



# IMSA Impact and Priority Outcomes

Model / Demonstrate  
Inquiry and innovation

“Publish”  
Insights

IMSA as a  
Learning Laboratory

Create Tools

Develop Diverse  
STEM Leaders

# IMSA Impact and Outcomes

**MISSION** ➔ *Igniting and Nurturing Creative, Ethical, Scientific Minds that Advance the Human Condition*

<b>Impact</b> ➔	By 2022, IMSA is a Recognized Global Leader and Catalyst in Equity and Excellence in STEM Teaching & Learning, Innovation and Entrepreneurship		
<b>Pillars</b> ➔	<b>STEM Teaching &amp; Learning</b>	<b>Operational Capacity</b>	<b>Stakeholder Engagement</b>
<b>Priority Outcomes</b> ➔	<ul style="list-style-type: none"><li>✦ Develop Student STEM Proficiency</li><li>✦ Develop Educator STEM Proficiency</li><li>✦ Strengthen Identity as a Learning Laboratory<ul style="list-style-type: none"><li>✦ 2022 Theme: Social Entrepreneurship</li></ul></li></ul>	<ul style="list-style-type: none"><li>✦ Increase Fiscal Sustainability</li></ul>	<ul style="list-style-type: none"><li>✦ Build IMSA's Network</li></ul>
<b>Strategy</b> ➔	Strong Employee Engagement		

# STEM Teaching and Learning

## Develop Student STEM Proficiency (10%)

Indicator	Next Steps	Source	Weight	Annual Target (G)	Annual Target (B)	Cabinet
% of IMSA students who contribute to the body of knowledge as accepted by the professional field	Develop additional intentionality around supporting student research  Define contribution		5%	Research baseline to determine target XX%	Research baseline to determine target XX%	Marie, Jeff
% of IMSA students demonstrating increased proficiency in STEM thinking	Development of IMSA proprietary tool, or determine existing third party assessment tool that would test this skillset and mindset  Define STEM thinking	Student Assessment (to be developed by IMSA)  Conduct pre/post for each cohort	5%	Future	Future	Marie, Michelle

# STEM Teaching and Learning

## Strengthen Identity as a Learning Laboratory (15%)

Indicator	Next Steps	Source	Weight	Annual Target (G)	Annual Target (B)	Cabinet
<b>% of IMSA educators participating in innovation in teaching &amp; learning</b> -learn -Build -Disseminate	Review and define learn, build, disseminate		5%	Research baseline to determine target XX%	Research baseline to determine target XX%	Marie
<b>Achievement of milestones in infusing new cutting-edge theme across IMSA by integrating theme into curricular and co-curricular experiences</b>  2022 Theme: Social Entrepreneurship	Develop plan and timeline for integrating theme across IMSA (more of a dashboard)		0%	1 milestone achieved every six months	2 milestones achieved every six months	Marie, Jeff
<b>% of IMSA students engaged in cutting edge theme</b>  2022 Theme: Social Entrepreneurship <ul style="list-style-type: none"> <li>Participating in pitches /competitions</li> <li>Launching social enterprise (tangible "something")</li> </ul>	Determine engaged criteria; Develop intentionality around student engagement in theme -2 parts, one discussion; two create		5%	Research baseline to determine target XX%	Research baseline to determine target XX%	Marie, Jeff
<b># of IMSA-led thought leadership efforts*</b> <ul style="list-style-type: none"> <li># of formal thought capital pieces developed (articles, reports)</li> <li># of tools developed for educators</li> <li># of district, state, and federal STEM policies or guidelines that IMSA is involved in developing/promoting</li> </ul>	Develop IMSA-wide system for tracking thought leadership efforts		5%	Research baseline to determine target <b>XX (total)</b> <ul style="list-style-type: none"> <li>Pieces: 3</li> <li>Tools: X</li> <li>Policies: X</li> </ul>	Research baseline to determine target <b>XX (total)</b> <ul style="list-style-type: none"> <li>Pieces: 5</li> <li>Tools: X</li> <li>Policies: X</li> </ul>	Jeff
<b># of new organizations using IMSA tools</b>	Develop system for tracking adoption		0%	Future	Future	Michelle, Jeff

\*This metric could also measure % of target achieved.

# STEM Teaching and Learning

## Develop Educator STEM Proficiency (10%)

Indicator	Next Steps	Source	Weight	Annual Target (G)	Annual Target (B)	Cabinet
<b>% of IMSA educators who demonstrate mastery in the teaching of STEM thinking:</b>	<p>Develop rubric for competence, confidence, and skills for faculty and integrate into professional growth plan and review mechanism</p> <p>QUESTION – how do we establish base line?            ** Need to review/assess CADRE for mastery</p>		5%	80%	90%	Marie, Michelle
<b>% of educators trained by IMSA who demonstrate mastery in improvement in the teaching of STEM thinking:</b> <ul style="list-style-type: none"> <li>Increased competence</li> <li>Increased confidence</li> <li>Improved skills</li> </ul> <p><i>Future potential for IMSA certification/ accreditation/badges for external educators</i></p>	<p>Define STEM thinking</p> <p>Review current program evaluation practices and align with STEM Thinking definition</p>	PFS	5%	80%	90%	Michelle, Jeff

# Operational Capacity

## Increase Fiscal Sustainability (25%)

Indicator	Next Steps	Source	Weight	Annual Target (G)	Annual Target (B)	Cabinet
<b>Progress on research and implementation of sustainable fiscal models</b>	Develop plan and timeline for researching sustainable fiscal models -develop dashboard (take 6-9 mths)	Finance Committee	15%	1 milestone achieved every six months	2 milestones achieved every six months	Jeff
<b>% of annual IMSA revenue sourced from diverse revenue streams*</b>	Determine how this target should be set in relationship to target to restore IMSA reserves	Finance	0%	Determine annual target – suggest incremental growth until new sustainable fiscal model put in place (e.g. 22%) XX%	Determine annual target – suggest incremental growth until new sustainable fiscal model put in place (e.g. 25%) XX%	Jeff
<b>% growth in IMSA reserves</b>	Determine annual target for reserve growth in relation to revenue diversification target	Finance	10%	Determine annual target – ultimate target is that reserves are equivalent to 25% of annual revenue in 5-7 years XX%	Determine annual target – ultimate target is that reserves are equivalent to 25% of annual revenue in 5-7 years XX%	Bud

# Stakeholder Engagement

## Build IMSA's Network (25%)

Indicator	Next Steps	Source	Weight	Annual Target (G)	Annual Target (B)	Cabinet
<b>% of IMSA's stakeholders who are engaged:</b> <ul style="list-style-type: none"> <li>• Staff</li> <li>• Alumni</li> <li>• Parents</li> <li>• Trustees (Board)</li> <li>• Directors (Fund)</li> <li>• Friends</li> </ul>	<p>Determine criteria for high financial and non-financial (see excel) engagement for each stakeholder; Develop system to track engagement</p> <p>Engaged – doing one or more of the above</p>	External Engagement	10%	Research baseline to determine target <b>XX% (total)</b> <ul style="list-style-type: none"> <li>• Staff: XX%</li> <li>• Alumni: XX%</li> <li>• Parents: 55%</li> <li>• Trustees: XX%</li> <li>• Friends: XX%</li> </ul>	Research baseline to determine target <b>XX% (total)</b> <ul style="list-style-type: none"> <li>• Staff: XX%</li> <li>• Alumni: XX%</li> <li>• Parents: 65%</li> <li>• Trustees: XX%</li> <li>• Friends: XX%</li> </ul>	Jeff, Bob
<b>Quality of IMSA recognitions*</b> <ul style="list-style-type: none"> <li>• # of high impact pieces in publications/media outlets (regional/national coverage, high circulation, prestigious outlet)</li> <li>• # of high impact IMSA speaking engagements (high attendance, influencer participation, media coverage)</li> <li>• # of citations by influencers (officials/opinion leader mentions in press release/interview/speech)</li> <li>• # of student, faculty, and school awards at target state, national, and international competitions</li> </ul>	<p>Determine target outlets, speaking engagements, influencers, and competitions</p> <p>-Define high impact publications</p> <p>-Clarify what target/list for competitions</p>	External Engagement	10%	Research baseline to determine target <b>XX (total)</b> <ul style="list-style-type: none"> <li>• Pieces: 3</li> <li>• Speak: 3</li> <li>• Influencer: X</li> <li>• Awards: 3</li> </ul>	Research baseline to determine target <b>XX (total)</b> <ul style="list-style-type: none"> <li>• Pieces: 5</li> <li>• Speak: 5</li> <li>• Influencer: X</li> <li>• Awards: 5</li> </ul>	Jeff, Adrienne
<b>% of engaged external partner organizations in IMSA's network</b> <ul style="list-style-type: none"> <li>• # of K-12 Schools, museums, higher education institutions, think tanks, corporations, government entities</li> </ul>	<p>Determine criteria for engagement (mutually beneficial relationship); Develop system for tracking network across IMSA</p>	External Engagement	5%	Research baseline to determine target XX%	Research baseline to determine target XX%	Michelle, Bud

\*This metric could also measure % of target achieved.

\*\*Types of engagement may include donations, mentorship, participation in activities, volunteering, and speaking on behalf of IMSA.