



ILLINOIS MATHEMATICS AND SCIENCE ACADEMY  
PLAN FOR MULTICULTURAL DEVELOPMENT

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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 development of an appreciation, affirmation, and inclusion of a multicultural perspective is an important goal of IMSA. From this perspective community members will have opportunities to learn and practice skills that will allow for effective cross-cultural interactions, which are 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, religion, age, sexual orientation, marital status, 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 are free to exchange ideas, 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 because we believe *every* student in the State of Illinois, who is 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 on addressing issues related to fair representation, and equal opportunity, for our students, faculty, and staff community.

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 strategies, programs, and services 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 educational 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 cultural contributions to the overall community.

Because of the absolute necessity to create and maintain this atmosphere, the entire IMSA community aspires to appreciate, affirm, and include all individuals regardless of real or perceived cultural differences. It is a priority to educate each member of our community about the strength and value of a multicultural educational environment. It is also a priority 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 results 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.

The following three statements reflect IMSA's objectives for multicultural development:

1. We will inform, prepare, and recruit potential students, faculty, and staff members until we have equitable representation, and opportunity, at IMSA for peoples from all cultural and socioeconomic groups.
2. We will create, support, and sustain a community that genuinely demonstrates the worth and value of a diverse educational experience for all members of the community.
3. We will engage all members of the community in education, training, and personal growth experiences that will 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 goals which are an integral part of IMSA's responsibility to the State of Illinois.

## **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.

### **The 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. ...”

### **The 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

### **The 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 NCSSMST 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 NCSSMST schools.

## **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.

## Overall Educational Benefits of Diverse Campuses

- The following table summarizes the overall benefits of diversity and multiculturalism in educational settings

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.

## Related IMSA Demographics

- Appendix 1: Distribution of Invited Students by Ethnicity, Gender, and Class
- Appendix 2: Distribution of Enrolled Students by Ethnicity, Gender, and class
- Appendix 3: Distribution of Graduation Rates by Ethnic Group
- Appendix 4: Distribution of Student Attrition Rates by Ethnic Group
- Appendix 5: Distribution of Faculty and Staff by Ethnicity and Gender (has been requested)
- Appendix 6: E2K Site Demographics 2003-04
- Appendix 7: Distribution of students by ethnicity and gender, for outreach programs (in process)
- Appendix 8: College/University enrollment information by ethnic group (has been requested)

## Objectives

The following three statements reflect IMSA's objectives for multicultural development:

1. We will inform, prepare, and recruit potential students, faculty, and staff members until we have equitable representation, and opportunity, at IMSA for peoples from all cultural and socioeconomic groups.
2. We will create, support, and sustain a community that genuinely demonstrates the worth and value of a diverse educational experience for all members of the community.
3. We will engage all members of the community in education, training, and personal growth experiences that will enhance each community member's ability to communicate and interact effectively across cultures.

## Strategies

The following statements reflect strategies designed to complete our goals regarding multicultural development (each strategy will include appropriate assessment and evaluation):

1. Develop strategies that will ensure an enrollment of a critical mass of students from underrepresented groups.  
Accountable Individuals/Units:  
Coordinator of Enrollment Management Team  
Enrollment Management Team
2. Create structures that provide academic, cultural, and individual support for accepted/enrolled students from underrepresented groups.  
Accountable Individuals/Units:  
Coordinator of MRRL  
Coordinator of Student Activities  
Coordinator of Residential Life  
Learning Strategies Specialist  
Faculty Representative
3. Design strategies that will create a critical mass of caring and talented administrators, faculty, and staff who represent a variety of cultural groups.  
Accountable Individuals/Units:  
Director of Human Resources  
Coordinator of MRRL

4. Design a mandatory, comprehensive multicultural educational and training program for students, administrators, faculty, and staff.  
Accountable Individuals/Units:  
 Coordinator of MRRL  
 Principal  
 Director of Student Leadership Development  
 Director of Human Resources  
 Director of Curriculum and Assessment
  
5. Develop strategies to heighten elementary and middle school underrepresented students' interest and skill in math and science, and IMSA.  
Accountable Individuals/Units:  
 Director of External Programs  
 Coordinator of MRRL  
 Director of Excellence 2000+  
 Director of Kid's Institute  
 Faculty Representative
  
6. Develop strategies to address the educational achievement gap between African-American, Latino/a, and White students.  
Accountable Individuals/Units:  
 Coordinator of MRRL  
 Director of Curriculum and Assessment  
 Principal
  
7. Establish strategic partnerships with individuals, communities, businesses, alumni, civic organizations, and parents of IMSA students related to multicultural development.  
Accountable Individuals/Units:  
 Director of Advancement  
 Coordinator of MRRL  
 Director of The Center
  
8. Conduct needs assessment and/or audit of IMSA policy and programs related to multicultural development.  
Accountable Individuals/Units:  
 Coordinator of MRRL  
 Office of Research
  
9. Establish an Academy-wide *Council for Multicultural Development* which will provide oversight of IMSA's *Plan for Multicultural Development*.  
Accountable Individuals/Units:  
 Coordinator of MRRL  
 Members (TBD)

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

Membership:

All Black and Latino employees (who choose to participate)

## **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 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.

## Contextual Glossary

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

**Affirmation:** a positive assertion regarding the value of cultural differences.

**Appreciation:** a sensitive awareness of cultural differences.

**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.