



ILLINOIS MATHEMATICS AND SCIENCE ACADEMY  
PLAN FOR MULTICULTURAL DEVELOPMENT

Revised Draft 3/31/05

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## Preface

Located in Aurora, Illinois, the Illinois Mathematics and Science Academy® is an internationally- recognized pioneering educational institution created by the State to develop talent and stimulate excellence in teaching and learning in mathematics, science and technology. IMSA's advanced residential college preparatory program enrolls 650 academically talented Illinois students in grades 10-12. More than 17,000 teachers and 26,000 students in Illinois and beyond have benefited from services of The Center@IMSA, the Academy unit that provides statewide professional development and enrichment programs. IMSA serves the people of Illinois through innovative instructional programs, public and private partnerships, policy leadership and action research.

The appreciation, affirmation, and inclusion of multiple cultures is important to ensure that all students, faculty, and staff will be able to enjoy the educational benefits of a multicultural academic environment. From this perspective it is important that community members be effective at interacting across cultures, which is essential to IMSA's vision of "*creat(ing) a learning enterprise that liberates the genius and goodness of all children and invites and inspires the power and creativity of the human spirit for the world*". The multiple cultures that make up the IMSA community include individual characteristics that contribute to personal identity such as race, ethnicity, geographic origin, gender, social class, religion, age, sexual orientation, and physical or mental ability. IMSA's diverse cultural groups also include the political orientations, statewide regional cultures, and the multiplicity of beliefs, ideas, and visions that are critical to fostering an educational environment where students, faculty, and staff exchange ideas freely, encourage critical thinking, and reexamine their personal perspectives.

IMSA's mission is to transform mathematics and science teaching and learning by actively engaging students in the "doing" of mathematics, science, and technology. An appreciation, affirmation, and inclusion of individual and cultural differences is a critical component of this mission. We believe *every* student in the State of Illinois, who is highly talented and interested in mathematics and science, should have an opportunity to benefit from IMSA's programs and services. Further, IMSA's current strategic business plan places a high value upon addressing issues related to fair representation, and equal opportunity, for our students, faculty, and staff.

While the Academy employs a Coordinator of Multicultural Recruitment, Retention, and Learning, the *Plan for Multicultural Development* calls upon *all* members of the IMSA community to assist in supporting the vision, goals, and objectives outlined in the *Plan*.

## **IMSA's Goals for Multicultural Development**

The Illinois Mathematics and Science Academy is a community with a multiplicity of diverse racial, ethnic, and socioeconomic class backgrounds, national origins, religious and political beliefs, physical abilities, ages, genders, and sexual orientations. Our programs and services and interpersonal climate, are enriched by an appreciation, affirmation, and inclusion of the myriad of cultural backgrounds from which we come, and of which we represent. As members of the Academy community, we strive to learn from each other in an atmosphere of effective cross-cultural communication and mutual respect which celebrates the unique individual and collective cultural contributions we all bring to the overall community.

Our goal is for the entire IMSA community to support and to demonstrate an appreciation, affirmation, and inclusion of the multiple cultures which are represented, or which we seek to have represented, within and throughout the Academy's programs and services. It is also our goal to educate each member of our community about the strength and value of a multicultural educational environment. It is important to educate each member of the community about the existence and effects of racism, sexism, ageism, homophobia, religious intolerance, and other forms of prejudice and discrimination. When the actions or behaviors of an individual or group result in intolerance, harassment, intimidation, violence, or discrimination of others, the Academy will act expeditiously to address these unacceptable behaviors. Further, we will not accept joking or ignorance as an excuse, reason or rationale for such behavior.

## **IMSA's Objectives for Multicultural Development**

IMSA's objectives for multicultural development are:

1. To inform, prepare, and recruit a critical mass of highly qualified students, faculty, and staff members from all underrepresented cultural and disadvantaged socioeconomic groups.
2. To create, support, and sustain a community that genuinely demonstrates the worth and value of a multicultural educational experience for all its members.
3. To enhance each community member's ability to communicate and interact effectively across cultures.

It is expected that all who work, live, study, and/or teach in the IMSA community will be committed to supporting these objectives which are an integral part of IMSA's responsibility to the State of Illinois.

\* see glossary

## Strategies

Strategies designed to achieve our goals and objectives regarding multicultural development are:

1. Inform, prepare, and recruit a critical mass of highly talented students from underrepresented groups. (see #5)

Point person: Rob Sheinkopf

Additional support: Jane St. Pierre, Cathy Veal, Kristin Ciesemier, Susan Bisinger, James Valadez, Admissions Office

**Current projects:** publicity, new brochures; EXCEL, SEAMS, EIP, PSV, E2K, Kid's Institute (pipeline programs)

2. Provide academic, cultural, and individual support for accepted/enrolled students from underrepresented groups.

Point person: Bob Hernandez, James Valadez

Additional support: Paula Altekruise, Tracy Townsend, Kelly O'Sullivan?, Grace Glass?, Socorro Cintron?, Linsey Crowninshield, Steve Zant? also see current projects

**Current projects:** EXCEL, Study groups, Peer tutors, Writing Center, Strategies team, EWOC participants (Aracelys Rios, Willa Shultz, James Valadez), Women's discussion group (Willa Shultz, Brenda Crosby), Body Image discussion group (Deb McGrath, Sarah Floss), AASA (Quintin Backstrom, Tiffany Tobler), ACC (Chris Linn), ICC ?, Alma Latina (Bob Hernandez), World of Difference Conference participants (Quintin Backstrom)

3. Build and support a critical mass of caring and talented administrators, faculty, and staff who represent a variety of cultural groups.

Point person: Lisa Jerome

Additional support:

Current projects: identification of recruitment sources to increase diversity of applicant pool; development of relationships; education of current staff (interviewers) to understand that diversity is as important as 3-5 years of experience; employee breakdown by race and department; examination of diversity representation on Board of Trustees

4. Design a mandatory, comprehensive multicultural educational and training program for students, administrators, faculty, and staff.

Point person: Lisa Jerome

Additional support: Quintin Backstrom, Paula Altekruise

**Current projects:** assessment of where we are; development of tools to assess effectiveness of long-term programs (internal and external); development of baseline questions for focus groups (students, staff, parents, alumni); collection of exit interview data (Jay Thomas? Chris

Kolar? Kirk Hollowell?); possible programs/needs assessment by outside consultant

5. Increase elementary and middle school underrepresented students' interest and skill in math and science, and IMSA. (Possible subset of #1)

Point person: Rob Sheinkopf

Additional support: James Valadez, Admissions Office, Linsey Crowninshield

**Current projects:** Identification of new funding sources for additional pipeline programs (grades 3-7); development of new multicultural recruitment brochure; E2K (Susan Bisinger); SEAMS, EIP, PSV (James V.); Kids' Institute (Britta McKenna)

6. Address the educational achievement gap between African-American, Latino/a, and White and Asian students.

Point person: Paula Altekruze, Eric McLaren

Additional support: Hector Muñoz

**Current projects:** Examination of relationship with Research (re: rates of graduation and course selection by ethnicity and gender); review of data already compiled (Dawn Frazier's thesis); additional student focus groups

7. Establish strategic partnerships with individuals, communities, businesses, alumni, civic organizations, and parents of IMSA students related to multicultural development.

Point person: Rob Sheinkopf, Kristin Ciesemier

Additional support: James Valadez, Linsey Crowninshield

**Current projects:** to be determined

8. Conduct needs assessment and/or audit of IMSA policy and programs related to multicultural development.

Point person: Rob Sheinkopf

Additional support: Chris Kolar

**Current projects:** to be determined

9. Establish an Academy-wide *Council for Multicultural Development* which will provide oversight of IMSA's *Plan for Multicultural Development*.

Point person: Willa Shultz, Rob Sheinkopf

Additional support:

**Current projects:** includes all of the above Members (TBD) (Bring a friend!)

10. Establish an *IMSA Association for Multicultural Employees* designed to provide mentoring and support for underrepresented, ethnic minority administrators, faculty, and staff.

Point person:Membership: Lisa Jerome, Bob Hernandez

Additional support: All underrepresented, ethnic minority administrators, faculty, and staff (who choose to participate).

**Current projects:** to be determined

## Overall Educational Benefits of Diverse Campuses

- The following table summarizes the overall benefits of diversity and multiculturalism in educational settings; and is important in order to understand IMSA’s *Plan for Multicultural Development* from a perspective external to our specific legislation and vision.

Table 1:

<p><b>Individual Benefits</b></p> <ul style="list-style-type: none"> <li>•Improved racial and cultural awareness</li> <li>•Enhanced openness to diversity and challenge</li> <li>•Greater commitment to increasing racial understanding</li> <li>•Enhanced critical thinking ability</li> <li>•Greater satisfaction with the college experience</li> <li>•Perceptions of a more supportive campus racial climate</li> </ul>	<p><b>Institutional Benefits</b> (Benefits to Private Enterprise)</p> <ul style="list-style-type: none"> <li>•Cultivation of workforce with greater levels of cross-cultural competence</li> <li>•Attraction of best available talent pool</li> <li>•Enhanced marketing efforts</li> <li>•Higher levels of creativity and innovation</li> <li>• Better problem solving abilities</li> <li>•Greater organizational flexibility</li> </ul>
<p><b>Benefits of Faculty Diversity</b></p> <ul style="list-style-type: none"> <li>•More student-centered approaches to teaching and learning</li> <li>•More diverse curricular offerings</li> <li>•More research focused on issues of race/ethnicity and gender</li> <li>•More women and faculty of color involved in community and volunteer service</li> </ul>	<p><b>Societal Benefits</b></p> <ul style="list-style-type: none"> <li>•More research on the effects of affirmative action in the workplace</li> <li>•Higher levels of service to community and civic organizations</li> <li>•Medical service by physicians of color to underserved communities</li> <li>•Greater equity in society</li> <li>•A more educated citizenry</li> </ul>

Source: Milem, J., “The Educational Benefits of Diversity: Evidence from Multiple Sectors.” In *Compelling Interest: Examining the Evidence on Racial Dynamics in Higher Education*. Prepublication Draft.

## Conclusions

The IMSA *Plan for Multicultural Development*, through the development of IMSA’s Goals for Multicultural Development, and the establishment of specific objectives and strategies, creates a plan for furthering IMSA’s commitment to develop an outstanding educational environment that appreciates, affirms, and includes students, faculty, and staff from a multiplicity of cultural backgrounds, who have high talent and interest in mathematics and science. The *Plan* is the catalyst for a dynamic, multi-year process that requires IMSA’s administrative units, residential academic programs, and outreach components to implement, support, provide resources, and evaluate specific strategies that address multicultural development. The results of these efforts will be documented in an annual report and shared with IMSA’s Senior Leadership Team, Academy community, Board of Trustees, Parent’s Association Council, and other key constituencies, by the Coordinator for Multicultural Recruitment, Retention, and Learning.



## **Context for Multiculturalism at IMSA**

In order to provide the context for this *Plan for Multicultural Development* it is important to understand some basic assumptions, and current research and thinking, which support the importance of emphasizing multicultural development at IMSA.

### **IMSA Beliefs:**

- all individuals have equal intrinsic worth.
- all people have an innate desire to learn.
- the human mind is the world's greatest resource.
- each person has the potential to change and to bring about change.
- without trust no human relationship can thrive.
- the survival of global civilization depends primarily on the quality of the education provided to all people.
- belonging to a group requires alignment of self-interests and the common good.
- all adults share responsibility for the well-being of all children.
- the process of education is more than the accumulation of facts.

### **IMSA Standards of Significant Learning:**

- **II.A** Identify unexamined cultural, historical, and personal assumptions and misconceptions that impede and skew inquiry.
- **V.A** Identify, understand, and accept the rights and responsibilities of belonging to a diverse community.

### **IMSA Learning Standards**

- Students studying English at IMSA will:

E. develop an understanding of and respect for diversity in language use, patterns, and dialects across cultures, ethnic groups, geographic regions, and social roles.

- Students studying foreign language at IMSA will:

F. understand the concept of culture through comparisons of their own culture and the cultures studied.

G. use knowledge of language and culture both within and beyond the school setting for personal enjoyment and enrichment.

- Students studying history and social science at IMSA will:

H. identify the cultural, commercial, and artistic connections that bind the regions of the world.

L. analyze the construction of gender roles and their influence on human events and public policy.

- Students living and learning in IMSA's residential environment will:

A. Identify, understand, and accept the rights and responsibilities of belonging to a diverse community.

#### **Recent U.S. Supreme Court decision related to affirmative action:**

- “[T]he Law School's admissions policy promotes “cross-racial understanding,” helps to break down racial stereotypes, and “enables [students] to better understand persons of different races.” These benefits are “important and laudable,” because “classroom discussion is livelier, more spirited, and simply more enlightening and interesting” when the students have “the greatest possible variety of backgrounds.” ...
- “[U]niversities.....represent the training ground for a large number of our Nation's leaders. In order to cultivate a set of leaders with legitimacy in the eyes of the citizenry, it is necessary that the path to leadership be visibly open to talented and qualified individuals of every race and ethnicity.”
- “These benefits are not theoretical but real, as major American businesses have made clear that the skills needed in today's increasingly global marketplace can only be developed through exposure to widely diverse people, cultures, ideas and viewpoints. ...”

#### **Illinois Board of Higher Education *Illinois Commitment* goals:**

- Higher education will join elementary and secondary education to improve teaching and learning at all levels.
- Illinois will increase the number and diversity of citizens completing training and education programs

**Illinois Board of Higher Education *Committee on Access and Diversity* report:**

- Achievement Gap: changes in the educational performance of low achievers depend upon a redirection of their goals and motivation. The kind of personal transformation required is, in many respects, beyond the capability of institutions to achieve and can best be influenced by family members, community leaders, and friends. *Nevertheless, our schools and colleges should search for opportunities to affect change in the lives of disadvantaged students.*

**Illinois State Board of Education *Learning Standards***

- Social Sciences standards:

Students who meet the standard can compare characteristics of culture as reflected in language, literature, the arts, traditions, and institutions.

1. Describe how different cultures are depicted in literature and the arts of the United States.
2. Identify cultural traditions from other lands that have been integrated into American life.
3. Analyze how various cultural groups have impacted the student's culture.
4. Analyze the ways that conflicts can be resolved in a pluralistic society.
5. Assess the impact of outside influences on a given culture (e.g., western music on Asian society).

Students who meet the standard can understand the roles and interactions of individuals and groups in society.

1. Analyze the effectiveness of different types of institutions (e.g., educational, governmental, charitable) in meeting similar social needs.
2. Compare the role and effectiveness of social institutions in other countries with those in the United States (e.g., schools, relief agencies).
3. Distinguish between norms and mores.
4. Explain likely consequences for nonconformity in a social group.
5. Explain how the concept of gender is a social construct.
6. Explain how race is a social construct.
7. Explain how policymakers influence social and economic statuses (e.g., tax policy, child labor laws, suffrage).

Students who meet the standard can understand how social systems form and develop over time.

1. Identify historical examples of how different ideas about emotions, motivation, and personality have led to significant social change.
2. Analyze the social effects of major cultural exchanges.
3. Give examples of global communication and economic activity.
4. Analyze the changing global perceptions of various social groups in the United States.

**The NCSSSMST Action Plan to increase underrepresented populations:**

- Vision: a diverse school community is a population representative of its constituent demographics, in which each individual realizes and fosters a sense of acceptance, inclusion, and support.
- Mission: to increase the percentage of underrepresented populations enrolled and matriculating at NCSSSMST schools.

## Contextual Glossary

(note: this glossary is provided to provide a context, and working definition, of various terms contained in the *Plan*.)

**Affirmation:** positive assertions and demonstrations of support regarding the value and importance of cultural differences.

**Appreciation:** a sensitive, favorable awareness and estimate of worth regarding the value and importance of cultural differences.

**Critical Mass:** "Critical mass is not a numerical quota. It's an idea, just like the word 'tall' is an idea, not a specified height. A critical mass exists whenever, within a given group of students, there are enough members from a particular group such that they feel comfortable participating in the conversation and that other students see them as individuals rather than as spokespersons for their race. It is not a yes-or-no condition. Its not as though in a room with 30 people one can say that two black people are not a critical mass but three black people are. How people perceive each other depends on many variables, including the size of the group, the personalities of the individuals, and the extent to which, at a particular moment in history, people in our society believe that all people of a given race tend to think alike." From Michigan Law School Dean Jeffery Lehman (*Grutter vs. Bollinger* Supreme Court decision).

**Culture:** the customary beliefs, social forms, shared attitudes, values, goals, practices and material traits of a homogenous group, generally transmitted from one generation to the next.

**Diversity:** set of divergent values, beliefs, attitudes, ideas, thoughts, etc. within and between individuals and groups.

**Inclusion:** an act of including and involving (and feeling included and involved) all members of a community in all aspects of the community etc., with a mindfulness of cultural differences.

**Multicultural:** designation indicating an environment/community/system with more than one relatively unique cultural group.

**Underrepresented Groups:** students, faculty, and/or staff from groups that are not represented in critical mass, students from economically disadvantaged backgrounds, and students from backgrounds with limited educational resources, students from rural geographic areas.