PUBLISHING THROUGH A TEACHING AND LEARNING LENS

Faculty Commons Workshop March 17, 2023 Sandie Han, Mathematics Diana Samaroo, Chemistry

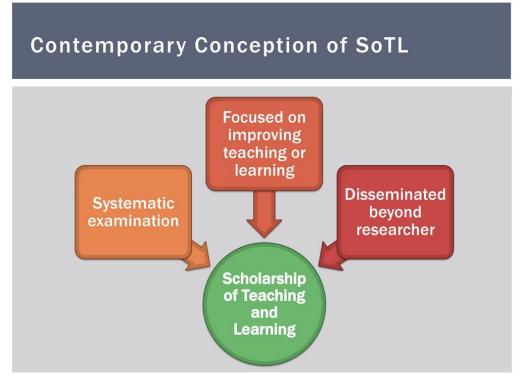
New York City College of Technology

Scholarship of Teaching and Learning (SoTL)?

Video https://www.centerforengagedlearning.org/studying-engaged-learning/what-is-sotl/

Peter Felten (2013) offers five principles of good practice in SoTL, suggesting that SoTL is

- inquiry focused on student learning
- grounded in both scholarly and local context
- methodologically sound
- conducted in partnership with students
- involves 'going public'

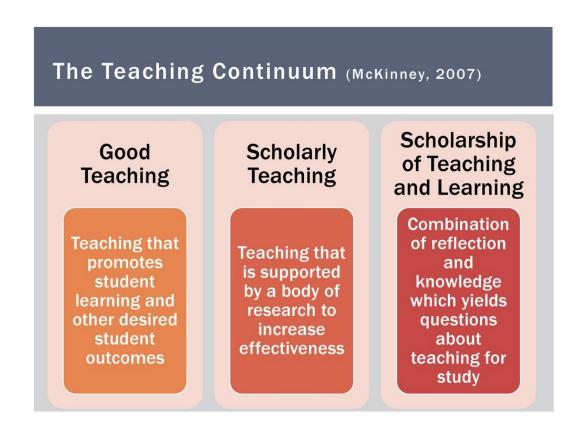


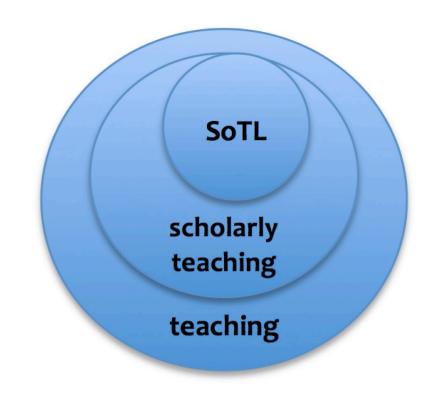
http://slideplayer.com/slide/13130251/

Teaching & Learning Inquiry: The ISSOTL Journal, Vol. 1, No. 1 (2013), pp. 121-125 https://www.jstor.org/stable/10.2979/teachlearningu.1.1.121

What is Scholarship of Teaching and Learning?

Video https://youtu.be/yN-sm6UDes

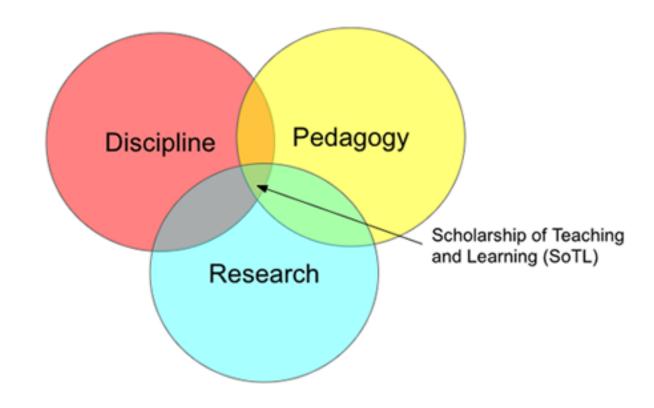




SoTL is Interdisciplinary!

More about SoTL

- https://my.vanderbilt.edu/sotl/understanding-sotl/why-sotl/
- https://www.jmu.edu/cfi/scholarship/sotl-ets/sotlwhat is sotl.shtml
- https://ctlt.ubc.ca/2021/01/28/edubytes-thescholarship-of-teaching-and-learning/



Why Engage in SoTL?

- To develop a report on an aspect of one particular course
- To describe the interaction of several courses or the student experience across courses
- To reflect on teaching practices/pedagogical choices from teaching (perhaps over time)
- To investigate interdisciplinary commonalities
- To synthesize existing SoTL work
- To propose or test new learning theories

How to SoTL: Potential Data Collection Tools

- Course portfolios
- Specific course artifacts (e.g., assignments/projects/assessments)
- Interviews
- Focus groups
- Questionnaires/surveys
- Content analysis
- Multi-method studies

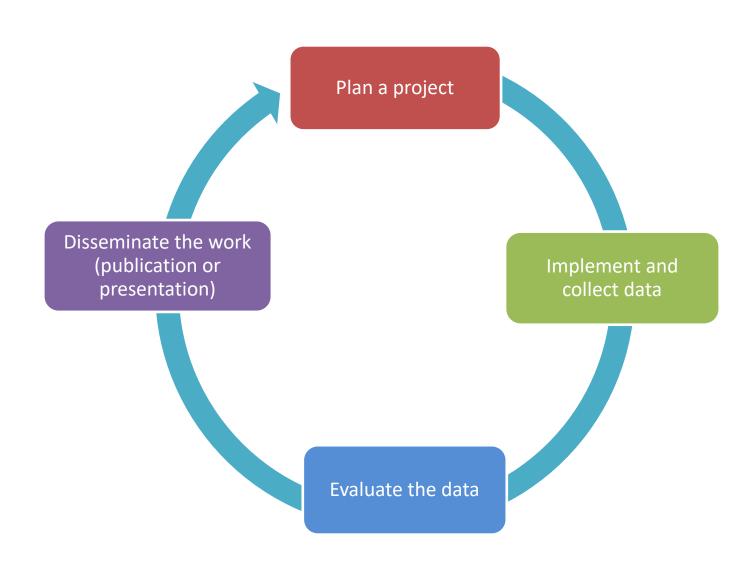
Future Directions For SoTL (Hutchings, 2015)

- SoTL needs to be a part of regular practices of teaching so that any/all pedagogical choices are evidence-based.
- 2. SoTL needs to be more integrated into institutional policies and agendas to ensure a greater impact into new and ongoing formative and summative assessment efforts.
- 3. SoTL needs to engage students, more fully, as research associates and collaborators to encourage a reflective/metacognitive focus up on their learning and the learning of their peers.

Jennifer Friberg, Ed.D. for Bradley University Fall Forum

http://slideplayer.com/slide/13130251/

Establish a cycle of Project -> Data -> Publish



SoTL Publications From Our Perspective

Introduction

- Presenting the problem
- Student profile/demographics

Literature Review

- Literature on our student demographics
 - support for women and underrepresented minority students
 - support for underserved students, i.e. first generation college, first generation immigrants, socio-economic considerations, etc.

Methodology

- Curriculum design
- Student support programs

Results

- Student learning outcomes
- Data broken down by gender, ethnicity, majors, or other demographics
- Consider cross-sectional demographics/intersectionality

Conclusion

- Potential impact of the project to other future projects
- Contribution to the body of knowledge

Journal of Peer Learning (2018) Vol 11: 65-75

The peer-led team learning leadership program for first year minority science, technology, engineering, and mathematics students

Janet Liou-Mark, Urmi Ghosh-Dastidar, Diana Samaroo, and Melanie Villatoro

ISBN: 978-81-941567-9-6 SUPPORTING UNDERGRADUATE UNDERREPRESENTED MINORITY STUDENTS FOR SUCCESS IN STEM Nadia Stoyanova Kennedy*, Urmi Ghosh-Dastidar*, Sandie Han, Diana Samaroo, Armando Solis

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A Multitier Approach to Integrating STEM Education into a Local **Elementary School**

By Mariya K. Kostova, DDS, RDH; L. Jay Deiner, PhD; CLINICAL FEATURE

Quantification of Fluoride Ion Concentration in Commercially Available Teas





Building Capacity: Enhancing Undergraduate STEM Education by Improving Transfer Success

Promoting STEM Learning through a Multidisciplinary SENCER Framework at a Minority-Serving Institution

DIANA SAMAROO

New York City College of Technology, CUNY Graduate Center

New York City College of Technology

LIANA TSENOVA

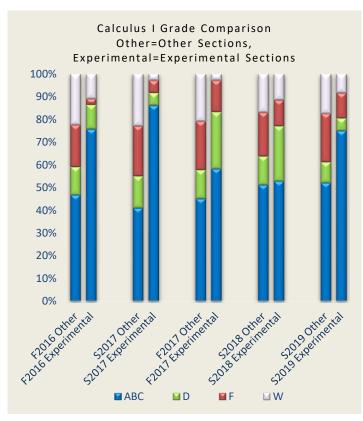
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URMI GHOSH-DASTIDAR

New York City College of Technology

Good practice in SoTL

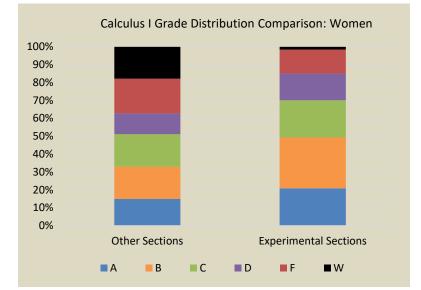
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Students in the experimental sections showed higher pass rates and lower failure and withdrawal rates than students in the non-experimental sections

Curricular and Strategic Changes in Mathematics to Enhance Institutional STEM Education

Women in the experimental sections showed higher pass rates and lower failure and withdrawal rates than women in the non-experimental sections

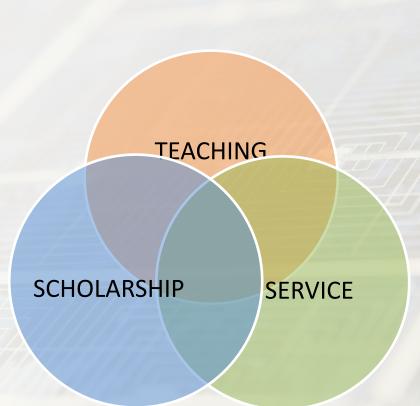




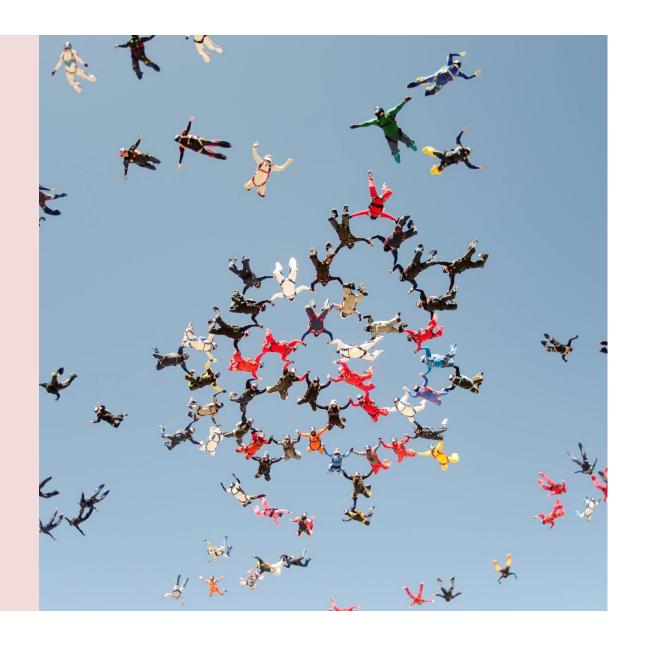
The Grade Distribution of Women in Calculus I (Fall 2016, Spring 2017, Fall 2017,								
Spring 2018, Spring 2019)								
	Total Enrollm ent	Total No. of Women	А	В	C	D	F	W
Other Sections	3033	718	14. 9%	18. 1%	18. 1%	11.7 %	19.4 %	17.8 %
Experimenta I Sections	215	67	20. 9%	28. 4%	20. 9%	14.9 %	13.4	1.5%

FRAMING YOUR WORK

Diversity, equity and inclusion (DEI) is a term used to describe policies and programs that promote the representation and participation of different groups of individuals.



Please share your ideas for a SoTL project



THANK YOU

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