

# Illinois Mathematics and Science Academy®

*igniting and nurturing creative, ethical scientific minds that advance the human condition*

## **IMSA Board of Trustees Regular Meeting**

**January 22, 2010**

### **Minutes**

#### **Call to Order**

The meeting was called to order by Chairman Isoye at 9:06 a.m.

#### **Roll Call**

Ms. Veal called the roll. A quorum was present.

**Members Present:** Steven Isoye, Jay Budzik, Jack McEachern, Jacklyn Naughton, Mary Kalantzis, Erin Roche and Marsha Rosner

**Members Absent:** Samuel Dyson, Sheila Griffin, Paula Olszewski-Kubilius, Luis Núñez, Judy Erwin, Christopher Koch, Geoffrey Obrzut and James Rydland (arrived 9:15 a.m.)

**Liaisons and Representatives Present:** Diane Hinterlong for IMSA Faculty, Herbert Knight for IMSA Fund Board, Matthew Knisley for IMSA Alumni Association

**Liaisons and Representatives Absent:** Debbie Meisner-Bertauski for Judy Erwin, Brian Durham for Geoffrey Obrzut, Sid Sapru for IMSA Student Council, Joyce Krumtinger for Christopher Koch and Karen Schwerbrock for Parents Association Council

#### **Chairman's Remarks**

Chairman Isoye asked Trustees to complete and return the order form if they plan to attend IMSA Commencement (June 5) and want the Academy to order their cap and gown. He also reminded Trustees about donating to the IMSA Fund, the goal being 100% participation.

#### **Reports of Liaisons**

Matthew Knisley noted that 32 alumni volunteered to teach Intersession this year, eight alumni and 35 students attended the first College, Careers, Choices Forum, and regional alumni events would be held in New York on January 23, Atlanta on January 29 and Austin, TX, in late February.

Diane Hinterlong reviewed faculty involvement during Intersession including trips to Paris and Madrid, energy projects, AP prep classes, karate, cooking and working with female alumni on a special project to increase female enrollment in physics electives. She discussed a recent career paths presentation by a panel of Abbott professionals with 100 students in attendance, Professional Development Day being held at IMSA with 160+

educators participating, the current visit by Russian students from St. Petersburg's Lyceum Physical-Technical High School (PTHS) arranged by Paavo Husen, and new course proposals by the Curriculum and Assessment Leaders.

Trustee Naughton asked if any female faculty members taught physics. Ms. Hinterlong said she and another female teacher did. The Board discussed factors in female participation in physics. It was noted that girls take physics for different reasons than boys do. Trustee Rosner pointed out that The University of Chicago has a very active women's group and she suggested taking advantage of assistance from local universities.

Herbert Knight reported that total giving was up from a year ago; however, the increase included the Abbott Fund grant. He said alumni participation had almost doubled and Trustees were ahead of IMSA Fund Directors thus far this year. He noted that the IMSA Fund audit was done complimented Dr. McGee and Ms. Price on their "outstanding job" talking with Northern Trust and Illinois Tool Works.

Dr. Purva Rushi presented the Student Council report for Sid Sapru. She said one of the priorities was the publication of a Course Evaluation Guide as a resource for underclassmen, with juniors and seniors giving feedback about elective courses. She noted that Clash of the Halls, consisting of a talent show, dance competitions and a variety of other spirit-related activities, was planned for March 1-5.

### **Report of the Treasurer**

Patrick Furlong indicated that staff were "on track with spending patterns." He said the two actions items presented to the Board would provide flexibility especially with the likelihood of no appropriations increases next next year. He discussed reallocating 2% in the Income Fund from Contractual Services to Personal Services and Medicare to cover salaries and benefits.

Trustee Roche inquired about the negative figure of \$45,000. Mr. Furlong reviewed an error in the data and last year's appropriation mix up by the comptroller's office. He pointed out the negative number indicates the need for a fund transfer.

### **ACTION ITEM**

#### **FY10 Income Fund Appropriation Re-allocation Request**

A motion was made by Trustee McEachern and seconded by Trustee Budzik to approve the FY10 Income Fund appropriation re-allocation request. Voting aye were Trustees Isoye, Budzik, McEachern, Naughton, Kalantzis, Roche and Rosner. The motion passed by a vote of 7 ayes, 0 nays.

Mr. Furlong then reviewed the recommendation to modify the Academy's FY11 Income Fund request, decreasing contractual services by \$605,000 and increasing personal services by \$600,000 and medicare by \$5,000. Needs and spending patterns have changed as a result of the sunseting of IMSA's operation of IVHS, reduced State support for IMSA Excellence 2000+ and Field Offices, and the Academy's compensation study, findings and new compensation structure. He said the Illinois Board of Higher Education staff supported the change.

Trustees discussed the State's bleak financial situation and the potential for level or reduced GRF funding in FY11, hence an even greater need to modify the Income Fund request.

## **ACTION ITEM**

### **Modification of FY11 Income Fund Request**

A motion was made by Trustee Roche and seconded by Trustee McEachern to modify the FY 11 Income Fund request as presented. Voting aye were Trustees Isoye, Budzik, McEachern, Naughton, Kalantzis, Roche and Rosner. The motion passed by a vote of 7 ayes, 0 nays.

Mr. Furlong also reviewed late payments to vendors by the State and said IMSA had instituted a process to use the Academy's Locally Held Fund in a limited way to pay vendors of essential services, then wait for reimbursement by the State. He said the process would be tight and subject to his review.

Trustee Kalantzis asked if the Locally Held Fund could be used for entrepreneurial activity. Mr. Furlong indicated that some expenses could be supported, for example contractual services, but others could not, for example personal services, because of the rules that applied to this fund.

Trustee McEachern asked about "Plan C." Mr. Furlong replied that reallocation of the Income Fund was part of Plan C, as was legislation to increase the Imprest Fund from \$15,000 to \$100,000.

Mr. Furlong said the investments and grant funding were in line with previous reports. Trustee Rydland encouraged the Board to stay nimble and informed without overreacting. He said the Board likely would need to "do some repositioning" during the next few years but could do so thoughtfully because "a great process is in place."

## **Report of the President**

### **REFLECTIONS AND OBSERVATIONS**

Dr. McGee introduced Arnold Crater, executive director for information technology services. He thanked Diane Hinterlong for her leadership during Intersession and noted that alumni Mike McCool and Ramez Naam were invited to attend Governor Quinn's State of State address where they received standing ovations and IMSA was referenced as "world renowned." He said McCool was working in computer helicopter simulation for rescue missions, a return on investment not lost on the legislators; in addition, on the same day, Congressman Bill Foster presented a resolution in Washington, D.C., IMSA's Intel Star Innovator Award. He said there was a "surge in the culture of innovation" at IMSA.

Dr. McGee paid tribute to Scott Swanson '90 who died on January 11, commending his family, alumni friends and staff for the wonderful Club Pseudo memorial event at IMSA and the establishment of the Scott Swanson Fund for Transformative Student Learning and Innovation.

## **ACTION ITEMS**

Ms. Veal noted a correction to the November 18, 2009, minutes with regard to the wording of the IMSA Fund liaison report – "...may transfer a percentage (up to 10%) annually from the unrestricted fund to the endowment fund."

## **Consent Agenda**

Dr. McGee recommended approval of the Consent Agenda. A motion was made by Trustee McEachern and seconded by Trustee Roche to approve the Consent Agenda as presented, with the correction to the minutes noted by Ms. Veal. Voting aye were Trustees Isoye, Budzik, McEachern, Naughton, Kalantzis, Roche and Rosner. The motion passed by a vote of 7 ayes, 0 nays.

The following items were approved:

*Minutes – Regular Board Meeting, November 18, 2009*

### *Personnel Items*

#### Resignations

*Diane C. Hoffer, Circulation/Interlibrary Loan Clerk*

#### New Staff

*Daniel Hernández, Wellness Program Assistant (PT)*

*Arnold R. Crater, Executive Director for Information Technology Services (ITS)*

#### Change of Status

*Sharon K. McMurray from Secretary for Humanities to Instructional Program Assistant (IPA) for Humanities*

#### Other Personnel – part-time hourly employees, hired within the budgetary allocations for part-time, temporary services

#### ***Admissions - Stipends***

*Curtis Boyd, EIP Transportation Facilitator/Program Assistant*

*Ed Caster and Anita Connors White, EIP Site Coordinator/Teacher*

*Vince Matsko, Teacher Early Involvement Program (EIP)*

*Michelle J. McGhee, PROMISE Transportation Facilitator/Program Assistant,*

*Michelle J. McGhee and Kandi N. Wilson, Multicultural Advisor for Student Programs*

*Kerby L. Mickelson, Student Shadowing Program Assistant*

*Robert J. Pranaat and Taryn Bell, Transportation Facilitator and/or Program Assistant*

#### ***Athletic/Co-Curricular/Sponsor Stipends***

*Antoinette (Toni) M. Petersen and Michelle J. McGhee, Ticket Taker*

#### ***Athletic Stipends***

*Quintin Backstrom, Assistant Coach – Girls Basketball*

*James Brehm, Assistant Coach – Boys Basketball,*

*Jacob Holton*, Assistant Coach – Boys Swimming/Diving  
*John Kazmierczak*, Head Coach – Girls Bowling  
*Keith McIntosh*, Head Coach – Girls Basketball  
*Trisha Meier*, Head Coach – Boys Swimming/Diving  
*Renard Miller*, Head Coach – Boys Basketball  
*Allison Miner*, Assistant Coach – Girls Basketball  
*Vicki Morrow*, Assistant Coach – Boys Swimming/Diving  
*James Mueller*, Assistant Coach – Boys Basketball  
*Joshua Wolfgang*, Assistant Coach – Girls Bowling

***Business Office***

*Ashley Dorion*, Temporary Office Help

***College/Academic Counseling***

*Julia Husen and Diane Stegmeyer*, AP Coordinators

***Excellence 2000+***

*William Fraccaro*, Problem of the Month FY10

***President's Office - Stipends***

FY10 Strategic Plan Co-Leaders:

*Paula Garrett, Jim Gerry, Daniel Gleason, Diane Hinterlong, Jeong Hwang-Choe, Janice Krouse, Branson Lawrence, Mary Myers, Donald Porzio, Jane St. Pierre, Thomas Walter*

*Lee W Eysturliid*, "Considerations in Ethics," (CinE) seminar

*Willa L Shultz*, implementing initiatives related to diversity

***Problem-Based Learning (PBL) - Stipend***

*Marc Deem and Pat Pentek*, design PBL Institute Problem

***Student Leadership Development – Student Life – Residential Program***

*Jayna E. Barker*, Part-time Counselor

*Raquel DeBartolo, Curtis Boyd, Michael McIntyre and Jean-Paul Viray*, RC Office Coverage

*Jean-Paul Viray*, Part-time Counselor

***Policies***

Freedom of Information (revised)

Employment Separation/Termination (revised)

Payroll Advance Contingency Program (new)

Research with Human and Animal Subjects (revised)

**INFORMATION AND DISCUSSION ITEMS**

***Student Records Policy – 1<sup>st</sup> Reading***

Dr . McLaren reviewed proposed revisions, indicating these were needed to align with changes in the laws and current practices. He cited dropping the use of Social Security

Numbers as a part of the Student Permanent Record and adding a paragraph regarding the release of records to juvenile authorities as examples.

Second reading and action will be scheduled for March.

### *Institutional Positions: Political Issues and Campaigns Policy – 1<sup>st</sup> Reading*

Ms. Veal reviewed proposed revisions, indicating these were needed to address situations in which IMSA and specific individuals associated with IMSA wanted or were invited to propose, endorse or oppose legislation and/or the political goals and interests of other individuals and organizations. She said that while individuals associated with IMSA certainly were free to participate in the political process as individuals, only the Board or President should speak for IMSA the institution.

Second reading and action will be scheduled for March.

## **FEATURED AGENDA ITEMS FOR DISCUSSION**

### *Strategies 1 and 2*

Strategy 1 – Roger Spayer, Mary Myers and Barb Miller reviewed progress on Strategy 1, *We will develop the whole person*. Ms. Myers said the strategy, which applies to IMSA students and staff, is grounded in an adapted model of the “wellness wheel” (dimensions are intellectual, occupational, spiritual, emotional, social and environmental). For staff, the focus is on development, and meaningful reward and recognition system; Mr. Spayer called human capital “the differentiator” for leading organizations. He said shifting organizational culture was a longer-term goal; “we’re knocking at the front door with this strategy.” Ms. Miller said the focus with students is on academic, social and emotional support initiatives.

Dr. McGee pointed out that by design, Mr. Spayer was co-leading both Strategies 1 and 4 because the institution’s ability to make significant progress on Strategy 4 depended on some Strategy 1 deliverables.

Trustee McEachern noted that according to Jack Welch building or changing a culture requires “being relentless and boring” until the mission statement becomes “second nature.” Trustee Rosner asked about indicators of “whole person” in the context of IMSA’s mission. Trustee Kalantzis said she thought about this strategy as addressing the “life world context in which work happens.”

Mr. Spayer cited some of the challenges, including how to keep this strategy “top of mind every day” and how to sustain action plans with significant costs.

Several Trustees complimented staff on progress to date.

Strategy 2 – Dr. McLaren, Diane Hinterlong and Janice Krouse reviewed progress on Strategy 2, *We will require students to pursue personalized plans of study, based on integrated learning experiences and assessed on the basis of individual mastery*. They reviewed Curriculum, Instruction & Assessment highlights, noting the faculty’s significant work to document and define “the core.” They spoke to how IMSA is personalized today

and noted challenges associated with becoming more personalized. Key next steps include development of a policy for accreditation of external learning experiences, further development of personalized learning plans, and the vision of senior year experiences.

Trustee Rydland characterized the work thus far as “a major big deal—it is about learning not about teaching.” Trustee McEachern encouraged the faculty to think about what society needs from assessment. Trustee Kalantzis recommended refinement of the framework: “it needs a little more work for conceptual clarity, not what you are doing, but the way you are documenting what you are doing.” Trustee Rosner wondered how IMSA would deal with grades given the “individual mastery” language of the strategy. She said some universities are open to looking at students differently about dealing with grades. Dr. McGee mentioned that he is chairing the Assessment Committee for the State’s P-20 Council.

Several Trustees complimented staff on progress to date.

At this point, Chairman Isoye announced a break for lunch.

At 12:30 p.m., the Board reconvened in the Academic Pit.

## **FEATURED AGENDA ITEMS, continued**

### *Mathematics Program Review*

Dr. Janice Krouse, Dr. Don Porzio, Dr. Steve Condie and Mark Kammrath presented key findings from the program review by Dr. Dan Teague (Mathematics Instructor, North Carolina School of Science and Mathematics) and Dr. Charles Vonder Embse (Professor of Mathematics Education, Central Michigan University) and discussed the team’s action plans. The reviewers recommended:

- Make the IMSA Mathematics program into a teaching and learning laboratory where organized investigations are pursued by the department with the goal of improved learning, teaching and curricular content
- Redefine and reconstitute the Mathematical Investigations course to reflect current thinking in teaching practice, technology use, student interaction, and assessment techniques
- Create and implement a forward looking technology use plan to make technology an integral part of the teaching and learning process at IMSA
- Expand the elective course offerings to include courses that serve the broad base of interests at IMSA, not just mathematics
- Reaffirm and implement the IMSA Administration's commitment to provide the resources (time and money) to insure that these recommended revisions actually happen at IMSA.

Dr. Krouse pointed out that the team did a self-analysis prior to the review and came to similar conclusions. PLC (Professional Learning Community) and SMART goals (strategic, measurable, attainable, results-oriented and time-bound) were defined. The Ferris Wheel Project was presented as an example.

Action Steps included:

- Teachers visit each other's classrooms to discuss student engagement and share ideas for best practices
- Team members are encouraged to participate in the summer 2010 NCSM PRIME Leadership Academy at IMSA (June 16 – 18, 2010).
- Develop and implement a technology use plan for the mathematics/computer science program
- Alter activities to more actively engage students in all classes
- Team members provide students opportunities to develop basic competency technology skills by actively using technology appropriately as a teaching and learning tool.
- Team to develop new Computer Science course or courses that provide students opportunities to develop basic competency technology skills.
- Operate as a laboratory in support of the mission.
- Pursue organized investigations by the department with the goal of improved teaching, learning, assessment and curricular content.
- Predetermine what constitutes "success" of the investigation (What are anticipated student responses?).
- Gather, record, and evaluate data, and report results
- Review and revise Mathematics/Computer Science Team Purposes, Goals, and Learning Standards.

The Board discussed the review and action steps. Trustee Rosner recommended partnering with biology teachers: "how can we use math to understand this concept better?" Trustee Kalantis wondered about how the faculty might enable "the unexpected, not just the predetermined." Trustee McEachern encouraged members of the mathematics team to take a "macroview, looking at their whole job and determining how to integrate technology and "export what we're doing."

Chairman Isoye congratulated the team on its impressive work thus far.

#### *Residential Life Program Review Follow-Up*

Dr. Robert Hernandez reviewed the reorganization and restructuring of Residential Life after the program review and Board visit to the residence halls in 2007. He introduced Keith McIntosh, associate director of student leadership development/dean of students, and Janett Cordoves, assistant director of student life-residential life. He said the program review in 2007 characterized and revealed two areas of concern: (1) residential life infrastructure and (2) "gap" between residential life and life in the academic building. Restructuring leadership roles and realigning responsibilities have helped narrow the gap, and now one of the primary responsibilities of RCs is to monitor the academic progress of their students.

Ms. Cordoves spoke of a four-year vision, the importance of partnership and priorities, and ways to bridge the gap between residential and academic life. Dr. McLaren pointed out that program reviews happen every five years with a significant part being the self study. He said the program review follow ups were a way to inform the Board of highlights and critical issues in the middle of a cycle.



### *Student Inquiry and Research Program Review Follow-Up*

Due to time constraints, this item was deferred to another meeting.

*Trustee Olszewski-Kubilius joined the meeting via u-stream and telephone.*

### **GUEST SPEAKERS**

Dr. McGee introduced guest speakers: Dr. Victoria Chou, College of Education, University of Illinois at Chicago; Cheye Calvo, Director of Expansion for the SEED Foundation; April Goble, Executive Director, KIPP Chicago-Gary Schools; and Marvin Warner, Assistant Regional Superintendent for Madison County.

Mr. Calvo presented slides on The SEED Foundation rationale, program and students, SEED economics, and SEED replication. He spoke about opportunities and challenges of operating and expanding residential schools in urban settings. SEED schools serve “disadvantaged, at-risk students” who “need significant educational and environmental support,” the goals being to prepare them for success in college and beyond and “break the cycle of poverty.” A key feature “wraps 24 hours of comprehensive services around students...” He also discussed the public-private partnership funding model, stating that capital and start-up operating costs were raised in the private sector, with state and local funds sustaining the program. He summarized the SEED expansion landscape and phased process and said that in order to establish a new school, SEED must successfully develop six elements of support: community support; operational funding; site selection; private funding; financing; and leadership. He said that SEED and IMSA had the “potential to learn from one another,” noting that their missions are different.

Regarding the *Mission Possible* “IMSA Chicago” model (combination day middle school and residential high school), Mr. Calvo said there would need to be different staffing ratios and more and different services than IMSA currently provides.

Dr. Chou shared some of her experiences and impressions working with educators and political leaders in Chicago. She said IMSA’s lack of familiarity with middle school, urban, “truly disadvantaged struggling learners” coupled with “Chicago overlays” made this a “very important decision to get right.” She said many top performing students from the Chicago Public Schools “end up in remedial classes at UIC.” She said challenges would include learning how to work with specific types of Chicago communities, understanding how to work with students who are academically unprepared, addressing safety issues, navigating changes in the CPS Administration, and working with the Mayor’s agenda. She referenced the “prescriptive culture” of other specialized schools and said “this is not the IMSA way.” She asked if the Board was interested in establishing “another IMSA” or “another school for a different purpose.” Dr. McGee said he wanted to clarify that an IMSA campus in Chicago would serve gifted and talented students, students with demonstrated potential, and teachers. Dr. Chou encouraged Trustees to take “baby steps.”

Ms. Goble discussed the opportunities and challenges of working with middle school students in an urban setting, sharing information about KIPP (Knowledge is Power Program) LEAD, a college preparatory middle school in Gary, Indiana, and KIPP Ascend Charter School, a college preparatory middle school in Chicago. KIPP schools are open enrollment by lottery. Ms. Goble noted that KIPP Ascend’s 2008 ISAT 8<sup>th</sup> grade scores

ranked above the Chicago and State averages. She discussed fundraising and how KIPP encourages critical thinking skills in students as well as their engagement in the world at large. With regard to IMSA expansion, Ms. Goble advised Trustees: “start small and grow slowly over time” and “don’t deviate too much” from the institution’s identity.

Mr. Warner shared his perceptions of the *Mission Possible* retreat, the need for a downstate STEM Center and the opportunities and challenges this model presents. He said the opening of an IMSA Field Office in Metro East was a “great step,” adding “IMSA has expertise we’d like to have.” He said he did not think his region was ready for a residential school yet but recommended that IMSA expand Problem-Based Learning, preservice workshops, and IMSA Excellence 2000+, and possibly start a day school. He said the majority of parents in his area were not comfortable with their children being away from home.

Trustees briefly discussed several issues, including wrap around services, scalable business models, the role of teachers and school leadership, and the importance of the “freedom to act.”

Dr. McGee thanked the guest speakers and Trustees for setting the stage for the Board Retreat and for their contributions to the Board and administration’s individual and collective learning. He remarked that he personally had learned a great deal and noted that the information the speakers presented would be very helpful as the Board members conducted their discussion about campus expansion models on Saturday.

### ***Adjournment***

A motion was made by Trustee Kalantzis and seconded by Trustee McEachern to adjourn the meeting. Voting aye were Trustees Isoye, Budzik, McEachern, Naughton, Kalantzis, Roche and Rosner. The motion passed by a vote of 7 ayes, 0 nays. The meeting was adjourned at 3:45 p.m.

Respectfully submitted,

Steven T. Isoye  
Chairman

Catherine C. Veal  
Secretary