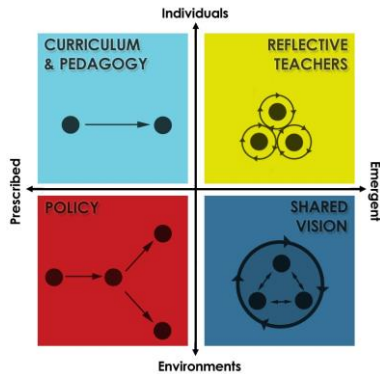


What does the last decade of research tell us about systemically changing undergraduate instruction?

#2201792: *Facilitating Change in Undergraduate STEM: A Multidisciplinary Metasynthesis Mapping a Decade of Growth*

Background

Facilitating broad instructional change occurs through changing individuals and environments.

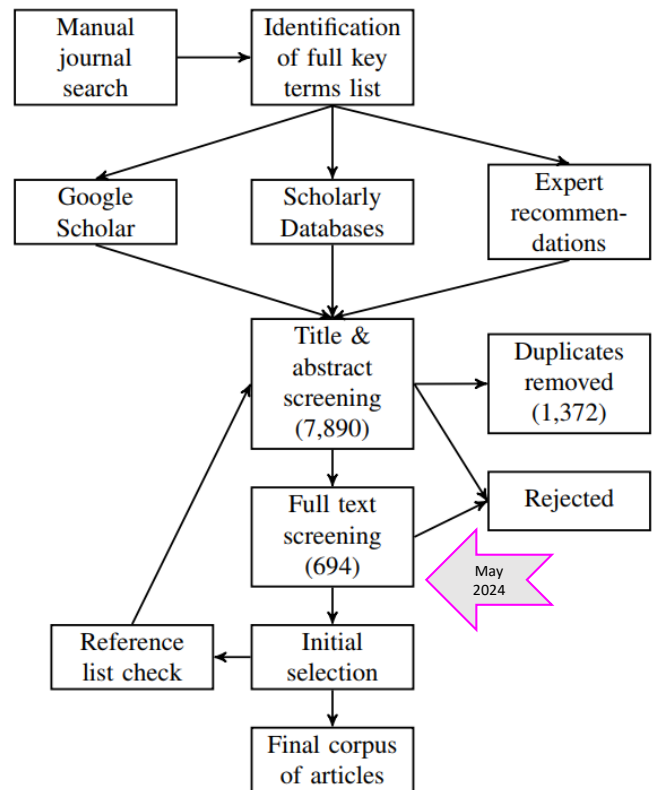


Most change agents use weak change strategies focused on individuals.

We want to improve the last review with technological upgrades and include more STEM fields.



Process



We are now concurrently screening, coding, and evaluating for quality.

Methods

Metasynthesis

Machine learning

- Will search the literature from 2013-2023.
- Will code for change strategies and foci.
- Will create social networks between fields.
- Will look at themes via humans and algorithms.

Challenge Area

Capacity

What resources support screening 7,000+ articles from databases alone? How do we code and judge article quality of hundreds of articles? How do you adapt with capacity issues?



Rachel Renbarger, Charles Henderson, Andrea Beach, Emily Bolger, Taylor Boyd, Danny Caballero, Noah Finkelstein, Scott Simmons, & Ying Wang

← [Link to see an overview of project dissemination efforts](#)

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