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Illinois Legislative Charges

IMSA was established in 1985 by the Illinois General Assembly as part of the State’s comprehensive educational reform package to address the critical need for citizens highly skilled in STEM fields. The Academy opened in 1986.

IMSA is governed by an appointed Board of Trustees and is funded by the Illinois legislature under the Illinois Board of Higher Education appropriation.

**Legislative Charge #1**

To provide an advanced academic and residential program for students of exceptional talent in mathematics and science.

**Legislative Charge #2**

To serve others as a catalyst to stimulate teaching and learning in mathematics and science throughout Illinois.
About IN2

“IN2” is a highly conceptual name that plays upon the idea of both innovation and inquiry—bridging businesses and the educational focus at IMSA. It also extends the current name assets at IMSA, metaphorically extending the mission.

It plays on the concept of bringing both innovation & inquiry into practice at IMSA and on the concept of what is put “into” the center to make things happen—ideas, intuition, exploration, knowledge, experimentation, etc.

It is short, memorable and easy to say. It leaves room for curiosity and play without having to explain too much.

The three lines composing the “2” represents the different journeys of students through time and the paths that come together at IMSA through innovative practices, inquisitive learning, and problem-solving processes.

3D walkthrough
The Illinois Innovation Ecosystem

Galvin Center for Electricity Innovation
Institute of Design & Engineering
IFSH - Food Technology
WisER

NCSA/User Facilities
Inst. For Genomic Bio
UIC Innovation Center
Enterprise Works
Tech. Entrepreneurship Center
Materials Research Laboratory

University of Illinois

University of Chicago

LOYOLA UNIVERSITY

DEPAUL UNIVERSITY

Fermilab

Northwestern University

Rush University Hospital

Illinois Medical District

Argonne

CTP
ISTP
PeoriaNEXT
University Park SIUE
Research Park at SIU

Research Parks

Private Equity
Seed
Early
Growth

In incubators, co-working spaces

1871
Catapult
TechNexus

Chicago Innovation Mentors
Chicagoland Chamber of Commerce
Chicago Innovation Awards

Mentorship, Community & Networking

Conveners

WBC
ISTC

Public Sector

City of Chicago
State /DCEO
IL GA

Culture

Amenities
Performing Arts

Capital & Networks

Universities
Federal Labs
Incubation
Accelerators
Philanthropy

Industry

Energy
Manufacturing
Biotech and Pharma

NCAUR
Where did we start?

1. 2007 IMSA Strategic Plan
2. CoolHub
3. The Gift
4. PB&J Innovation Brown Bag lunch
5. IN2 Advisory Committee (adults)
6. Select Architects
and then what?

7. Design Charrette
8. Intersessions (3)
9. Design Process
10. Maker Squad
11. IN2 Advisory Committee (Students)
12. Naming/Branding
what came next?

13. Programming
14. Fundraising
15. Job Descriptions, hiring and onboarding
16. Order equipment & prepare to open
17. Develop MVP
18. Open (fall 2016)
Design Charrette
August 2014
1871
Silicon Valley (Facebook, Twitter, Dropbox...)
State Farm Next Door (industry)
Chicago Public Library (Maker Space)
IIT Idea Lab
CIE – Chicago Innovation Exchange
MIT Media Lab (Boston)
Harvard Innovation Lab (Boston)
Northwestern University Garage
Greentown Labs (Boston)
Artists’ Asylum (Boston)
Purdue (Foundry & Anvil)
Chicago - DMDII
University of Illinois Research Park
Rockford & Peoria Innovation spaces
Silicon Valley

Twitter, Dropbox
Google, Avos
Exploratorium
Facebook, WeWork
Silicon Valley

Twitter

**Takeaways:** Internal hack days; branding; unique staff benefits;
Silicon Valley

Exploratorium

Takeaways:
Engaging; fun; applied learning; Manipulatives; peek behind
Silicon Valley

Google

Takeaways: teams; art inspired; edgey
Silicon Valley

Facebook

Takeaways:  fun; mentoring;  
Creativity outlets; benefits
Silicon Valley

Avos

**Takeaways:** flexible open space; inexpensive options; toys & games; design and play with brand (colors)
Silicon Valley

Co-working Spaces (WeWork)

*Takeaways*: comfort; collaborative; amenity laden; membership; phone booths; café; office station
Boston

Harvard Innovation Lab

Oblong Technology

MIT Media Lab  Greentown Labs  Artists’ Asylum
Boston

Artists’ Asylum

Takeaways: whimsy; chaotic comfort; community; tool organization
Takeaways: Art integration, functionality zones, social media, programming
Boston
HI – Harvard Innovation Lab – 10/1/14

Takeaways: Mobility, technology, experiential, community around food
Boston

Greentown Labs

**Takeaways:** focused vertical; sponsored community
Boston

MIT Media Lab

Takeaways: Teams; IP; hands-on; ingenuity
Regional

Thermo Fisher Scientific
Blue Waters Petascale Computing

Jump Simulation
Regional

Caterpillar Visitor’s Center
Peoria, IL

Woodward Aerospace
Rockford, IL

University of Illinois
EnterpriseWorks
Chicago

IIT Idea Lab

DMDII

Northwestern
Local Business Incubator
Barrington High School

“A I want to teach older adults how to use technology”

Aurora Public Library
Maker Space
Funding

Revenue Streams

• Donations
• Memberships
• Sponsorships
• Program fees

Expenses

• Salaries
• Equipment
• Program supplies
Questions
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IMSA Innovation Spaces Tour

Grainger Lab
Grainger Workshop
IN2
Robotics Lab
IN1
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Maker Space Panel
(next door in IN1)

Lawrence “Bud” Bergie, IMSA COO
Britta McKenna, IMSA CIO
Erik Swanson, IN2 Maker Manager
3D printing online resources

- NASA Summer of Innovation Site [http://www.nasa.gov/offices/education/programs/national/summer/education_resources/#.Vqu7GblrJaQ](http://www.nasa.gov/offices/education/programs/national/summer/education_resources/#.Vqu7GblrJaQ)
- Open Education Consortium [http://www.oeconsortium.org/2015/12/new-oecd-publication-open-educational-resources-a-catalyst-for-innovation/](http://www.oeconsortium.org/2015/12/new-oecd-publication-open-educational-resources-a-catalyst-for-innovation/)
- TinkerCad [https://www.tinkercad.com/](https://www.tinkercad.com/)
- FreeCad [http://www.freecadweb.org/](http://www.freecadweb.org/)
- Slic3r [http://slic3r.org/](http://slic3r.org/)
- 123dDesign [http://www.123dapp.com/design](http://www.123dapp.com/design)

...more presentations and articles at IMSA Digital Commons
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Q: Who came today with a specific space or idea to design?
How might we design a new space at our school to invite and enable innovation initiatives?

Key questions…

Who is your target audience and what do they want?
What do they (you) want to make or do?
What are your constraints?
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Join IN2 on social media...

IN2IMSA
IN2 (Group page)
IN2 (group)
imsa.edu/in2
Lessons from Sylvia…

1. Baby Steps
2. Cheap is Good
3. Failure happens
4. Be the student
5. Don’t sweat the small stuff