

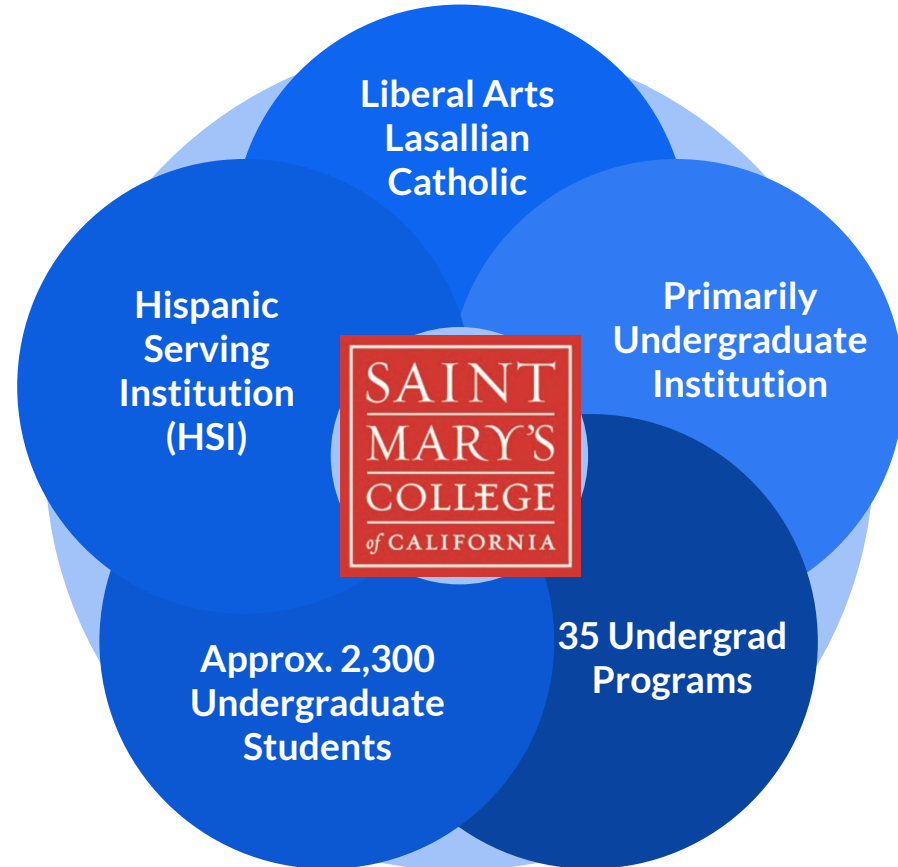


# Assessing Shared Inquiry as a Form of Oral Communication Core Competency Using Dialogue Coding and Student Feedback Data

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# Institutional Characteristics



# Collegiate Seminar Program - 79 years of Tradition

Signature Program in the Core Curriculum, **The Great Questions Model**

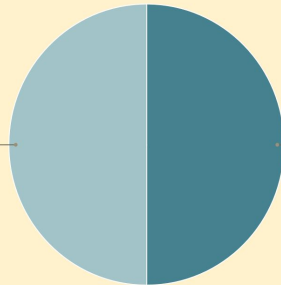
4 classes, **standardized reading list**, primary texts **chronological curriculum**

Primary curriculum for **Oral Communication Core Competency**

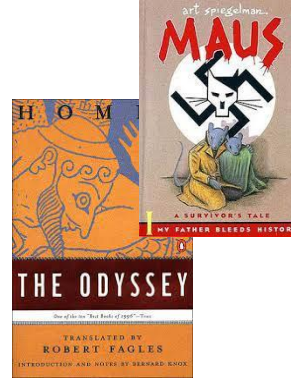
Supports **Critical Thinking** and **Written Communication Core Competencies**

**Grade Breakdown**

Essays  
50%



Participation  
50%



Talk about ideas as living things

Talk about the present as an extension of the past

See the future in texts that are centuries old



# Shared Inquiry as Oral Communication

## What is it?

*Shared Inquiry* reframes the traditional conceptualization of one-way oral communication and redefines it as a **dialogic process** whereby **students collectively and collaboratively navigate a discussion and negotiate perspectives, values, and ideologies** in a small group context.

## Why?

Our approach to liberal arts education aligns with the high impact practice of faculty-student collaborative learning to increase student retention and engagement.

## Learning Outcomes

1. Advance probing questions with arguments supported by textual evidence.
2. Collaborate in sustained lines of inquiry with a purpose of deepening and broadening perspectives.
3. Use verbal and nonverbal communication modes that are contextually appropriate and effective to engage in inclusive and respectful conversations.

## Challenges

The Seminar curriculum and pedagogy that promotes genuine dialogue is often subject to the experiences of microaggressions and implicit biases against the students of color.

# This Assessment Project

## Research Questions

1. How do students' engagement characteristics with shared inquiry differ between first year and fourth year seminars?
2. What resources and strategies do students use to overcome the challenges related to shared inquiry and what changes in the patterns across the first and fourth year seminars?
3. How do students' experiences of shared inquiry differ based on their gender and racial/ethnic identities across the first and fourth year seminars?

## Data Points & Methods of Collection

### Demographic Info

#### *Student-Level*

- Sex
- Race

#### *Course-Level*

- Class Size
- Racial Composition

### Direct Measures (Spring 2022)

#### *Student-Level*

- Participation grade
- Course grade
- Reflection essay

#### *Course-Level*

- Class discussion observations

### Indirect Measures (Fall 2021 & Spring 2022)

Student Feedback Survey Responses ("course eval.")

# Student-Level Data Sampling & Profile: 1st Year Seminar

		Completed with a Letter Grade	Feedback Survey Response N (%)	Participation Grade Sampled N (%)	Reflection Essay Sampled N (%)
N size		392	285 (73%)	324 (83%)	100 (26%)
Sex	Male	182 (46.4%)	116 (64%)	149 (82%)	48 (26%)
	Female	210 (53.6%)	169 (80%)	175 (83%)	52 (25%)
Race	Asian	71 (18.1%)	51 (72%)	58 (82%)	18 (25%)
	BIPOC	43 (11%)	29 (67%)	39 (91%)	11 (26%)
	Hispanic	109 (27.8%)	81 (74%)	87 (80%)	33 (30%)
	White	153 (39%)	111 (73%)	128 (84%)	35 (23%)
	Inte'l	12 (3.1%)	10 (83%)	8 (67%)	3 (25%)
Transfer Students		N/A			
Religion	Catholic	111 (28.3%)			
	Christian	55 (14%)			

# Student-Level Data Sampling & Profile: 4th Year Seminar

		Fall 2021		Spring 2022			
		Completed with a Letter Grade	Feedback Survey Response N (%)	Completed with a Letter Grade	Feedback Survey Response N (%)	Participation Grade Sampled N (%)	Reflection Essay Sampled N (%)
N size		304	173 (56.9%)	203	78 (38%)	164 (81%)	54 (27%)
Sex	Male	120 (39.5%)	68 (57%)	86 (42.4%)	35 (41%)	74 (86%)	22 (26%)
	Female	184 (60.5%)	105 (57%)	117 (57.6%)	43 (37%)	90 (77%)	32 (27%)
Race	Asian	53 (17.4%)	32 (60%)	42 (20.7%)	15 (36%)	32 (76%)	11 (26%)
	BIPOC	22 (7.2%)	8 (53%)	21 (10.1%)	6 (26%)	19 (90%)	7 (33%)
	Hispanic	82 (27.3%)	43 (52%)	55 (27.1%)	24 (44%)	41 79%	15 (27%)
	White	127 (41.8%)	78 (61%)	81 (39.9%)	33 (41%)	68 (84%)	20 (25%)
	Inte'l	16 (5.3%)	6 (38%)	1 (.5%)	0	1	1
Transfer Students		25		37		30 (81%)	
Religion	Catholic			84 (41.4%)			
	Christian			14 (6.9%)			

# Course-Level Data Sampling & Profile

## Observation Coding

**Verbal** - Use of Text; Focus on the comment; Question; Collaboration  
**Nonverbal** - Agreement, Disagreement, and Negative Attention

	First Year Seminar	Fourth Year Seminar
Overall Class Size	M = 16.33, Mode = 17, Range = 13-19	M = 18.45, Mode = 19, Range = 16-21
# of Sections in SP2022	24 sections	11 sections
# of Sections Observed	16 sections (67% sampled)	6 sections (55% sampled)
Student Engagement %	M = 88%, Range = 69% - 100% 50% of sections had over 90%	M = 84%, Range = 63% - 100% 33% of sections had over 90%
Per-Student Verbal Particip.	M= 7, Mode = 5, Range 3-13	M= 1.34, Mode = 6, Range 3-8
Per-Student Nonverbal Particip.	M = 2, Mode = 1, Range 0-4	M = .84, Mode = 1; Range 0-4



# Analysis

## Data Points

- 1. Class Discussion Observation (Spring 2022)**
  - Verbal Comm: Text, Focus, Question, Collaboration
  - Nonverbal Comm: Agreement, Disagreement, Negative Attention
- 2. Student Feedback Form (Fall 2021 & Spring 2022)**
  - 3 valuable things learned in the course
  - Helpful activities in the course
  - Challenges
  - Strategies and resources to overcome the challenges
- 3. Reflection Essays (Spring 2022)**
  - Reflect on the Shared Inquiry learning outcomes and self-evaluation
- 4. Course Grades and Participation Grades (Spring 2022)**
  - Grade points
  - Discrepancy: [Course grade - Participation grade]

## Analysis

- 1. Closed-coding with a scheme, follow-up analysis with descriptive statistics and qualitative analysis**
- 2 & 3. Grounded Theory approach to open-coding, follow-up analysis with descriptive statistics on gender and racial characteristics**
- 4. 2 (sex) x 4 (race) Factorial ANOVA, follow-up tests of mean difference**

# RQ1: How do students' engagement characteristics with shared inquiry differ between first year and fourth class levels?

## Data

- Participation Grades
- Class Discussion Observations
- Student Feedback Survey
- Reflection Essays

## Analysis

- Independent Samples *t*-test
- Closed-coding with a scheme
- Grounded theory approach to open-coding

Fourth year students ( $N = 164, M = 3.25, SD = .77$ ) received significantly higher participation grades than the first year students ( $N = 324, M = 2.88, SD = 1.22$ ),  $t(486) = -3.50, p < .001$ .

The structure of conversations and number of questions or collaborative moments did not change much between the first and fourth seminars, but the depth of discussion and its breadth as well as the ability to move between topics increased from the first to fourth seminars. Faculty spoke a similar number of times, but directed the discussion less.

Seniors are more likely to locate their learning in discussion with their peers, rather than in texts or with respect to their instructor. Seniors can articulate shared inquiry tasks as work and life-related competencies (collaboration, confidence speaking in groups, ability to speak to anyone).

In future studies, it is worth looking at why and how students articulate that discussion of texts with peers fosters the acquisition of life- and job skills.

**RQ2:** What resources and strategies do students use to overcome the challenges related to shared inquiry and what changes in the patterns across the first and fourth year seminars?

### Data

- Student Feedback Survey
- Reflection Essays

### Analysis

- Grounded theory approach to open-coding

Students expressed **similar challenges and resources/strategies** used across the first year and fourth year seminars.

### Common Challenges

- Reading is long and difficult
- Speaking in class is anxiety-provoking
- Putting enough time to coursework

In the **first seminar**, students focus on **tasks in class**. By the **fourth year** seminar, students focus on **discussion dynamics** and the **articulation of discussion leadership and facilitation skills**.

### Common Resources & Strategies Used

- Do the reading before class
- Annotate the reading
- Come prepared to ask questions
- Start papers earlier
- Manage time better/personal challenges
- Ask their peers for input and help
- Learned from discussion facilitation exercises in class

# RQ3: How do students' experiences of shared inquiry differ based on their gender and racial/ethnic identities across the first and fourth year seminars?

## Data

- Course and Participation Grades
- Reflection Essays

## Analysis

- 2 x 4 Factorial ANOVA and follow-up tests of mean difference
- Grounded theory approach to open-coding

- No significant interaction effect, but significant main effects of gender and race.
- **Male students “caught up” with the female students’ level of participation by the senior year.**
  - Female students participated better ( $M = 3.12, SD = 1.10$ ) than male students ( $M = 2.62, SD = 1.28$ ) in the freshman seminar, but this difference was not evident in the senior seminar.
- **Hispanic students’ course and participation grades matched with those of White and Asian students by the senior year.**
  - While race was a factor that made a difference in the course grades but not in the participation grades, Hispanic students’ course and participation grades were significantly higher in the senior seminar (Course  $M = 3.45, SD = .61$ ; Participation  $M = 3.34, SD = .74$ ) than in the freshman seminar (Course  $M = 3.18, SD = .84$ ; Participation  $M = 2.80, SD = 1.28$ ).
- **BIPOC students are left behind with the written part of the coursework.**
  - 50% of Asian, 42% of Hispanic, and 38% of White students were able to use written coursework to boost their overall course grades, whereas only 26% of BIPOC students were able to do so. Similarly, written coursework negatively affected the overall course grades for 26% of BIPOC students, whereas only 15% of White, 7% of Hispanic, and .3% of Asian students.

# RQ3: How do students' experiences of shared inquiry differ based on their gender and racial/ethnic identities across the first and fourth year seminars?

## Data

- Reflection Essays

## Analysis

- Grounded theory approach to open-coding

### Overall

- 17% of first year and 25% of fourth year students skipped the question related to LO#3 in their essays.
- 83% of first year students can define respectful conversation and can break down elements of it, such as eye contact and non-verbal signs of engagement, but only 40% of fourth year students included this in their essays.
- Collaborative learning and deeper/richer understanding of discussion engagement was non-existent in the first year students, but evident in senior students (32%).

### Differences across Gender or Racial/Ethnic ID

- No gender difference
- No BIPOC students expressed collaborative learning and deeper/richer understanding of engagement.
- 43% of BIPOC students report microaggressions as part of their discussion experience, whereas no White or Hispanic students mentioned this.

# Takeaways

*How are the first and fourth year students achieving the Shared Inquiry learning outcomes?*

1. Advance probing questions with arguments supported by textual evidence.

1st Yr.

Some focus only on **questions texts raise**, and others see **the value of asking questions that foster discussion**.



4th Yr.

Students see the value of **asking good questions** as a skill that increases agency in their lives because **questions lead to capacity for growth**.



# Takeaways

*How are the first and fourth year students achieving the Shared Inquiry learning outcomes?*

2. Collaborate in sustained lines of inquiry with a purpose of deepening and broadening perspectives.

1st Yr.

Mostly **concerned with talking enough** or not in discussion.

4th Yr.

- Focused on **how they interact with their peers.**
- Many refer to the application of **ethical principles in discussion**, and the art of **perspective taking.**



# Takeaways

## *How are the first and fourth year students achieving the Shared Inquiry learning outcomes?*

3. Use verbal and nonverbal communication modes that are contextually appropriate and effective to engage in inclusive and respectful conversations.

1st Yr.

Students are focused on discussion tasks like **non-verbal affirmations and eye contact**

4th Yr.

- Most could define and use terms around **inclusive and respectful conversation**, and say why it is important.
- Some students articulated the **benefits of learning from disagreement and of using perspective-taking and reflective listening** to learn from their peers, and understood that their peers were integral to their learning.
- **BIPOC students mentioned microaggressions in discussion.**





# Takeaways

## *What can we conclude about gender and racial difference in student engagement in learning in Seminar?*

- The developmental curriculum is working especially well for male students and Hispanic students to improve their participation and overall course grades over the span of 4 years.
- BIPOC students are doing ok with participation, but they are left behind with the overall coursework related to written assignments.
- The lack of deeper engagement with discussion among BIPOC students may be related to their experiences of microaggression toward them.

## *What would streamlined and sustainable assessment of Shared Inquiry look like in the next cycle of assessment?*

- Use axial coding across the question codes to develop reflection assignments that specifically address shared inquiry benchmarks
- Multiple data points were useful, especially intersection of course and participation grades, student feedback form, and reflection essays.

# Next Steps

## Immediate

**Student Support:** Writing support for BIPOC students

**Faculty and Student Development:** More discussion training focusing on respectful conversational skills

## Long Term

**Curriculum Design:** Create developmental models of discussion to share with students

**Coursework for Sustainable Assessment:** Tie the reflective essay prompts more specifically to the codes we developed in this study

## Next Assessment

Replicate the assessment study, possibly longitudinally, in the new curriculum with **Class of 2027**

Assess the **transfer Seminar course**