



SACRAMENTO
STATE

Oral Assessment as an Alternative to Proctored Exam

Dr. Sayonita Ghosh Hajra
Department of Mathematics & Statistics
California State University, Sacramento



Image credit: Flickr



Image credit: Flickr

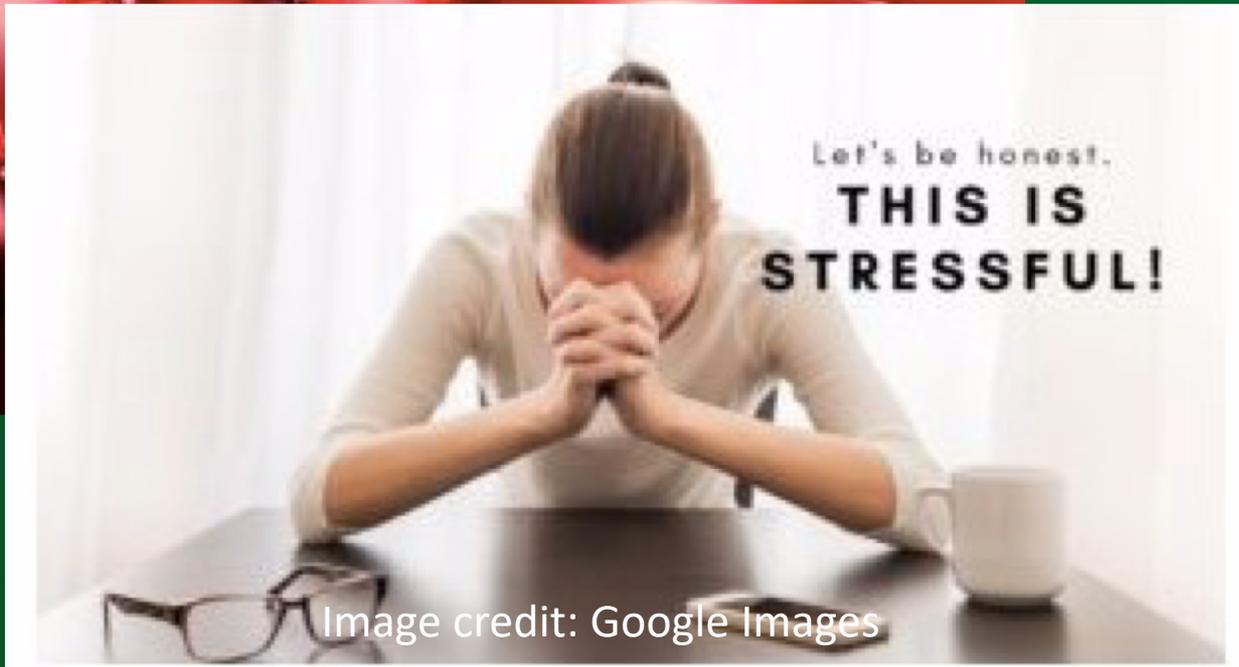


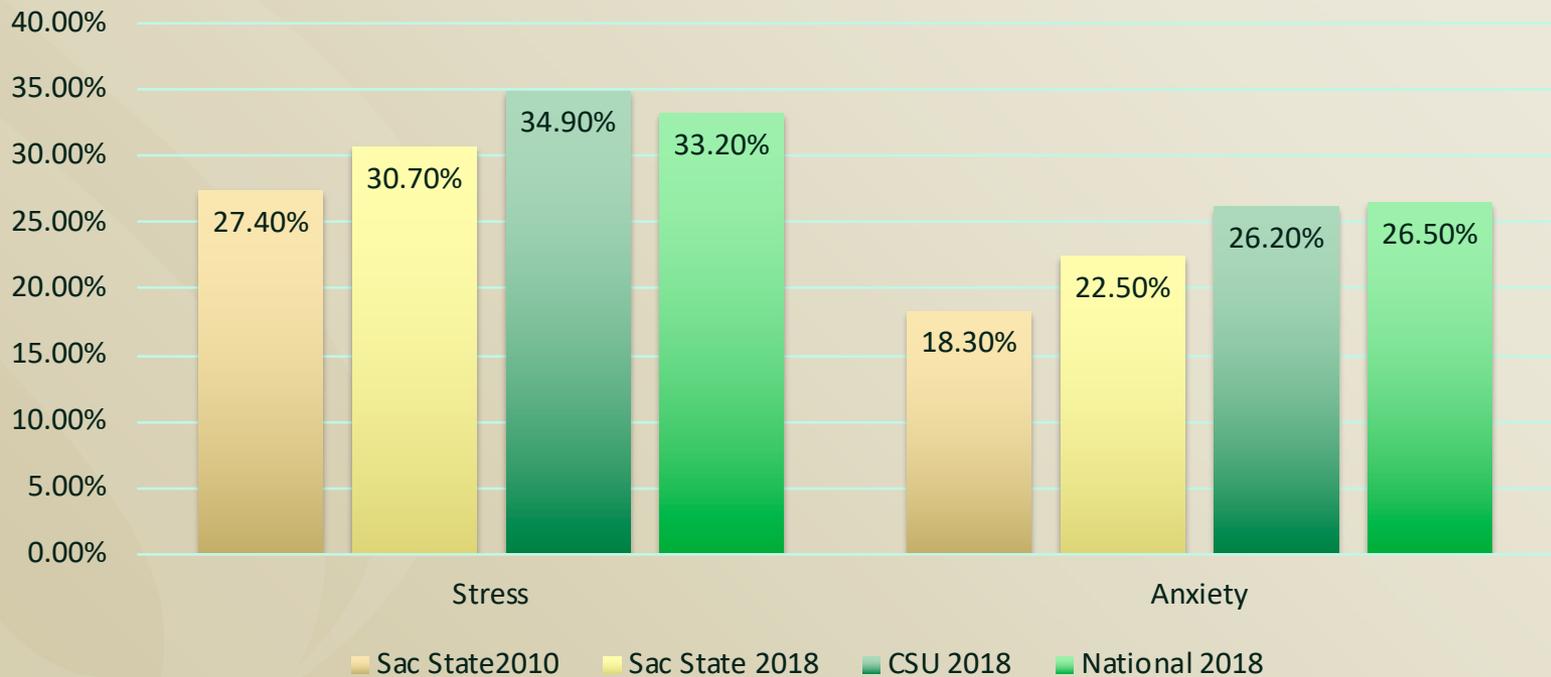
Image credit: Google Images



Image credit: Flickr

Before COVID-19

Health Impediments to Academic Performance



During COVID-19

- Students' anxiety- 47% reported feeling more **anxious** about their coursework.
- Instructors' anxiety- thinking about the **well-being** of students and administering **exams** online were among the activities that caused the highest levels of anxiety.

Quick Survey

Were you anxious about assessments in the remote settings in the past 6 months?

- Yes
- No

Please use the following link to submit your answer:

<https://forms.gle/9A5Vaf4DfHHRcARx9>



“Health and Well-being are essential elements for effective learning”

El Ansari & Stock (2020)



*Health and Well-being are
essential components for effective
teaching and learning*



ASSESSMENT



S
U
P
P
O
R
T



W
E
L
L
B
E
I
N
G

ACADEMIC INTEGRITY



SACRAMENTO STATE
Redefine the Possible

Image credit: Flickr/ Google

Oral Assessment

An oral assessment is an assessment technique where the instructor assesses the students verbally.

Various forms of oral assessments:

- oral presentation,
- poster presentation,
- one-on-one dialogue, and
- other variations conducted verbally in whole or in parts.

Regular Oral Assessment Format

- Student works on a problem in front of the instructor
- Instructor asks questions



Our Prior Experience



Oral Qualifying Exam



Our Prior Experience



Regular Oral Assessment- Pros & Cons



Instructor gathers a lot of information



Very stressful for students

An Assessment Tool: Supported Oral Assessment (SOA)

Structure:

Preparation

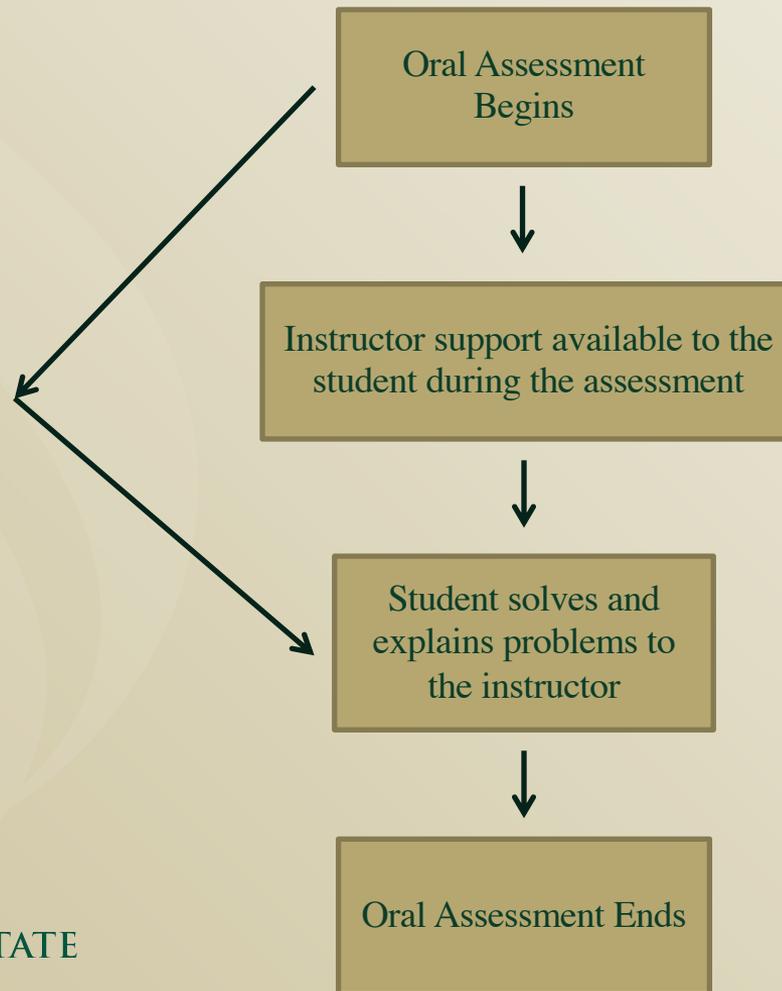
30-minute one-on-one appointment slots in Canvas

- Opens one week before the exam week
- Student can only sign-up for one slot

During Assessment Day

- Instructor starts casual conversation to create a comfortable learning environment
- Instructor asks student to choose a topic that the student feels comfortable
- Through a two-way dialogue, instructor provides feedback and clarify questions
- Student solves a new problem before moving to the next topic
- Student receives full credit after completing the oral exam

Supported Oral Assessment (SOA)



Example 1: An Hypothetical Excerpt between Instructor and a student

Instructor: How do you feel about domain of functions?

Student: I am good with domains.

Instructor: Do you have any questions regarding domains?

Student: No, I think I understand it very well.

Instructor: Great! Then let's try the following problem.



Example 2: An Hypothetical Excerpt between Instructor and a student

Instructor: How do you feel about “domain of functions”?

Student: I think I struggle with “domain”.

Instructor: Ok. So let’s start with a problem and we work on this problem together. I will let you start the problem. You are allowed to use class notes.

Student: Ok.

Instructor then writes a problem on the board. Student takes a marker and starts working on the problem.

A Rubric for SOA

Topics	Support is Needed	Ready to Move On
# 1		
# 2		
# 3		
# 4		

An Example: SOA Rubric in Calculus-I

Topics	Support is Needed	Ready to Move On
# 1: Domain	✓	
# 2: Limits		✓
# 3: Differentiation		✓
# 4: Implicit Differentiations	✓	

Instructor's Role during SOA

- Instructor checks-in and provides feedback or clarifies questions during the process.
- Student gets new questions on the same topic if needed.
- If a student does not complete the exam, student returns another day.

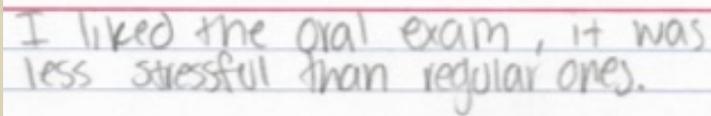
Calculus-I: (Fall 2018)

- Set-up: In-person, Instructor's office
- SOA was in week-9 of the semester
- 30-minute slots were available for 28 students
- Material covered- up to implicit differentiation



Calculus-I: Students' Feedback (Fall 2018)

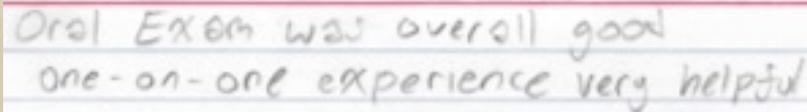
Reduces Test Anxiety



I liked the oral exam, it was less stressful than regular ones.

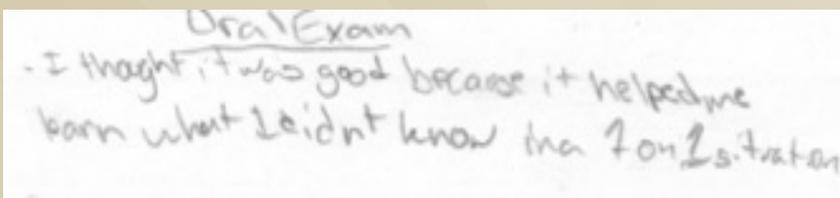
“ I liked the oral exam, it was less stressful than regular ones.”

One-on-one interaction



Oral Exam was overall good
one-on-one experience very helpful

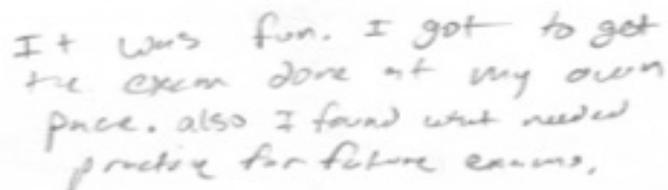
“ Oral Exam was overall good. One-on-one experience very helpful.”



Oral Exam
- I thought it was good because it helped me learn what I didn't know in a 1 on 1 situation

“ I thought it was good because it helped me learn what I didn't know in a 1 on 1 situation.”

Learning at own pace



It was fun. I got to get the exam done at my own pace. also I found what needed practice for future exams,

“ It was fun. I got to get the exam done at my own pace. also I found what needed practice for future exams.”

Calculus-I: Students' Feedback (Fall 2018)

Identifying the problem- solutions follow

The oral exam in my opinion really helped me understand the concept I was having trouble with since we specifically worked on it.

"The oral exam in my opinion really helped me understand the concept I was having trouble with since we specifically worked on it."

I absolutely loved the oral exam it was so helpful, I'm able to keep up w/ the current contents of the class now that I brushed up on problem I've been struggling with.

"I absolutely loved the oral exam it was so helpful, I'm able to keep up w/ the current contents of the class now that I brushed up on problem I've been struggling with."

Oral exam was very helpful on finding what we were having trouble on

"Oral exam was very helpful on finding what we were having trouble on."

I found the oral exam to be very helpful. It helped me identify areas I still struggle in and need to review

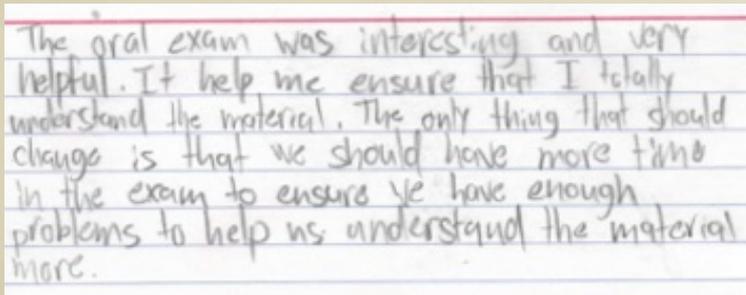
"I found the oral exam to be very helpful. It helped me identify areas I still struggle in and need to review."

Oral Exam:
It was a good way for me to practice more on things I need work on

"Oral Exam: It was a good way for me to practice more on things I need work on."

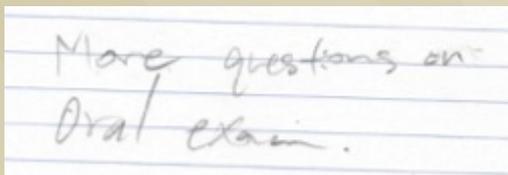
Calculus-I: Students' Feedback (Fall 2018)

More Time, More Questions



The oral exam was interesting and very helpful. It help me ensure that I totally understand the material. The only thing that should change is that we should have more time in the exam to ensure we have enough problems to help us understand the material more.

“The oral exam was interesting and very helpful. It help me ensure that I totally understand the material. The only thing that should change is that we should have more time in the exam to ensure we have enough problems to help us understand the material more.”



More questions on
Oral exam.

“More questions on oral exam.”



My Reflections on SOA

- Witnessed Aha-moments!
- Was able to identify students who needed additional support and provide that instant support
- Students asked for more problems to work on during exam!!



Calculus-III: (Spring 2020)

Variation of SOA in Zoom:

- 2-hour Timed Cumulative Non-proctored Exam
- Optional One-on-one Oral Assessment

Calculus-III: (Fall 2020)

- Two mid-term oral assessments
 - First Exam: Weeks 6-8
 - Second Exam: Weeks 12-14

Benefits of SOA

- Based on student success
- Reduces test anxiety
- Creates a supportive environment
- Increases self efficacy
- Provides opportunities for students to self-identify struggles and finds ways to work on those
- Improves communication, both social and mathematical



Instructor Benefits

- Supports instructor's well-being
- Maintains academic integrity
- Gives an opportunity to know students better
- Helps in course planning through mid-course adjustments



Challenges

- **Initially feels like “Time consuming”**- Could be embedded in the course through careful planning and saves the grading time!



Ideas for implementations: Possible Variations

- 5-minute check-in sessions after a timed exam during structured (virtual) office hours
- 10-minute interview on pre-assigned problems
- ...

Exit Ticket- Activity

Think about a current assessment that you can modify to an oral assessment.

Write your ideas here:

<https://docs.google.com/document/d/1yDUQb67575pA-UkBdsrtci37u-woqswlrum4QY1iv6Y/edit?usp=sharing>



Thank You!

Questions?

Contact Info:

Email: Sayonita.ghoshhajra@csus.edu