

MicroCredentials

Promoting IMSA's Signature Strategy

Connecting the Academy & Outreach

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Illinois Mathematics and Science Academy



Illinois Mathematics and Science Academy (IMSA) – Who we are

The Illinois Mathematics and Science Academy® (IMSA) develops creative, ethical leaders in science, technology, engineering and mathematics. As a teaching and learning laboratory created by the State of Illinois, IMSA enrolls academically talented Illinois students (grades 10-12), in its advanced residential academic program.

IMSA is both a public residential Academy and a catalyst and laboratory for the advancement of STEM teaching and learning statewide, with responsibility to stimulate further excellence for all Illinois schools in mathematics and science through student and educator outreach, teacher training and turnkey STEM curricula, student enrichment and entrepreneurship and makerspace education.



Legislative Charge – 2 parts

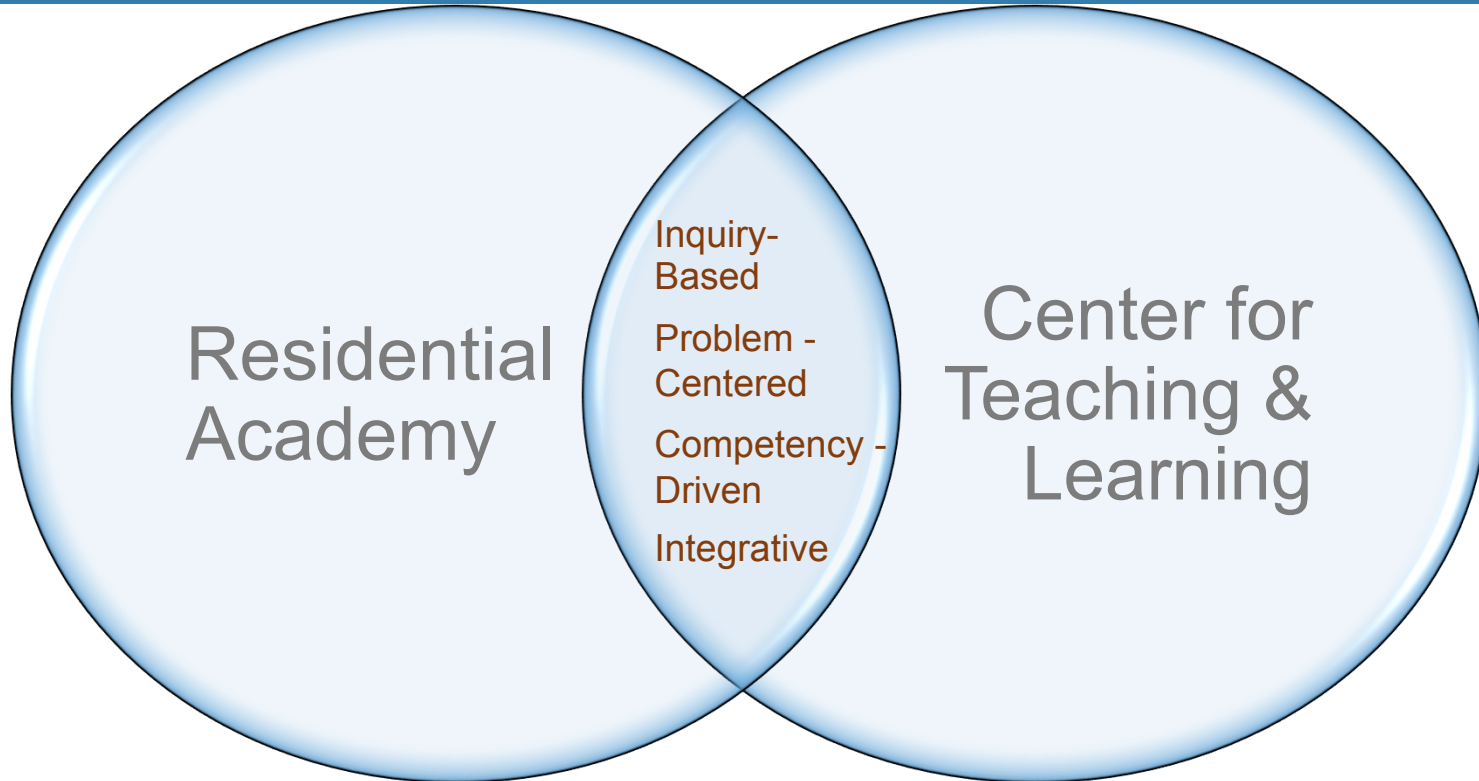
Residential Academy

The primary role of the Academy shall be to offer a uniquely challenging education for students talented in the areas of mathematics and science.

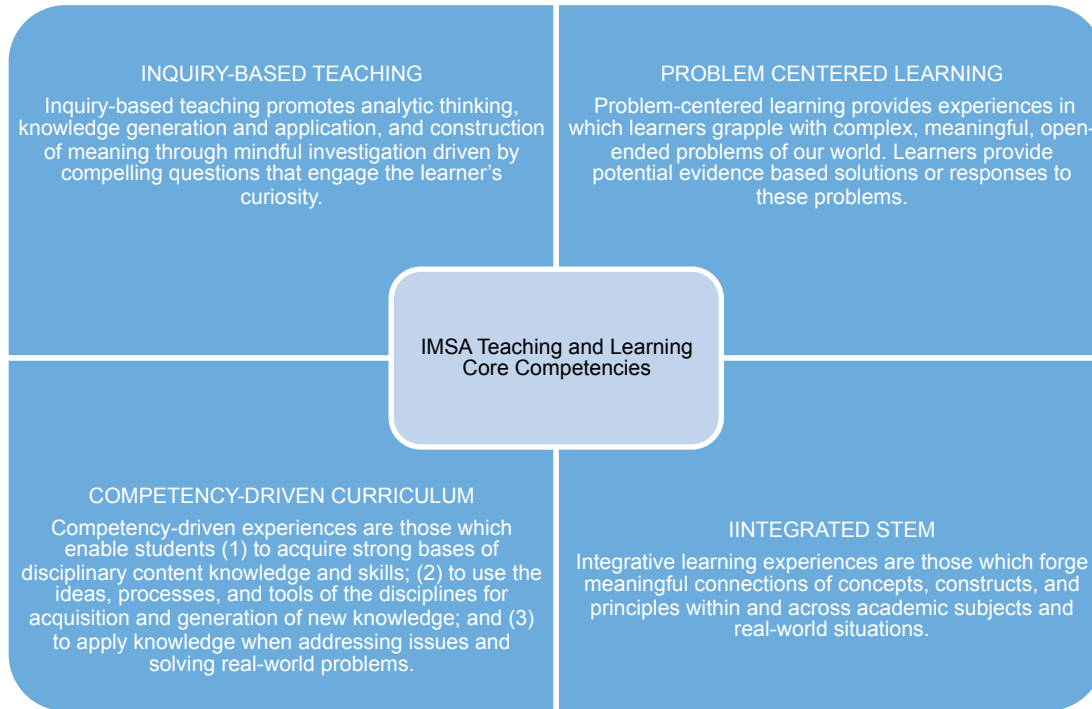
Outreach & Development Center for Teaching and Learning

The Academy shall also carry a responsibility to stimulate further excellence for all Illinois schools in mathematics and science.

IMSA Core Competencies



IMSA Core Competencies



Educator Development – Identity transformation

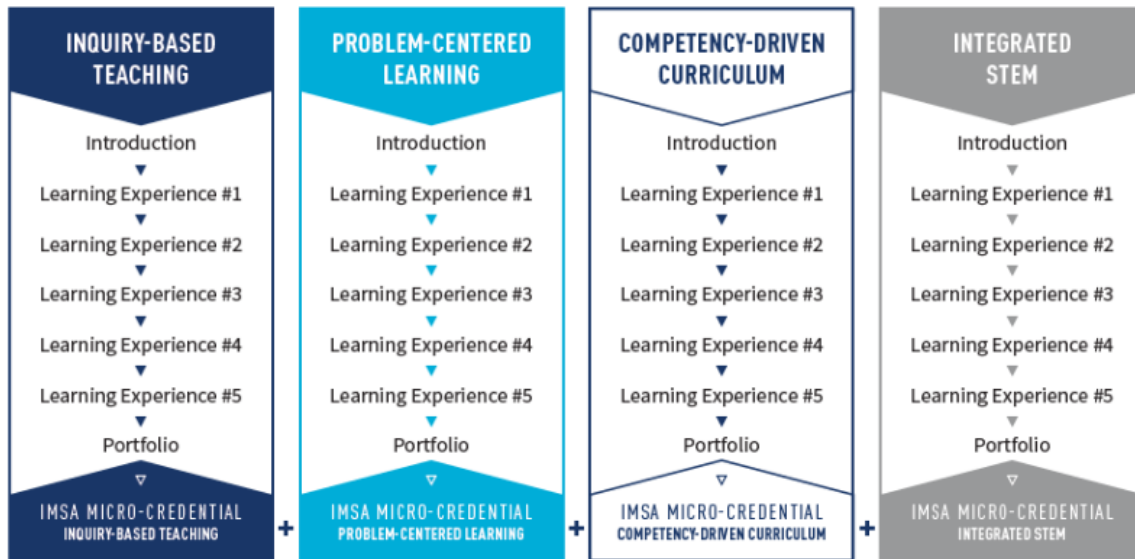
Program-Driven

- IMSA Fusion
- STEM on Demand
- NGSS training
- Shifting Science PD
- State & National conferences
- Teacher Institute Days
- Illinois Math Science Partnerships
- School STEM fairs
- Teacher workshops
- POP (Pedagogy of Practice)
- Educator Externships

Mission Driven

We provide professional development to educators rooted in IMSA's 4 core competencies (inquiry-based, problem-centered, competency-driven, integrative) which further our mission of, *“Igniting and nurturing creative, ethical, scientific minds that advance the human condition”*

IMSA Educator MicroCertification and Micro-Credentials Program



**IMSA EDUCATOR
MICROCERTIFICATION**

Why Micro-Credentials?

What is a micro-credential:

Micro-credentialing is a form of professional development that is quickly gaining popularity among people looking to continue their education or advance in their careers. Specific characteristics of these professional development systems highlight its usefulness to providing quality education outreach. According to French and Berry, a micro-credential is described as being a set of “competency-based, personalized, small-scale professional development modules that are suited for anytime/anywhere learning and allow teachers to show what they can do, not only what they know.” (Berry, 2017). These professional development systems are often designed as courses, or a set of online or blended modules offering bite-sized methods to acquire new knowledge or skills (ALA TechSource, 2019). With micro-credentials being offered at a variety of levels across multiple disciplines and areas of study within those disciplines (ALA TechSource, 2019), this form of continuing education presents a personalized route for professional development.

Micro-Credential Learning Experiences + Portfolio

LEARNING EXPERIENCES (LE)

- Approx 3 hour experience + application and dissemination
- Available to all educators, any grade level and discipline.
- Include a research base, pedagogy, instructional strategies and sample lesson plans focused on increasing student learning.
- Identified with a grade level band, content area, and instructional focus
- Includes an "Apply and Reflect" assignment

SUMMATIVE PORTFOLIO

- Demonstration of teaching of the Micro-Credential strand
- Artifacts supporting the implementation and professional learning
- Professional Reflection on impact on instructional practice

IMSA Educator Micro Certification

(micro-credentials+)



FY19

Nov - Hire on-line specialist

Dec-June - Develop structure for MicroCertification

Jan - Introduce CWPDSs to online teaching & learning

Feb-May - Develop intro to core competencies

March - Determine LMS needs

June - Market research for pricing

June - Moodle upgrades



FY20

Aug - Create general marketing brochure

Aug-Dec - Beta test intro courses

Sep-Jan - Edit and revise intro courses

Sept-Oct - Catalogue current offerings by competency & grade level

Nov-Dec - Gap analysis of current offerings

Dec - First mailing to Illinois admin & teachers

Dec-April - Build LEs to fill in gaps for minimum of 2LEs/grade level/competency

Sept-May - STEM Thinking Thursdays PD - record for online

Sept-June - Develop 16 on-line LEs based on existing PD (4 per quarter)

Sept-May - Revise current PD to focus on competencies 36 F2F LEs prepped for launch

March - 2nd mailing to Illinois admin & teachers

April - "Go Live" with online intros as MOOCs registration for June LEs

May - 3rd mailing to Illinois admin & teachers

June - On-line and F2F LEs begin; minimum 40 LEs for kick-off



FY21

July 2020 - Full Year one of MicroCertification begins

July-June - 14 LEs offered each month, at least 8 online

July-June - 40 additional LEs created, complete program PreK-12, all competencies

July-June - Edit and revise LEs after 2nd offering

June 2021 - target for 20 teachers complete the entire MicroCertification,

June 2021 100+ teachers on target to complete by FY22

June 2021 - 500+ teachers in "the system"

FY22

First 20 MicroCertified "IMSA Educators" to serve as "train the trainers" for IMSA's CTL Educator Development programs

100+ educators from around the globe complete the MicroCertification

5 schools approved as IMSA Outreach Schools

Questions?

