



# SAGE 2YC

*2YC Faculty as Agents of Change*

Engaging your faculty colleagues  
in evidence-based practices using SAGE 2YC resources:  
Book clubs, journal clubs, and implementation groups

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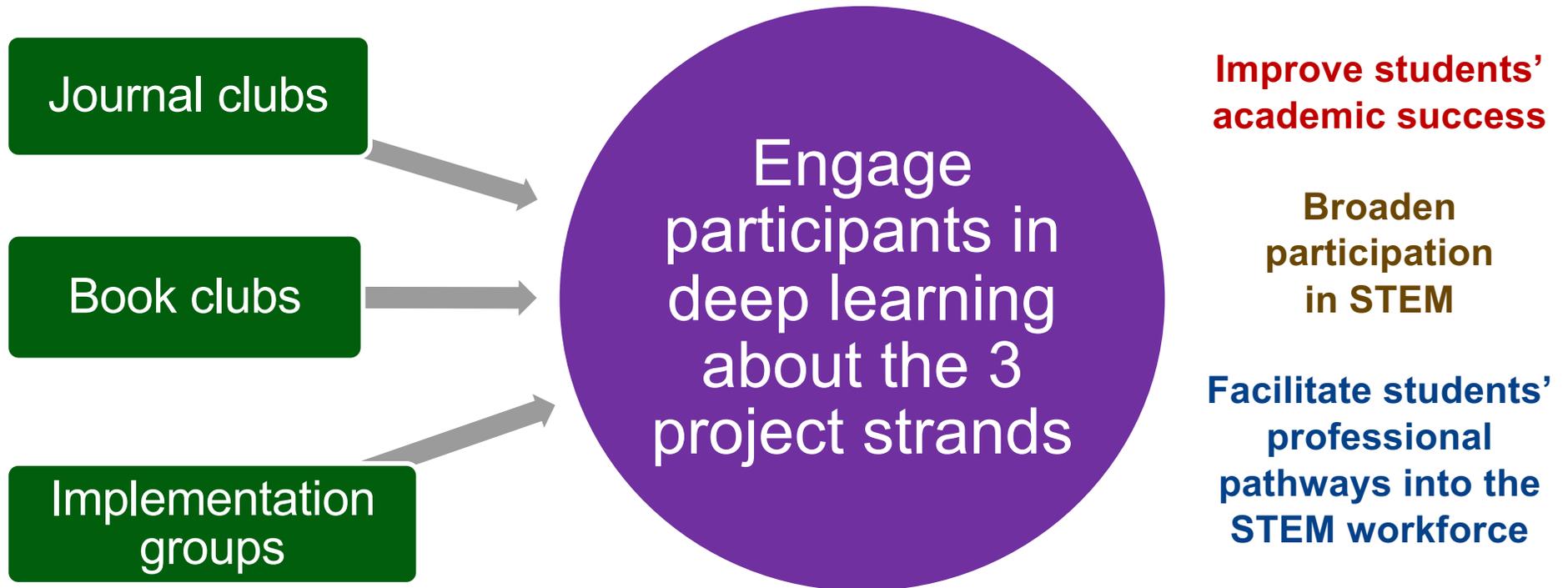
# SAGE 2YC: Faculty as Change Agents

- National network of 2YC geoscience\* faculty who use evidence-based strategies to
  - **improve students' academic success,**
  - **broaden participation in STEM, and**
  - **facilitate students' professional pathways into the STEM workforce**
- 3 cohorts of faculty Change Agents:
  - Cohort 1, 2016-2019, hybrid delivery
  - Cohort 2, 2018-2019, almost all online
  - Cohort 3: 2020, all online
- Virtual faculty professional development has taken several forms, including the faculty discussion series I will describe today

\* Cohort 3 includes faculty across STEM, with at least one geoscientist on each campus team



# Focus of this talk: SAGE 2YC topical virtual PD “events”



# Goals of the virtual PD series

The overarching goal of our discussion series is to spark **changes** in practice through **deep engagement** with **evidence-based practices** for teaching and learning. The specific goals generally include some or all of the following:

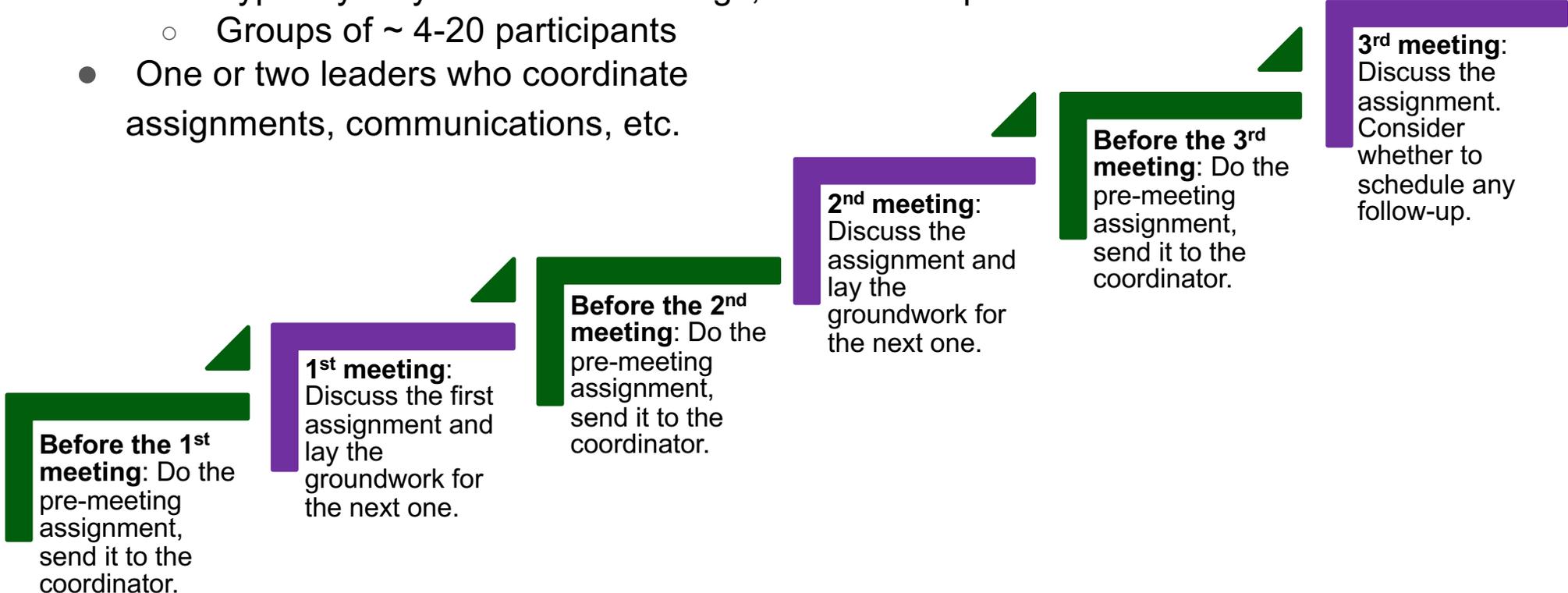
Participants will

- **read** primary or secondary literature on the topic;
- **reflect** on how the reading relates to their current teaching practices;
- **develop plans** to implement evidence-based practices in their classrooms / departments / programs;
- **peer review** implementation plans;
- **Implement** their plan;
- **report** back to the group about what they implemented and how it went.



# Structure and format

- Synchronous 1-hour meetings via Zoom, each preceded by asynchronous assignments
  - Typically 3 synchronous meetings, 1-3 weeks apart
  - Groups of ~ 4-20 participants
- One or two leaders who coordinate assignments, communications, etc.



**Before the 1<sup>st</sup> meeting:** Do the pre-meeting assignment, send it to the coordinator.

**1<sup>st</sup> meeting:** Discuss the first assignment and lay the groundwork for the next one.

**Before the 2<sup>nd</sup> meeting:** Do the pre-meeting assignment, send it to the coordinator.

**2<sup>nd</sup> meeting:** Discuss the assignment and lay the groundwork for the next one.

**Before the 3<sup>rd</sup> meeting:** Do the pre-meeting assignment, send it to the coordinator.

**3<sup>rd</sup> meeting:** Discuss the assignment. Consider whether to schedule any follow-up.

# Example: Whistling Vivaldi book club

## Prior to the first meeting:

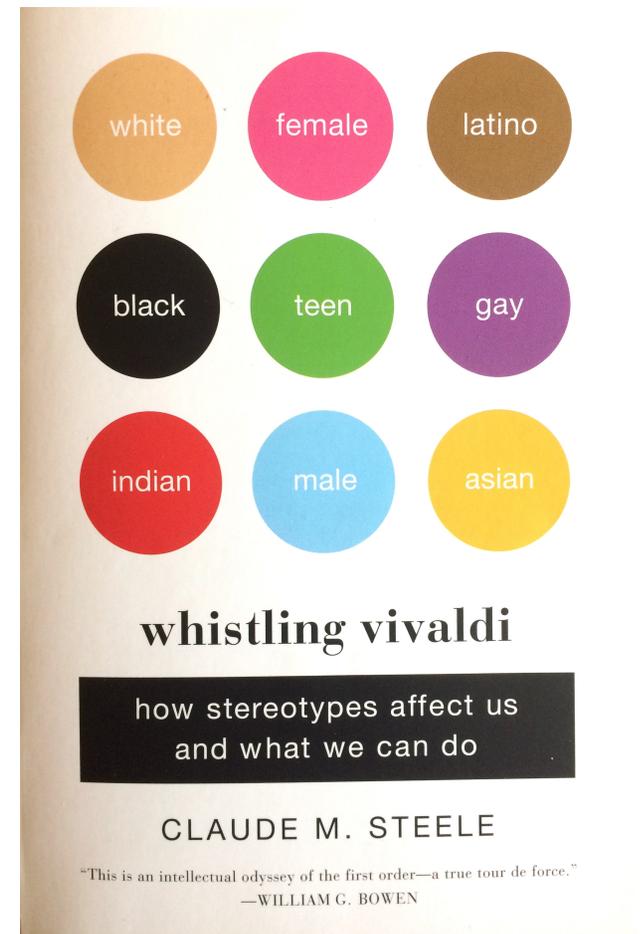
- Read chapters 1-4. Send me 3 questions you would like to discuss in our synchronous meeting. I will post them (anonymized) to a password-protected web page before the meeting.

## 1<sup>st</sup> meeting:

- At the beginning of the meeting, I remind everyone that some degree of discomfort and concern about saying the wrong thing is natural; these discussions are an opportunity to learn.
- Group discusses a subset of the submitted questions. (I choose which ones.)

## For 2<sup>nd</sup> & 3<sup>rd</sup> meetings:

- Iterate, with 3-4 chapters for each meeting

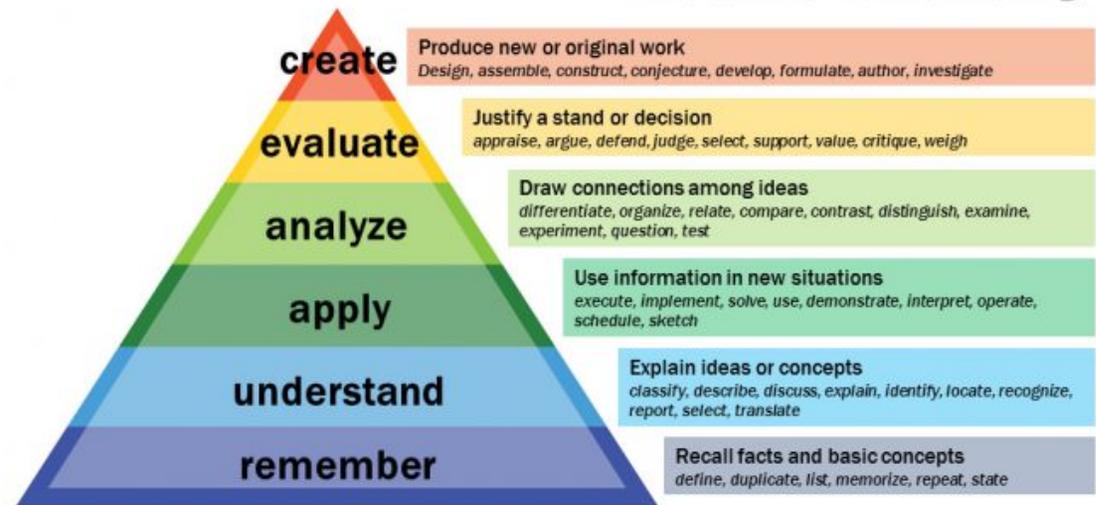


# Example: Bloom's Taxonomy implementation group

Prior to the first meeting:

- Send me a set of course-level learning goals for one course
- Review course-level learning goals from 3 or 4 other participants; rank them according to Bloom's taxonomy and send your rankings to the faculty member whose course it is.
- Review your peers' rankings of the Bloom's taxonomic levels of your course goals. How much variation is there? What surprises you?

## Bloom's Taxonomy



 Vanderbilt University Center for Teaching

<https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/>

# Example: Bloom's Taxonomy implementation group

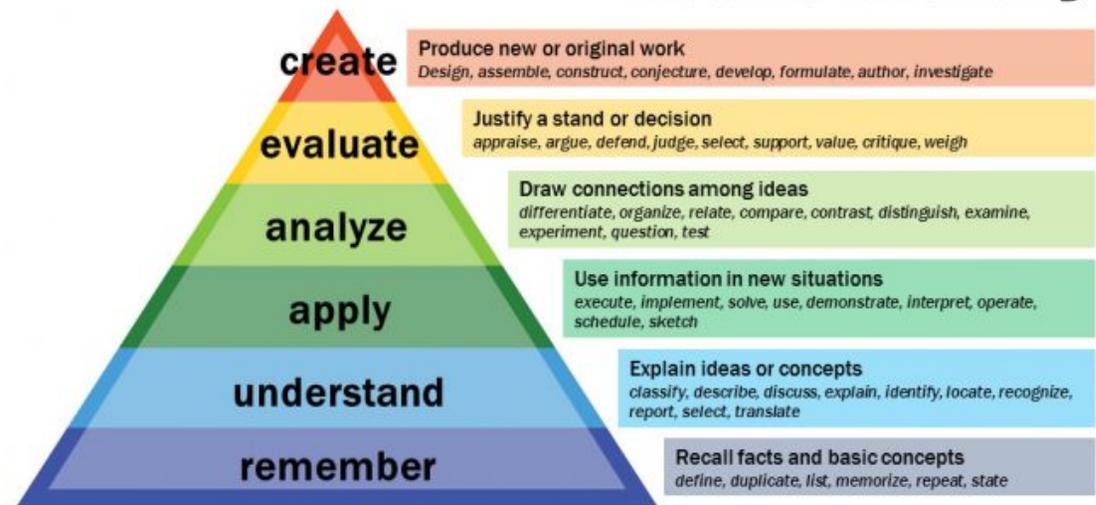
## 1<sup>st</sup> meeting:

- Does everyone agree on the Bloom's level of your learning goals?
- If not, where do they disagree?
- If so, what's the proportion of higher-level goals to lower-level goals? What do you think about that proportion - does it represent what you want students to learn?

## For 2<sup>nd</sup> & 3<sup>rd</sup> meetings:

- Iterate, but with a set of exam questions (2<sup>nd</sup> meeting) and an assignment (3<sup>rd</sup> meeting), each time in new review groups

## Bloom's Taxonomy



Vanderbilt University Center for Teaching

<https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/>

# Sessions described on the SAGE 2YC website:

## Book clubs:

- **Small Teaching:** Everyday Lessons from the Science of Learning, by James Lang
- **Whistling Vivaldi:** How Stereotypes Affect Us and What We Can Do, by Claude Steele

## Journal clubs:

- Fostering students' **sense of belonging**
- Developing students' **science identity**
- Supporting **2YC-4YCU transfer**

## Implementation groups:

- **Using the lens of Bloom's taxonomy** to align course learning goals, assignments, and assessments

**Improve students'  
academic success**

**Broaden participation  
in STEM**

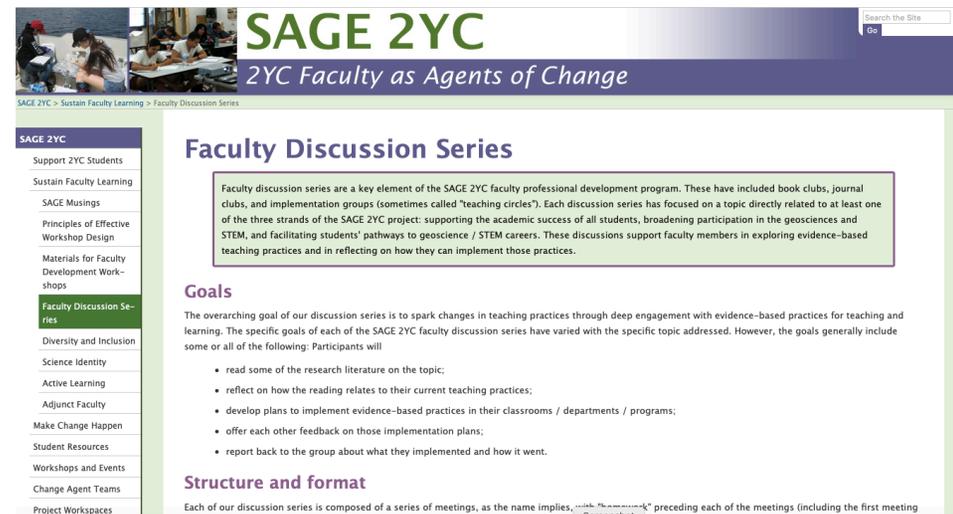
**Facilitate students'  
professional pathways**

# Engaging your faculty colleagues in similar activities

- Choose a topic that appeals to you, that you want to learn more about
- Peruse the materials available on the SAGE 2YC website to see if there's something you can adopt or adapt:

[https://serc.carleton.edu/sage2yc/faculty\\_discussions.html](https://serc.carleton.edu/sage2yc/faculty_discussions.html)

- Consider what group size makes sense
  - We've run events for 4-20 participants
- Invite colleagues to join you
  - Selected group, or open to the community?
  - For whom is the topic relevant?
  - Whom do you want to engage in this conversation?
  - Who has expertise to share?



The screenshot shows the SAGE 2YC website page for the Faculty Discussion Series. The header features the SAGE 2YC logo and the tagline "2YC Faculty as Agents of Change". A navigation menu on the left lists various resources, with "Faculty Discussion Series" highlighted. The main content area includes a description of the series, its goals, and its structure and format.

**SAGE 2YC**  
2YC Faculty as Agents of Change

SAGE 2YC > Sustain Faculty Learning > Faculty Discussion Series

### Faculty Discussion Series

Faculty discussion series are a key element of the SAGE 2YC faculty professional development program. These have included book clubs, journal clubs, and implementation groups (sometimes called "teaching circles"). Each discussion series has focused on a topic directly related to at least one of the three strands of the SAGE 2YC project: supporting the academic success of all students, broadening participation in the geosciences and STEM, and facilitating students' pathways to geoscience / STEM careers. These discussions support faculty members in exploring evidence-based teaching practices and in reflecting on how they can implement those practices.

#### Goals

The overarching goal of our discussion series is to spark changes in teaching practices through deep engagement with evidence-based practices for teaching and learning. The specific goals of each of the SAGE 2YC faculty discussion series have varied with the specific topic addressed. However, the goals generally include some or all of the following: Participants will

- read some of the research literature on the topic;
- reflect on how the reading relates to their current teaching practices;
- develop plans to implement evidence-based practices in their classrooms / departments / programs;
- offer each other feedback on those implementation plans;
- report back to the group about what they implemented and how it went.

#### Structure and format

Each of our discussion series is composed of a series of meetings, as the name implies, preceding each of the meetings (including the first meeting

# Engaging your faculty colleagues in similar activities

If you are designing an activity on a book or topic we haven't addressed, use evidence-based design principles:

- Articulate your goals for the sessions
  - What do you hope you and your colleagues will get out of these activities?
- Plan activities that support your goals
  - What can you do, before, during, and between your meetings, to set yourselves up to achieve those goals?
  - What will you ask participants to do in advance of each of the meetings?
  - How will you structure your meetings to maximize discussion and sharing of ideas?
  - Will you “lead” each of the sessions, or share that role with others?



# Engaging your faculty colleagues in similar activities

- Follow our template, or adapt it for your situation
  - F2F or virtual meetings? How many sessions? Over what total time interval? How long will each synchronous discussion be?
  - Will you share everyone's responses to the asynchronous activities?
    - *Of course you will. You might anonymize them if the topic warrants it.*
  - Will someone take notes during discussions? If meeting virtually, will you record sessions?
    - *If so, be clear about how recordings will be shared, with whom, and get explicit consent from all participants.*
- Schedule it!
- Run it.... and send out reminders about everything
  - About every pre-meeting assignment
  - About every meeting
- Optional: Follow up with participants, 1-2 months later



[https://serc.carleton.edu/sage2yc/faculty\\_discussions.html](https://serc.carleton.edu/sage2yc/faculty_discussions.html)

A screenshot of the SAGE 2YC Faculty Discussions webpage. The page features a navigation menu on the left with items like 'Support 2YC Students', 'Sustain Faculty Learning', and 'Faculty Discussion Series'. The main content area includes a header with the SAGE 2YC logo and the tagline '2YC Faculty as Agents of Change'. Below the header, there is a section titled 'Faculty Discussion Series' with a descriptive text box, a 'Goals' section with a list of objectives, and a 'Structure and format' section. A search bar is visible in the top right corner of the page.

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