# Identifying and Strengthening Existing Support for Students on a Research-to-Publication Pathway

Connie James-Jenkin
Sowmya Anjur, PhD
Jean Bigger
Amberly Carter
Raven McKelvin ’24


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**Connie James-Jenkin – Electronic Resources, Reference, Collection Development Librarian**

- *Supporting library and classroom research*

***Sowmya Anjur, PhD* – Science Faculty| Student Inquiry and Research (SIR) Program Coordinator | IMSA Medical Society Advisor**

- *Creating equitable classroom assessments that support and promote an understanding of scientific inquiry and the nature of research*

***Jean Bigger* – Head of Technical Services | DigitalCommons Manager | Archives Liaison**

- *Capturing student work in DigitalCommons and Student Portfolios*

***Amberly Carter* – Coordinator of Diversity Equity and Inclusion|Advisor for Brotherhood Sister Circle (BHSC)**

- *Engaging and supporting our CLED students*

***Raven McKelvin '24* – Black Woman| FY23 IMSA Intern | Active Club Leader | Junior at IMSA**

- *Sharing her experience as an IMSA Intern and DC student liaison*

# Thank you!

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# Session Description:

Participants will:

1. learn how IMSA is generating and disseminating scholarship and incorporating students on a Research to Publication pathway
2. discover classroom activities that support and promote an understanding of scientific inquiry and the nature of research
3. discuss student work in IMSA's repository and student portfolios
4. hear how we are engaging and supporting our CLED students, like Raven McKelvin '24, who will share her experience as an Intern and student liaison.

# Takeaways:

- Embedded links within this presentation to referenced teacher resources: lesson plans, peer-reviewed articles, conference papers/presentations/posters, books and book chapters, webinars, podcasts, and more

- Links to examples of student work and engagement in response to project-based learning assignments

*This record includes all of our presentation materials and the link to Comments*

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How are we are identifying and strengthening existing resources that support an inclusive student Research-to-Publication pathway?

How is this process making it possible for us to organically create portfolios of our best work?

Why does this matter?

# IMSA's Learned Experience: *how we are increasing awareness of, and enthusiasm for, academic achievement and student success by:*

Recognizing that we are a "community of scholars" with a robust history of inquiry-based, student-centered, and integrative curriculum and instruction that has frequently led to publication

Being able to provide evidence to support that claim, such as: Science Publications & Research

Continuing to prioritize equity in STEM and accountability to our mission: Equity and Excellence

Reinforcing support for IMSA's flagship student research program: Student Inquiry & Research

Promoting learning experiences with business professionals, nonprofits and entrepreneurial mentors through: Internship

Identifying current and potential research opportunities and support: Research to Publication Toolkit

Understanding the importance and benefit of being connected to a global community of scholars

Encouraging community members to develop Faculty/Staff Portfolios and Student Portfolios of their professional accomplishments

Sharing monthly download statistics from around the world with IMSA authors, creators, innovators, and stakeholders who require evidence of impact

Creating an institutional identity for scholarly research and publication within secondary and higher education

Conclude with a demonstration,

and a discussion- where we hope to learn more about how you stimulate and support research and publication at your institutions

# About IMSA:

The Illinois Mathematics and Science Academy (IMSA), is a state-funded residential high school for gifted students in Illinois

The school opened in 1986 with the first sophomore class of approximately 200 students • it's located in Chicago's far west suburb of Aurora • and it has a current annual student body of about 650 sophomores, juniors, and seniors

IMSA was one of the fours schools responsible for leading and organizing the foundation of NCSSSMST in 1988 by 15 schools

Admission is open to students from across Illinois; however, the process is competitive; students who present the strongest combination of credentials are invited to attend

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# Founded by:

**Leon Lederman, PhD**

Nobel Laureate and Director of Fermilab, particle physics and accelerator laboratory

**Former Illinois Governor James R. Thompson**

Passed the Education Reform Act of 1985 that created the
Illinois Mathematics and Science Academy

**Stephanie Pace Marshall, PhD**

Founding President of IMSA and Founding President of the National Consortium for Specialized Secondary Schools in Mathematics, Science and Technology (NCSSS)

# IMSA's Mission:

*"to ignite and nurture creative, ethical scientific minds that advance the human condition, through a system distinguished by profound questions, collaborative relationships, personalized experiential learning, global networking, generative use of technology and pioneering outreach"*

# 2022 Strategic Plan:

Equity in STEM and accountability to our mission

Commitment to the growth of our people and having the mindset of a learning laboratory

Innovation and impact throughout the state in teaching and learning

# Strong Foundation of Collaboration:

- Integrating library research and instruction into classrooms and assignments
- building and reinforcing an inclusive research-to-publication pipeline at IMSA with intention
- Collecting, disseminating, and promoting: faculty/staff and student publications & research • open educational resources • innovative/creative works • hosted conference events
- Developing new opportunities for the inclusion of student work – Distinguished Student Work, Exemplary Classroom Work, online journals, such as: Zeitgeist: A Journal of Politics, History, and Philosophy
- Recognizing and reinforcing faculty/staff and student achievement
- Developing steps to ensure that IMSA is showcasing success equitably among faculty/staff and students
- Showcasing research projects from SIR students, for example: 2022 IMSAloquium presentation
- Recognizing and reinforcing student learning
- Protecting the intellectual property of our students
- Ensuring the integrity of our data, evolving and documenting our processes, and actively supporting Equity in STEM, and accountability to our mission

# Information Literacy Instruction

Connie James-Jenkin
Librarian

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# Researching the Professional Literature

- Students have little prior experience
- Instruction methods
  - Embedded
  - Scaffolded
  - Asynchronous tutorials
  - One-shot, librarian as guest speaker format

# The One-Shot, Librarian as Guest Speaker in MSI: Methods of Scientific Inquiry

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ACRL
Advancing learning
Transforming scholarship
Association of College & Research Libraries

# Framework for Information Literacy in Higher Education

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# ACRL Frames

**•Searching as Strategic Exploration**

•utilize divergent (e.g., brainstorming) and convergent (e.g., selecting the best source) thinking when searching

•match information needs and search strategies to appropriate search

tools

•use different types of searching language (e.g., controlled vocabulary,

keywords, natural language) appropriately

•understand how information systems (i.e., collections of recorded information) are organized in order to access relevant information

•manage searching processes and results effectively.

# ACRL Frames

- **Authority is Constructed & Contextual**
- Define different types of authority
- Research tools as indicators of authority
- Acknowledge they (student) are developing their own authoritative voices

# ACRL Frames

- **Scholarship as Conversation**

- cite the contributing work of others in their own information production

- contribute to scholarly conversation at an appropriate level, such as … undergraduate research journal, conference presentation/poster session

# Dovetails with IMSA's Priority Outcome:

"IMSA innovations are published in professional journals, presented at conferences and shared with partners/government. Student work that illustrates breakthrough outcomes is highlighted."

# Librarian Led MSI Session

- Pre-work
- Born out of COVID
- Benefits of students:
  - Having increased familiarity with IRC (Library) before session
  - Thinking about literature searches
  - Being able to ask questions "In private"

- In-Class
- Kahoot to assess knowledge based on the pre-work
- In-depth discussion of research strategies
- Discussion regarding questions and IRC in general

# References


Association of College & Research Libraries. (2015). *Information literacy framework for higher education.* https://www.ala.org/acrl/sites/ala.org.acrl/files/content/issues/infolit/framework1.pdf

Buchanan, H.E., & McDonough, B.A. (2017). The one-shot library instruction survival guide. American Library Association.

Cook, D. (2022). Is the library one-shot effective? A meta-analytic study. *College and Research Libraries, 83*(5). https://doi.org/10.5860/crl.83.5.739

Howard, K., Nicholas, T., Hayes, T., & Appelt, C. W. (2014). Evaluating one-shot library sessions: Impact on the quality and diversity of student source use. *Community & Junior College Libraries*, *20*(1-2), 27-38. https://doi.org/10.1080/02763915.2014.1009749

Nicholson, K., & Seale, M. (2022). Information literacy, diversity, and one-shot "pedagogies of the practical." *College and Research Libraries, 83*(5). https://doi.org/10.5860/crl.83.5.765

# Creating equitable classroom assessments that support and promote an understanding of scientific inquiry and the nature of research


## Sowmya Anjur, PhD

Science Faculty| Student Inquiry and Research (SIR) Program Coordinator | Red Cross Club Advisor| Spectrum Advisor


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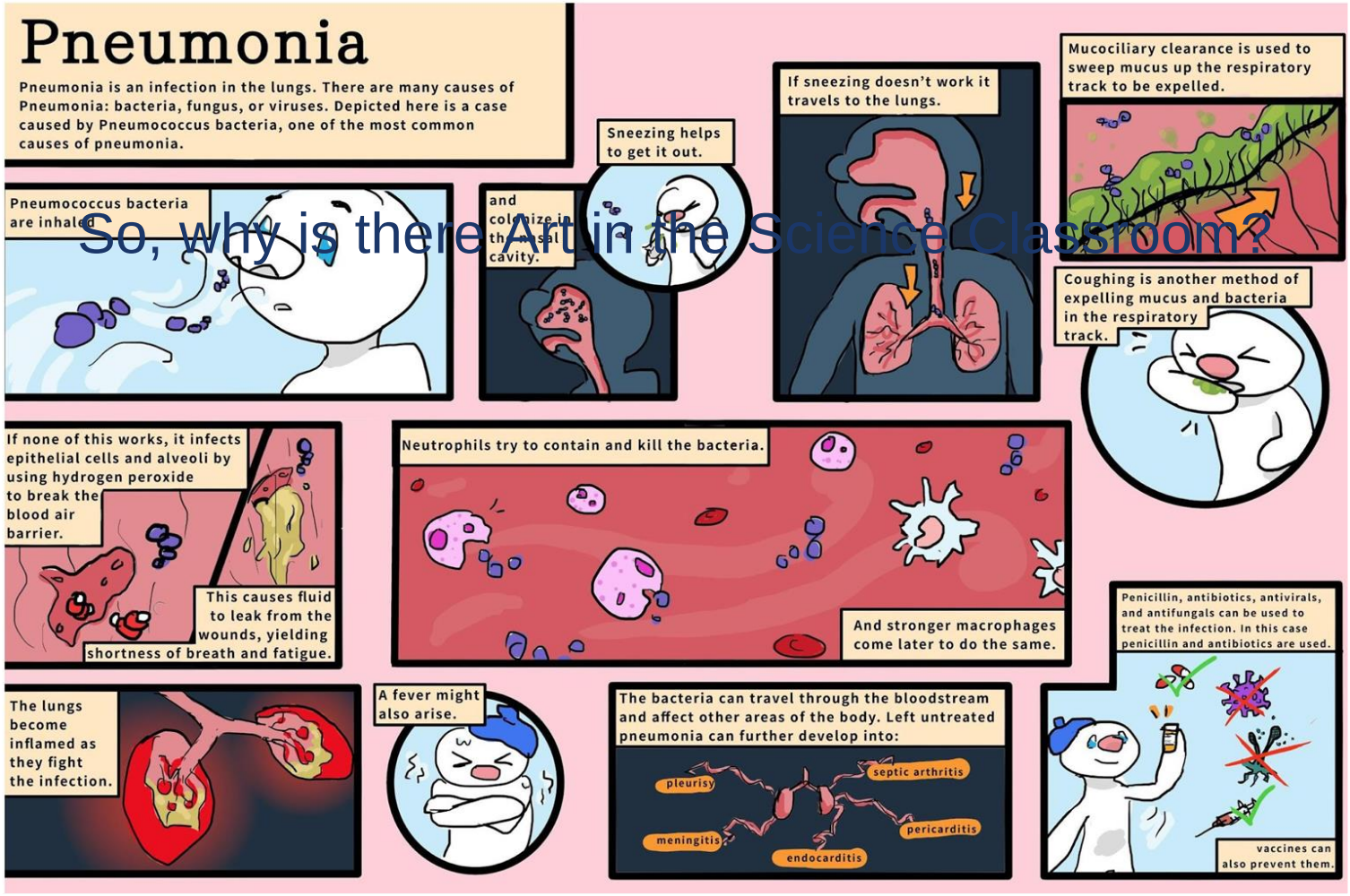


So, why is there Art in the Science Classroom?

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# Incentivizing Students in the Classroom:

- IMSA students have a lot of creativity and passion
- Often they do not have the opportunity to use their skills
- Due to the rigor of the classes they take, they are often encouraged to recall previous learning
- Therefore the idea arose to encourage them to do projects and other activities, which could be tied to publication in DigitalCommons in an equitable way

# Pathophysiology Class:

- Biology elective for 11th and 12th graders
- The class is based on modeling biological systems
- Students learn about homeostasis and model diseases
- Students take responsibility for their learning and enjoy learning through modeling
- We decided to publish student work from this class because students used learning from other classes to complete their projects

# Identifying Equitable Assessments:

- Identifying Biases
- Multiple sources of evidence for assessing work
- Reflective practices

# Creating Equitable Assessments:

- Avoid making assumptions
- Offer students choices to demonstrate their learning
- Offer a variety of assessments to cater to individual student needs

# Modeling Projects:

## Heart Model Project

(ISTA Spectrum 2015)

## Graphic Novel Project

(ISTA Spectrum 2020)

# Heart Model Project:

- Introduced as a replacement for the written cardiovascular unit test
- Intended to remove inherent fear of written assessments
- Provided students with an innovative way to express their creativity in applying what they had learned in class
- Gave them an opportunity to reflect on their learning

# Heart Model Project Steps:

- Blueprint of heart model
- Building the model
- Demonstrating the model
- Reflecting on the model

# Student Heart Model Projects

NCSSS
National Consortium of Secondary STEM Schools

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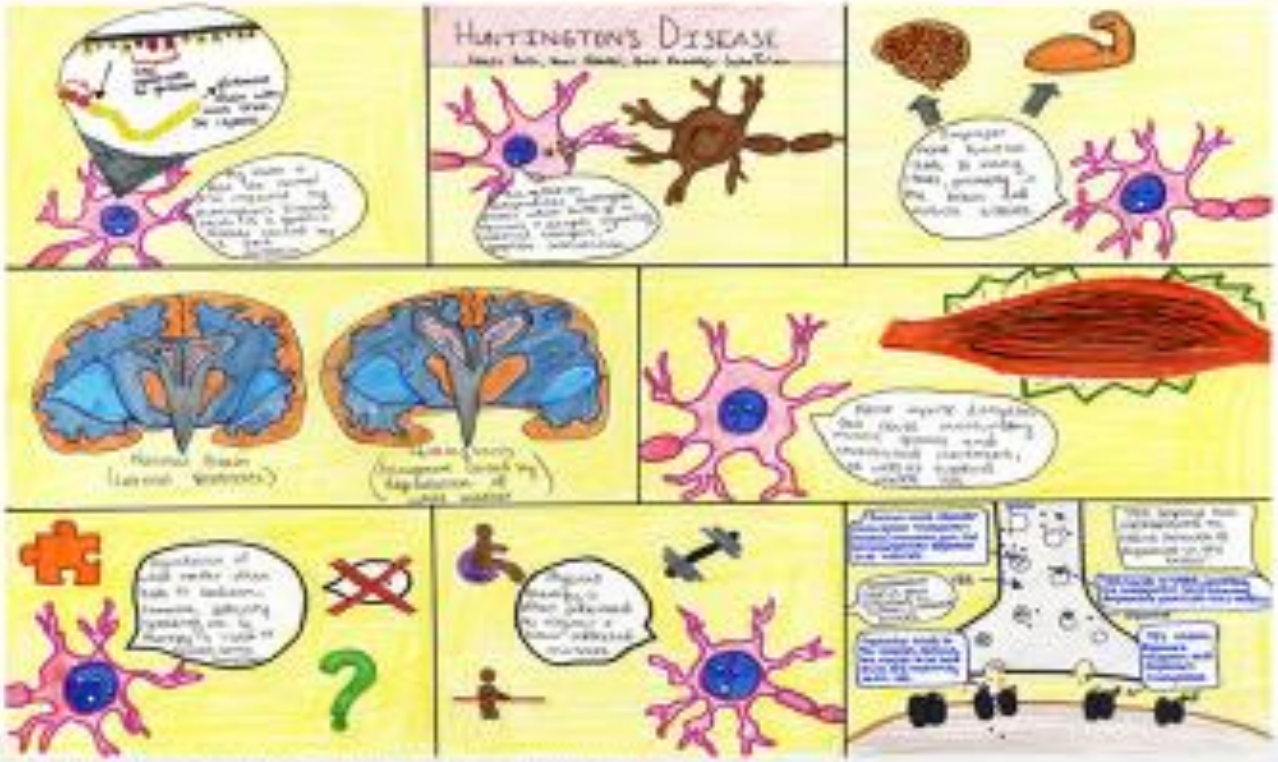
# Graphic Novel Project:

Was introduced as a novel replacement for oral presentations because many students do not pay attention when classmates are presenting.

Students in this class:

- Are encouraged to choose any two organ systems not studied in class and research two diseases of each system
- Work together in groups of 2-3, draw graphic novels of the diseases they have chosen
- Reflect on their work in terms of disruption of homeostasis and how the body strives to maintain equilibrium
- Have an opportunity to apply what they have learned and extrapolate it to real life examples

# Student Graphic Novel Example 1




NCSSS
National Consortium of Secondary STEM Schools

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# Testing Efficacy of the Projects:

- Student feedback
- Reflection
- Quantitative – pre and post quizzes on the relationship between the structure and function of the heart

# Reflection:

- Students are required to reflect on their models and graphic novels to identify problems, describe how they solve them and how they would modify their design for future purposes.
- I also reflect on how the assessments help students better articulate comprehension, and also how I can refine the assessments based on student feedback.

# Class projects on DigitalCommons:

Student projects are selected for publication in Digital Commons:

- Based on fulfilling the requirements of the project rubric
- Their permission

Making it possible for students to build Student Portfolios that frequently begin with Exemplary Classroom Work.

# SIR projects on DigitalCommons:

Student projects are selected for publication in Digital Commons:

- Based on fulfillment of SIR requirements
- Permission from research advisor

SIR students are also able to include conference posters/presentations and published articles in their portfolios.

# Capturing student work in DigitalCommons & Creating Student Portfolios


## Jean Bigger (she/they)

Head of Technical Services | DigitalCommons Manager | Archives Liaison


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**What kind of existing resources do you have at your schools that support and recognize research and publication?**

Libraries

Academic courses

Institutional programs

Career counseling

Marketing

# DigitalCommons includes some of our best work by:

- All of the academic teams
- All of the academy centers / programs
- Almost all of the academy departments
- Every student beginning sophomore year

**DigitalCommons connects IMSA with a global community of scholars.**

**Furthers IMSA's Mission:**

*" To ignite and nurture creative, ethical, scientific minds that advance the human condition"*

**And supports its Legislative Charge:**

*https://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1030&ChapterID=17*

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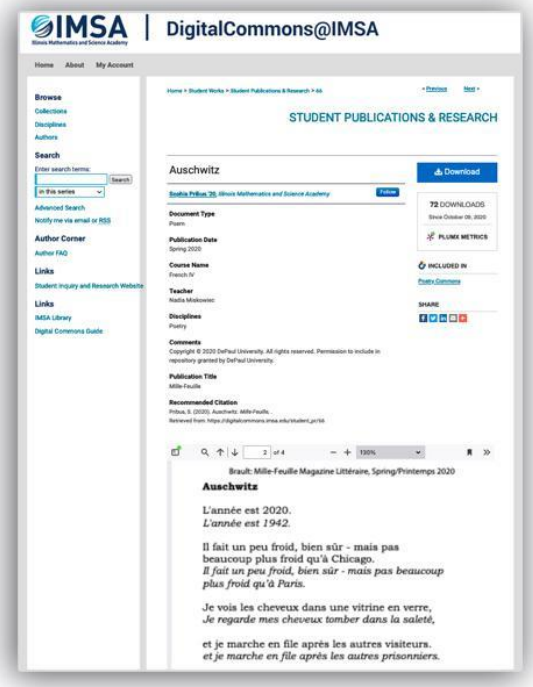
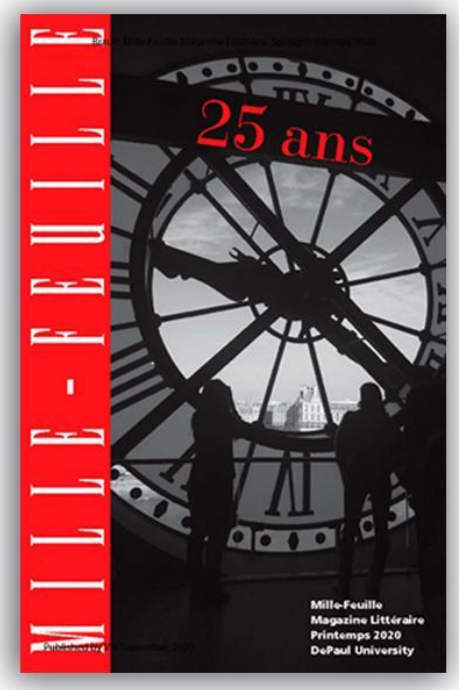
# So what have we discovered?

# IMSA students have mentors at these universities and together they are publishing and presenting:

- Washington State University: https://digitalcommons.imsa.edu/student_pr/77/
- Mississippi State University: https://digitalcommons.imsa.edu/student_pr/45/
- Mississippi State University: https://digitalcommons.imsa.edu/student_pr/43/
- Illinois State University: https://digitalcommons.imsa.edu/student_pr/30/
- Loyola University: https://digitalcommons.imsa.edu/student_pr/15/

# Our students are publishing in college/university online journals:

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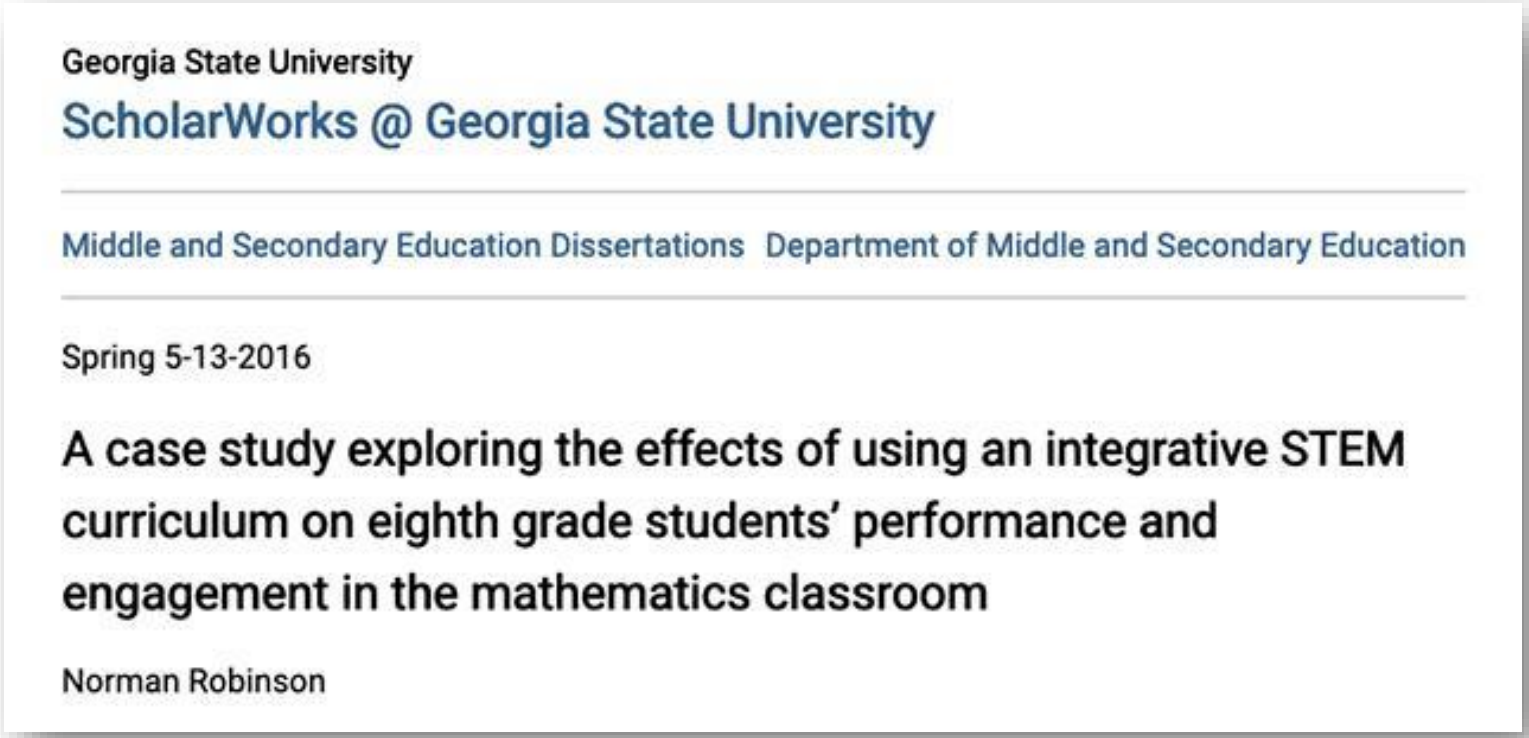
# Our faculty and staff have a masters thesis or dissertation from one of these colleges/universities:



Georgia State University

ScholarWorks @ Georgia State University

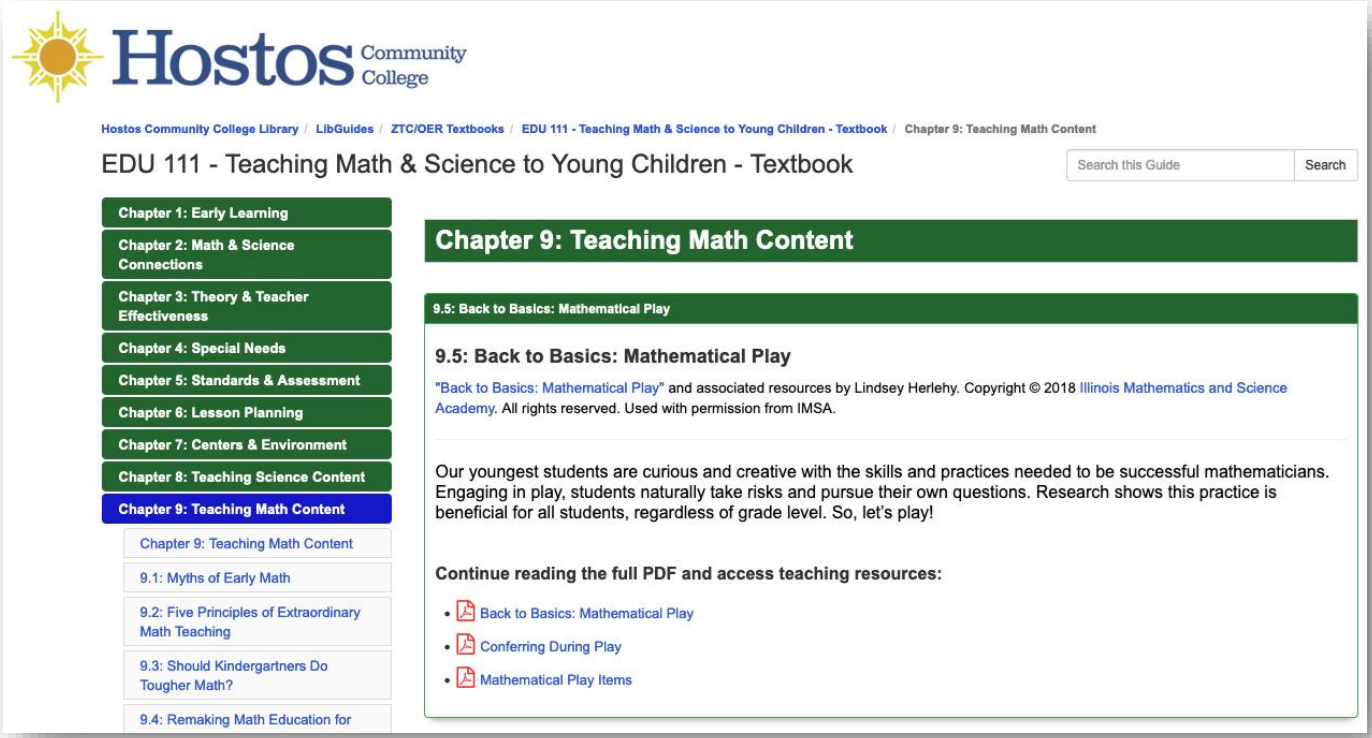
Middle and Secondary Education Dissertations  Department of Middle and Secondary Education

Spring 5-13-2016

A case study exploring the effects of using an integrative STEM curriculum on eighth grade students' performance and engagement in the mathematics classroom

Norman Robinson

# Our teacher resources are being published in open access textbooks:

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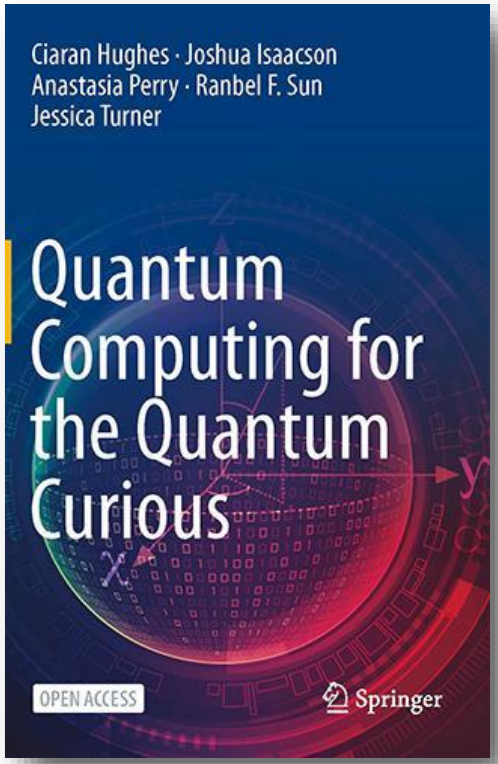
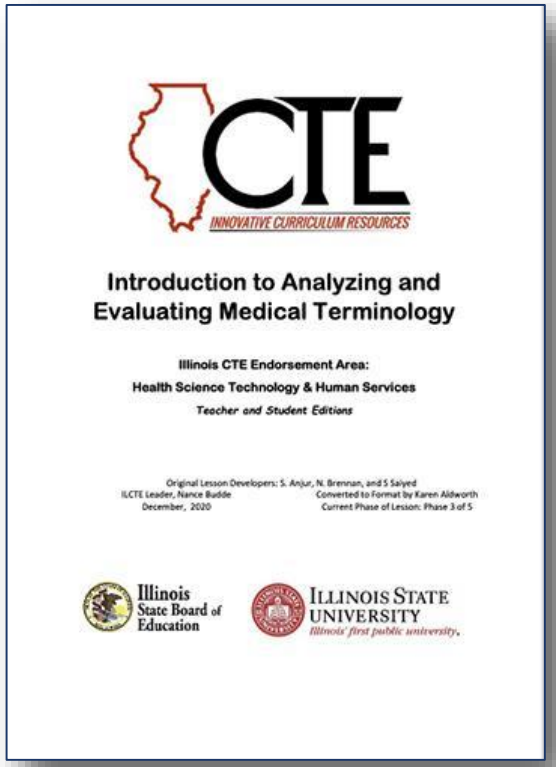
# And our faculty are publishing open access textbooks:



**Our students are attending these colleges and universities, interning at their institutions, and applying for jobs at their companies.**

**AND**

**They're coming with an understanding of the importance and benefit of being connected to a global community of scholars.**

# Accountability:

**We are able to show a return on investment to our stakeholders**

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# Stakeholders: Illinois Taxpayers

**Legislative Charge:** Excerpt from: (105 ILCS 305/) Illinois Mathematics and Science Academy Law

*The primary role of the Academy shall be to offer a uniquely challenging education for students talented in the areas of mathematics and science. Both high school and college levels of instruction will be provided in order to assure appropriate linkage with higher education. Other programs deemed necessary to assure the elements of a strong general education required of creative scientists will be provided.*

**Primary Source Evidence of ROI:** ***all student work included in DC is approved by faculty/staff***

- **Student Publications & Research** – published articles and conference papers/presentations
- **Independent Study** – year-long research, approved by administration - final report approved by faculty
- **Distinguished Student Work** – external competitions: math, science, arts, humanities
- **Exemplary Student Work** – project work that exceeds expectations - approved by faculty or staff advisor

# Stakeholders: Illinois Taxpayers

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**Student Publications & Research:**

17,029 Full text downloads

1,121 Institutions

- Northwestern University
- University of Illinois
- University of Illinois, Chicago
- Stanford University
- Argonne National Laboratory
- Yale University
- University of Chicago
- Boston University
- University of Southern California

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# Stakeholders: Illinois Taxpayers

**Legislative Charge:** Excerpt from: (105 ILCS 305/) Illinois Mathematics and Science Academy Law

*The Academy shall also carry a responsibility to stimulate further excellence for all Illinois schools in mathematics and science. That responsibility may be exercised through any or all of the following means:*

*1.Stimulating curriculum development and revisions through the collaborative efforts of the interacting institutions involved in the Academy including: universities, secondary schools, the industrial sector and national laboratories*

## Primary Source Evidence of ROI:

**Open Educational Resources:** open-access textbooks, manuals, teaching units, and lesson plans that are free to use, have no access restrictions, and can be remixed and adapted

- **Teacher Resources:** created by faculty, staff, and IMSA's Center for Teaching & Learning
- **Kane County Professional Learning Day:** hosted through DC / includes lesson plans also teacher and student handouts

# Stakeholders: Illinois Taxpayers

**Legislative Charge:** Excerpt from: [(105 ILCS 305/) Illinois Mathematics and Science Academy Law]

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**Open Educational Resources:**

178,454 Full text downloads

7,207 Institutions

- North Carolina Research and Education Network
- Georgia Department of Education
- Department of Education
- Indiana Department of Education
- Kentucky Department of Education
- Alabama Supercomputer Network
- WV Department of Education
- State of Arkansas

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**Professional Learning Day:**

88,472 Full text downloads

2,810 Institutions

- City of Aurora
- Department of Education
- Washington School Information Processing Cooperative
- University of Denver
- Virginia Polytechnic Institute and State Univ
- Multnomah Education Service District
- North Carolina Research and Education Network

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# Grantors:

## Next Generation Science Standards (NGSS) Model Lessons:

Funding was provided through a grant from the Illinois State Board of Education. Materials were developed by the Science Educators Initiative team from Illinois Mathematics and Science Academy (IMSA).


Next Generation Science Standards (NGSS) Model Lessons:
25,108 Full text downloads
1,197 Institutions

- Central Community Unit School District
- Chowan University
- Illinois Principals Assn
- University of Denver
- OFallon School District
- North Carolina Research and Education Network
- Kentucky Department of Education
- Reed Custer Unit School District
- University of Missouri

**Think about what kind of stakeholders do your schools have?**

Mission

Community / taxpayers

Students/parents

Grantors

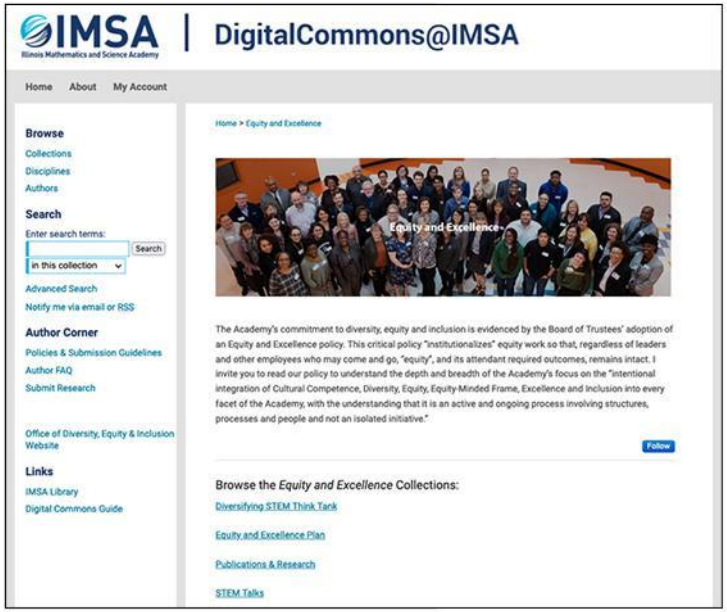
Board of Trustees

# Institutional Benefit:

- Collections within DigitalCommons are aligned with IMSA's Legislative Charge and its Mission, and front site navigation reflects its Institutional Priorities
- Customized reports are prepared for external program reviews and reports to the Board of Trustees, and statistics are provided for state appropriations
- Annual reports are prepared for several departments/programs
- Download statistics shared with Cabinet
- Spreadsheet of new additions shared with Cabinet
- DC stats are included within the annual State Appropriations
- Department heads have access to the Dashboard for collections in their areas and they receive monthly download for the purpose of analyzing and reporting
- Support staff and administrative/executive support receive monthly download statistics for the internal publications they create and maintain, such as course catalogs and conference booklets
- Project team members are recognized within collection Descriptions

# Reflects Institutional Priorities

## Equity and Excellence

# Customized department reports:

## For Board of Trustees and external program reviews.

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DigitalCommons Report to the English Team

5.3.21

The English team has been creating and disseminating content through two primary collections within IMSA's institutional repository, DigitalCommons, since 2011.

Both collections generate their own statistics and support IMSA's legislative charge: [105 ILCS 305/] Illinois Mathematics and Science Academy Law:

1. English Team general collections: *faculty Publications & Research, Roundtable discussion, Exemplary Student Work, etc.*: https://digitalcommons.imsa.edu/eng/
2. English Teacher Resources: *open-access teaching units / lesson plans:* https://digitalcommons.imsa.edu/eng_tr/

To date, within **Faculty Publications & Research, etc.** there have been:

- 13,940 Full-text Downloads
- 6,100 Metadata Page Hits



Readership Map. Available data: 12/16/2014 to 5/4/2021

By 905 Institutions – *top downloading institutions, include:*

- City of Aurora
- University of Alabama
- Texas Southern University
- Delaware State University
- Indian River State College
- Alabama Supercomputer Network
- Indiana Department of Education
- Tennessee State University
- Auburn University
- Oxford University

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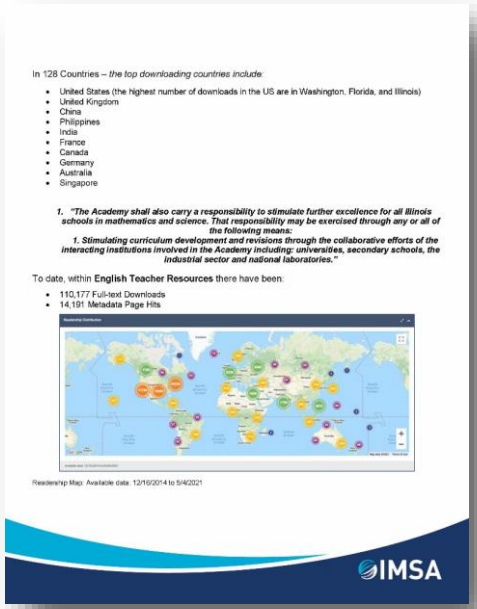

In 128 Countries – *the top downloading countries include:*

- United States (the highest number of downloads in the US are in Washington, Florida, and Illinois)
- United Kingdom
- China
- Philippines
- India
- France
- Canada
- Germany
- Australia
- Singapore

***1. "The Academy shall also carry a responsibility to stimulate further excellence for all Illinois schools in mathematics and science. That responsibility may be exercised through any or all of the following means:***

***1. Stimulating curriculum development and revisions through the collaborative efforts of the interacting institutions involved in the Academy including: universities, secondary schools, the industrial sector and national laboratories."***

To date, within **English Teacher Resources** there have been:

- 110,177 Full-text Downloads
- 14,191 Metadata Page Hits



Readership Map. Available data: 12/16/2014 to 5/4/2021

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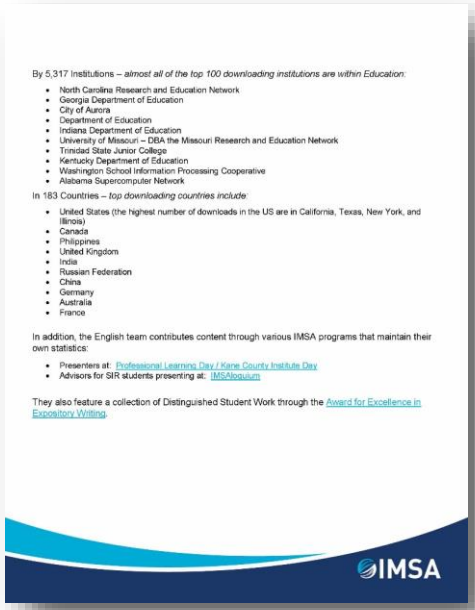

By 5,317 Institutions – *almost all of the top 100 downloading institutions are within Education:*

- North Carolina Research and Education Network
- Georgia Department of Education
- City of Aurora
- Department of Education
- Indiana Department of Education
- University of Missouri – DBA the Missouri Research and Education Network
- Trinidad State Junior College
- Kentucky Department of Education
- Washington School Information Processing Cooperative
- Alabama Supercomputer Network

In 183 Countries – *top downloading countries include:*

- United States (the highest number of downloads in the US are in California, Texas, New York, and Illinois)
- Canada
- Philippines
- United Kingdom
- India
- Russian Federation
- China
- Germany
- Australia
- France

In addition, the English team contributes content through various IMSA programs that maintain their own statistics:

- Presenters at: Professional Learning Day / Kane County Institute Day
- Advisors for SIR students presenting at: IMSAloquium

They also feature a collection of Distinguished Student Work through the Award for Excellence in Expository Writing.

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# Faculty and Staff:

**2007 Strategic Plan:**

Strategy 4: *We will generate scholarship that discovers, integrates, applies and transfers knowledge produced by our work*

**Good News: We do!**

The DigitalCommons@IMSA repository was implemented to share scholarly works by IMSA faculty, staff, and students. The repository is a source for both external educators and researchers seeking articles and teacher resources. Content includes, but is not limited to:

Electronic versions of full text scholarly works • Published, peer-reviewed literature • Author's accepted manuscripts • Books and book chapters • Conference papers, posters, and presentations • IMSA-hosted conference papers, posters, and presentations • Creative works (art, photography, mixed media, music, and videorecordings) • Classroom/teacher resources: lesson plans, teaching units • Lectures, keynotes, speeches, and talks • Podcasts and webinars • Working papers and technical reports • Unpublished scholarly and creative works • Unpublished studies and interviews

# Individual Benefit:

**Action taken on recommendations from the Scholarship and Innovation Committee**

- Faculty and staff are recognized for academic and creative achievement through IMSA's social media, *regardless of the status in DigitalCommons*
- The President and Cabinet are included on email confirmations to authors and presenters at the point their content has been published in DigitalCommons – so that they can also recognize them
- Annual Leon Lederman Scholar Award
- Author designation on all work we contribute to, which makes portfolios possible
- Expert Gallery
- Stipends

# Students:

**We're recognizing some of their best work:** content includes, but is not limited to:

- Publications & Research
- Independent Study
- Distinguished Student Work
- Exemplary Project Work
- Leadership Roles
- Service Learning

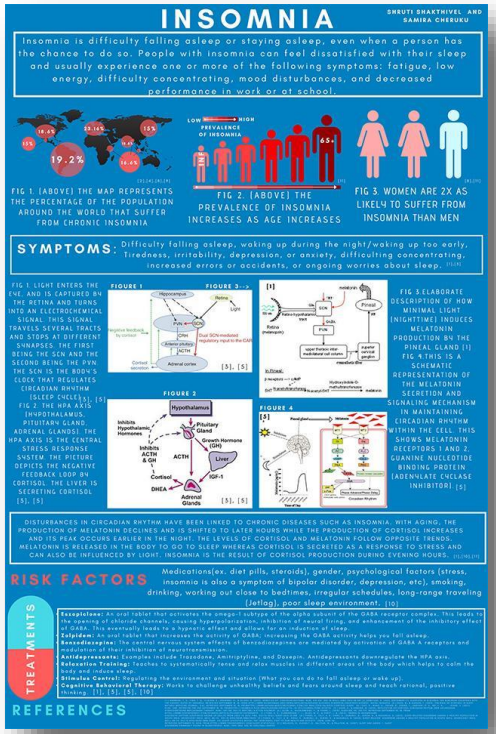
**Good News: It's possible to build portfolios for all students on a foundation of their best work, beginning sophomore year.**

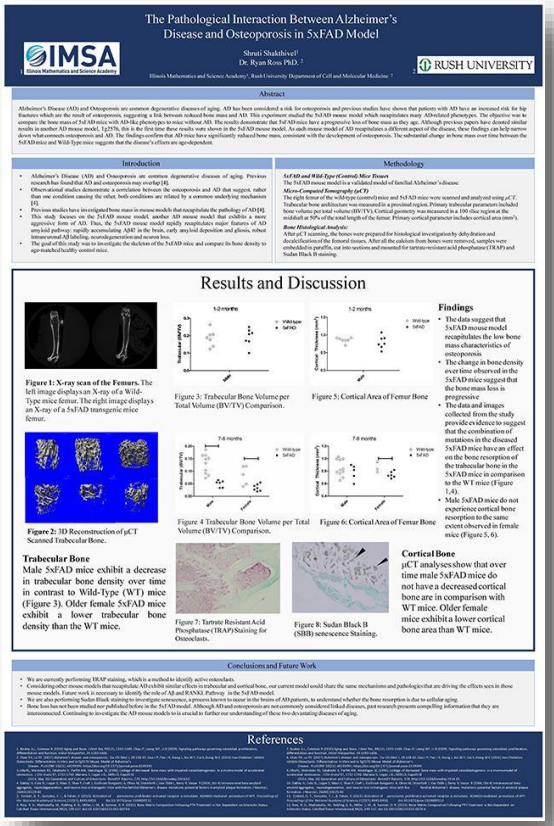
# Individual Benefit:

**Aligned with individual benefits for faculty and staff:**

- Students are recognized for academic and creative achievement through IMSA's social media, *regardless of the the status in DigitalCommons*
- Creative Commons licensing
- Student Portfolios
- Stipends

# And we can see an indication of student growth in critical thinking and written communication skills.

# Engaging and supporting our CLED students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Pronouns: She, Her and Hers

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# Why do educational equity gaps exist?

- Inadequate training for educators who work with underperforming subgroups of students
- The exclusive use of standardized tests, which reflect middle-class, majority values and do not reflect the exceptional abilities, experiences, and cultural styles, and values of minoritized students
- Systemic bias in the design and implementation of programs for advanced learners
- Attitudes about high achievement potential
- Fewer environmental opportunities that enhance intellectual achievement

and so much more…

# Educational Equity Model for Equity & Excellence at IMSA

FIGURE 7 | Equality vs. equity in the short and long term

In this first image, it is assumed that everyone benefits from the same support. They are being treated **equally**.

Individuals are given different support to make it possible for them to have equal access to the view. They are being treated **equitably**.

All three can see the view without any support because the cause of inequality was addressed. The systemic barrier has been **removed**.

Deloitte Insights | deloitte.com/insights

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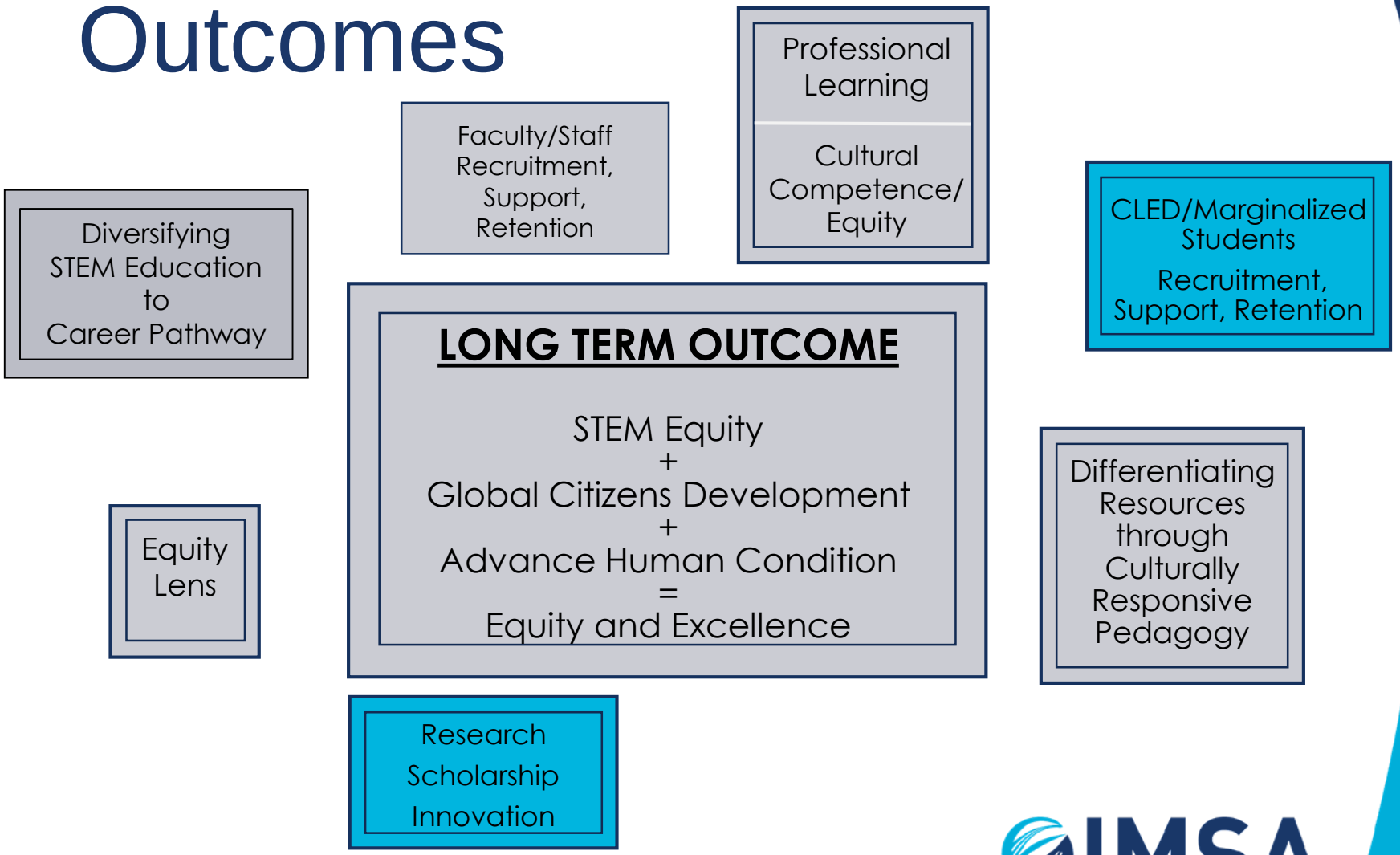
# Equity and Excellence at IMSA

*"The Academy recognizes and acknowledges the historical underrepresentation and marginalization of culturally, linguistically, and economically diverse groups, both universally, and particularly, in STEM education and professions. These disparities also exist in the representation of the Academy's workforce.*

***We are committed to advancing equity in STEM education and representation and creating a diverse, inclusive community of global citizens who can realize their full potential, and execute our mission to advance the human condition, through a model of Equity and Excellence."***

# IMSA's Equity and Excellence Outcomes

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# Equity & Excellence Defined

**Equity**

Access for **Culturally, Linguistically and Economically Diverse and Marginalized students** to differentiated academic and social-emotional supports and interventions that create opportunity for them to participate in educational programs and co-curricular activities that are capable of closing the excellence gaps in student experiences, success and retention.

**Excellence**

The expectation and standard that whatever the Academy does in teaching and learning, research, innovation, student and workforce development, institutional functioning, and participation in local and global communities, is of the highest quality, is on the cutting edge, rigorous, nourishes critical and creative thinking, is responsive to stakeholders and advances equity.

# IMSA's CLED and Marginalized Students

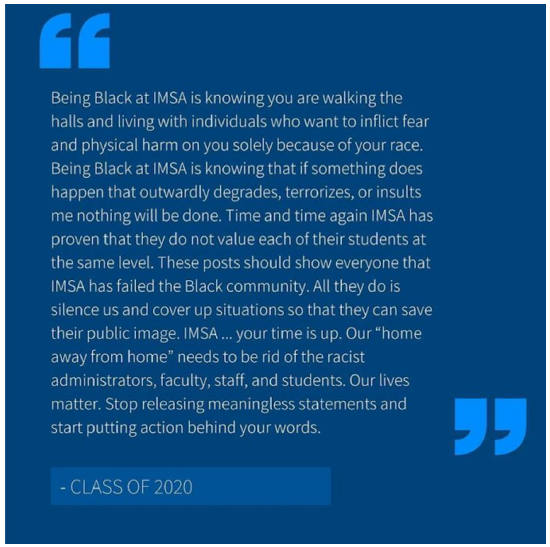
## Culturally, Linguistically and Economically Diverse

The historically underrepresented populations at IMSA (Black, Latinx, rural, low-socioeconomic status).

## Marginalized

Those groups who traditionally lack access to rights, resources, and opportunities, and are often socially excluded, including but not limited to LGBTQIA+, undocumented, female and twice exceptional.

Black@ISMA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# Equity and Excellence Plan Policy Outcome #2

**Equity and Excellence Plan Policy Outcome #2**

***Implementing strategies to recruit support and retain Culturally, Linguistically and Economically Diverse groups and support and retain Marginalized groups.***

| *Rationale* | *Strategies* | | | |
|---|---|---|---|---|
| | # | *Year 1* | *Year 2* | *Year 3* | *Scorecard* |
| Based on findings from the Equity Context Analysis Process, approximately 1/3 of students feel unsafe at IMSA because of their race or sexual orientation. It was further reported that racist and homophobic remarks were regularly heard at IMSA, and when adults were present, nearly 50% of the time, they do not intervene. During the school building walk-through, 30% agreed/strongly agreed that the building climate is not student and family centered, nor does it facilitate a safe and inclusive learning environment. The Theory of Change data suggested that IMSA needs to create a welcoming and inclusive environment that creates equity focused support plans. Based on the IMSA Student Diversity Climate survey which states that over four years of data, approximately 1/3 of Black students do not feel safe on campus because of their race, along with 30 years of stories shared on Black at ISMA by IMSA students, alum, current and former staff/faculty that discuss an institutional culture of racism at IMSA, an anti-racist student education agenda is being put forth. | 2.1 | Recruitment: Examine and revamp the Admissions Recruitment Strategy through an equity lens and with representation goals. | Recruitment: Implement equity-minded and differentiated recruitment strategy, being intentional about equitable access. | Recruitment: Monitor and measure CLED recruitment progress through an equity lens. | Blueprint for Enrolling a Diverse Student Body, Establishing Admissions Criteria that balances Experiences, Attributes, and Metrics (EAM) Developmental Cycle, STEM Equity Program Evaluation Rubric |
| | 2.2 | Support: Create a comprehensive, equity-minded educational program that is rooted in social justice and develops cultural competence, with an intentional focus on anti-racist education. | Support: Implement equity-minded educational program for students that is rooted in social justice and develops cultural competence, with an intentional focus on anti-racist education. | Support: Continue to implement equity-minded educational program and evaluate student growth. | Student Diversity Climate Survey/ Trauma Responsive School Implementation Assessment/ Centering Equity in Social Emotional Learning/Bias Incident Review |
| | 2.3 | Retention: Reduce the number of CLED and other marginalized students who do not feel safe on campus by developing a plan to assist them in transitioning into and through IMSA. | Retention: Implement process to assist CLED and other marginalized students in transitioning into and through IMSA. | Retention: Monitor and evaluate process to assist CLED and other marginalized students in transitioning into and through IMSA. | |

# Equity and Excellence Plan Policy Outcome #4

**Equity and Excellence Plan Policy Outcome #4**

***Supporting research, scholarship and innovative expression of staff, including faculty as well as external partners that either address or promote the Equity and Excellence Model.***

| *Rationale* | *Strategies* | | | | |
|---|---|---|---|---|---|
| | # | *Year 1* | *Year 2* | *Year 3* | *Scorecard* |
| According to the Equity Context Analysis Data Process, 58% of staff and 67% of administration do not agree that evidence-based support systems are implemented to increase the likelihood of successful implementation of innovations, and are perceived by building leadership and staff to be helpful. This suggests that there needs to be structures in place to collect, hold, and disseminate data. In addition, the Theory of Change discussed the need to remove barriers that interfere with students and staff, including faculty engaging in research, scholarship and innovative expression. | 4.1 | Develop and strengthen the resources and infrastructure to support the highest level of equitable and inclusive research, scholarship and innovative expression that addresses issues of diversity, equity, inclusion and anti-racism. | Provide on-going support for the creation and sharing of research, scholarship and innovative expression that addresses issues of diversity, equity, inclusion and anti-racism. | Increase IMSA's presence and leadership in national and international research, scholarship and innovative expression groups and publications. | Contributions to the Body of Knowledge |
| | 4.2 | Examine current IMSA research, scholarship, and innovative expression offerings (e.g. SIR, Internships, etc.) for students through an equity lens and reimagine accordingly. | Institutionalize research, scholarship, and innovative expression experiences, so that CLED and other marginalized students have access to said experiences. | Evaluate the experiences of CLED and other marginalized students while engaged in research, scholarship, and innovative expression. | SIR and IN2 CLED student participant data |

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# Brotherhood Sister Circle

Last semester, The Coordinator of Diversity, Equity and Inclusion facilitated a collaboration between BHSC and Jean Bigger (DigitalCommons Manager) to create a pipeline of support and peer mentorship for publishing and portfolio development and showcase through DigitalCommons.

**Next month BHSC Retreat's will feature a student-led workshop on portfolio building for CLED students in DigitalCommons w/ Raven McKelvin '24.**

BHSC is a program developed to give our Black and Latine students an opportunity to celebrate and enhance their strengths, creativity, intelligence, promote networking, community involvement, financial literacy, resources, and academic success.

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# My experience as an IMSA Intern and DigitalCommons student liaison

## Raven McKelvin ’24

Black Woman| FY23 IMSA Intern | Active Club Leader | Junior at IMSA

# Highlights of my Internship

- Building student portfolios
- Creating Workshops
- Advancing IMSA's digital commons
- Leading pathways for CLED students
- Internal Presentations

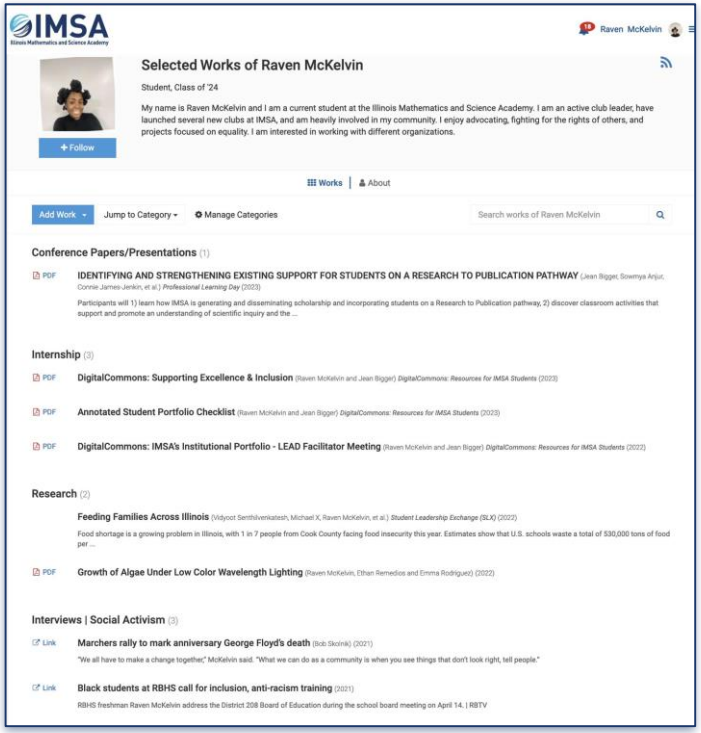
## My Passions

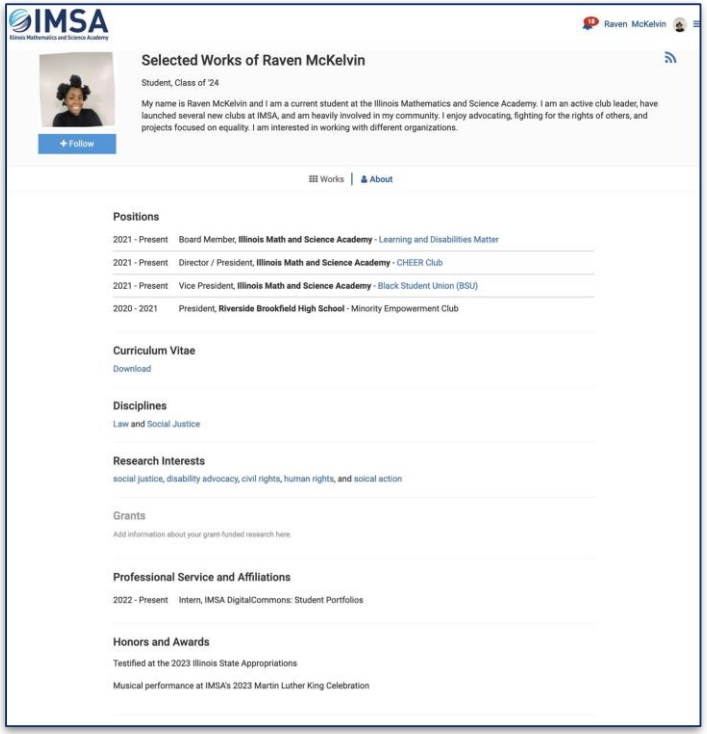
Social Justice
Advocating for Disabilities
Policy
Arts
MAKING THE WORLD A BETTER PLACE

# Portfolio

- Mission Statement (if you have one)
- Presentations
- Honor Rolls
- Jobs
- Service works
- Projects
- Achievements
- Art work
- College entry Exams
- Anything important in your HIGHSCHOOL years

# Example Student Portfolio



# How is this best for the IMSA Community?

- Students can learn the skills of building a portfolio when first coming in
- This benefits college experiences and job opportunities
- Encourage students to take a leadership role and build on what they already have
- Progress from Sophomore to Senior Year
- Can add the artifacts from freshman year
- Can put your greatest achievements and accomplishments on your portfolio

# Community Impacts

We are giving all students the opportunity to create a student portfolio. We are giving Culturally, lingustilly, and Economically Diverse  (CLED) Students the first hand opportunities

# How has my Internship helped me

Documentation
Opportunities
Communication
Make New Connections

# Takeaways

Learning Education and Development (LEAD)
New Workshops
Professional Presentation ( Staff and Faculty)
My Own Student Portfolio
Updates In Digital Commons
New Opportunities

# Dream Big … we do!

- **Host peer-review journal: could be the IMSA STEM Journal of High School Research:** *To provide another opportunity for local high school students to experience peer-review publishing, for instance: https://ijhighschoolresearch.org/*
- **Collaboratorium for Teacher Resources:** *focused around something like the UNSDGs*
- **"Drop box"** *approach for including Student Work*
- **Research support prior to publication:** *survey to determine whether faculty/staff or students are utilizing library, IN2, or Writing Center resources*

# Acknowledgements:

*IMSA colleagues & students – your work inspires ours!*

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# Questions?