & Composition	English Lit. & Composition	French Language	German Language	Government & Politics: Comp.	Government & Politics: U.S.	Mathematics: Calculus AB	Mathematics: Calculus BC	Physics B	Physics C : Mechanics	Physics C : Elec. & Mag.	Psychology	Spanish Language	U.S. History	TOTAL GRADES REPORTED	PERCENTAGE OF TOTAL
5	10	5	0	13	1	1	13	6	0	2	0	1	3	45	1	20	14	2	0	0	137	28%
4	18	8	1	10	1	3	12	6	0	1	0	2	5	28	0	16	9	2	2	0	124	26%
3	14	13	1	10	4	2	13	6	0	3	3	1	6	32	6	10	11	0	6	1	142	29%
2	7	8	0	2	1	1	1	2	1	2	1	0	5	4	1	8	11	1	1	1	58	12%
1	0	1	0	1	0	0	0	0	1	0	0	0	2	7	1	0	4	0	0	0	14	2%
TOTAL	49	35	2	36	7	7	39	20	2	8	4	4	21	116	9	54	46	5	9	2	475	100%
IMSA MEAN	3.63	3.22	3.50	3.88	3.28	3.57	3.95	3.80	1.50	3.37	2.50	4.00	3.09	3.86	2.88	3.88	3.52	3.80	3.11	2.50		
NAT'L** MEAN		2.87	2.45	3.09	3.03	3.08	2.85	3.03	2.92	3.16	2.92	2.99	3.12	3.49	2.86	3.27	3.41	3.14	3.52	2.78		

NA\* Not Applicable \*\*Results of 1993 data

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