

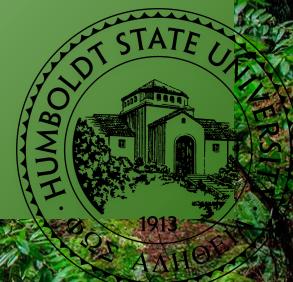


# Embedded Supplemental Instruction at Humboldt State University

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CSU Math Council (MC<sup>2</sup>) Colloquium, January 29, 2021



# Big Picture: HSU Learning Center Peer-to-Peer Support

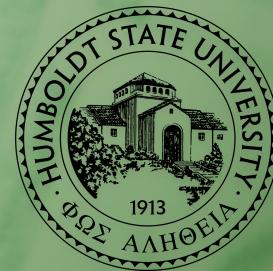
Connected  
Tutoring

Academic  
Peer  
Coaching

Writing  
Studio

Math  
Tutoring Lab

Supplemental  
Instruction



# Overview of SI at Humboldt State

- Offered for high DFW & equity gap classes
- It is a 1 unit, CR/NC class
- Sessions held 2x a week for 50 minutes
- Voluntary participation
- A place where students practice & learn content using active & collaborative approaches



# History of SI at Humboldt State

## SI Established at HSU

SI established in **1996** by Biol faculty through grant for science courses. Program moved to Learning Center in **2008**.

## Formally establish SI as Math 198 course

Structure of math/stats courses did not easily fit our SI model

Participation low for category 3 & 4 students

## Expand Embedded SI to other online Math courses

Equitable solution - SI came to the students

**1996 2008**

**2018**

**2020**

**2016**

## Piloted SI for Precalculus as drop-in model

Students did well, but participation was low

**2019**

## Piloted Embedded SI for one supported algebra course

Partnership between Math Dept, Learning Center, and EOP/SSS



# SI Impact

Enrolling in and passing Supplemental Instruction at HSU has a highly significant predicted\* effect of increasing course grade by 0.49 GPA!

\* Results modeled using a Linear Mixed-Effects Regression with Term and Course as random effects and the following as covariates: High School GPA, AP Units earned in High School, Firstgen status, PBLC Participation, Remedial Level (Not Remedial, Math, English, or Both), URM status, PELL Recipient status, Credits Enrolled at HSU

*Analysis by S. Margell, HSI STEM Evaluator*





# Supplemental Instruction vs. Embedded Supplemental Instruction



# Commonalities: SI & Embedded SI

- Active & collaborative learning
- Leader-created lesson plans
- Content review
- Transferable study/learning strategies
- Community-building activities
- Leader-access to parent course LMS (Canvas)
- Leaders host open review sessions before exams out of class



Supplemental Instruction at HSU	Embedded Supplemental Instruction at HSU
Typically for <b>large course</b> sections (50+ students)	Typically for <b>smaller course</b> sections (~25 students)
Students take <b>initiative</b> to join	SI leader is <b>embedded</b> in parent course
<b>Does not assist</b> faculty in parent class	<b>Assists faculty</b> when needed
Leader <b>may attend parent class</b> but doesn't interact with students	SI leader attends parent class and <b>leads activities that they planned for all</b>
<b>No additional</b> study sessions	SI leader hosts <b>additional study sessions</b>
Meets/ <b>communicates with faculty once a week</b>	Meets/ <b>communicates with faculty more often</b>
Does <b>not share observations</b>	<b>Shares observations</b> about student understanding in class



# SI Leader Training & Professional Development

## Pre-semester training

Week long training

- Layered (All Peer Educators > SI leaders only > Embedded SI)

## Bi-Weekly training & Saturday training

Coordinator & Senior SI leaders observe sessions and give feedback

All leaders also observe each other's sessions and give feedback

New leaders shadow experienced leaders

## Self reflection tools

- Professionalism rubric
- [Spring 2021 SI Professional Growth Rubric\\_ Revised.xlsx](#)
- Equitable practices rubric
- Self evaluations



# Pre-Semester Training Topic Highlights



**Training sessions mirror how leaders should design and lead their sessions and are easily transferable to what they can do with their students**

- How to create lesson plans= Bloom's Taxonomy- goals and learning objectives
- Community building + why - supports student retention
- Creating ground rules and safe learning spaces
- Active & collaborative learning - about, examples of, how they supports brain growth & equity
- Opening & closing activities, lesson timing
- Organization & learning strategies including retrieval
- Grouping strategies, facilitation strategies
- Mental health
- Effective mock SI Sessions
- SI Showcase



# Supplemental Instruction Showcase

SI Showcase Activity Lesson Plan - Google Docs

[https://docs.google.com/presentation/d/1UP8qzk3arUhxcJBz1woQa\\_YvRqouHJD1LwZRY0iV9IU/edit?ts=60144806#slide=id.p](https://docs.google.com/presentation/d/1UP8qzk3arUhxcJBz1woQa_YvRqouHJD1LwZRY0iV9IU/edit?ts=60144806#slide=id.p)





# How is Embedded SI Going?



# Input from Students

“ I enjoyed breakout sessions, Jeopardy, and general going over problems.”

“ I enjoyed the set up of the Zoom meetings, it was effective and I was encouraged to engage.”

“I really liked our review sections every week. I found it helpful when she'd add in ways to study more effective online as well. ”

“ I enjoyed when we would do the Friday activities. to me these activities was very interesting and i felt engaged the whole time.”

“I don't think any changes are needed. The embedded SI leader was available to help us in class, had a review session once a week, and was available plenty of time outside of class. She was knowledgeable and friendly and therefore helped to break things down a lot.”

“I was the most engaged on our Friday zoom meetings with Liz. These were really fun because we were able to review and debrief what we had learned throughout the week. ”

# I asked the faculty, “How is Embedded SI Working?”

Responses from Michelle Gledhill, Math Department Faculty

## How did embedded SI work for your class?

I used a flipped class and gave the SI leader 50 mins on Fridays to do her activity. We called it **“Workshop Fridays.”** Before the semester started I **thought it would require more time** of me, **but it didn’t.**

## How did students respond?

Positively, **students saw a “friend”** in the SI Leader. Someone who they could talk to - fostered a positive relationship. My particular leader was approachable inside & outside of class. She offered to meet with the students a 4th day to watch videos with them



# Faculty Feedback cont.

## Benefits?

The leader **facilitated** with **online class management** - especially with monitoring the **chat**.

Helped students to acclimatize with zoom, and helped me with **tips and tricks**. Tech support.

Aware about the internet access of folks and **access issues**.

## Challenges?

If I did not post **lecture videos**, and have a **stretched class**, I don't know if I could have given up a day of instruction

Other observations: The SI leader went above and beyond to **foster relationship** and assist with **outside of class to answer questions**. Relationship are so important for students and she carved the space and time for this. She was **well trained**. Overall, having an embedded SI leader was a very positive experience. **I recommend keeping the model.**

# Input from Embedded SI Leaders

## What are strengths of this model?

- It doesn't single out any individual. It's there **for anyone in the class**. A resource that is for all students, whether they are confident in their abilities and just need clarification or if they are less confident and need help understanding concepts.
- Time outside of class allows us to expand on what the professor was talking about in class. We were in class with them and **know exactly where and what topic** in the book they were talking about.

## Do you like it?

- It may not be exactly professional to say it like this, but hell yes I like this! Not only because it's my job but also because **as a student this is an amazing program!** I would have loved to have this in my first semester at HSU, or even now in my upper division classes. Having a resource that is there for the sole purpose of helping you pass the class **is invaluable**, especially if they **let you have a say in** when their study **session hours** are AND are **in the class** with you following along.

# Is Embedded SI Impactful?

- No real data yet
- Seems successful, all parties happy about this experience
- It's an EQUITABLE way to offer academic support!

Challenges... Time

- Initial Coordination time
- Faculty may not be willing to give up instructional time
- 10-15 min. not enough time to do a good activity = Leader frustration

What's next?

Try it again next fall, more assessment







# HUMBOLDT STATE UNIVERSITY

QUESTIONS?

