

# Implementing Oral Exams at Scale Using Graduate Student Instructors (GSIs)

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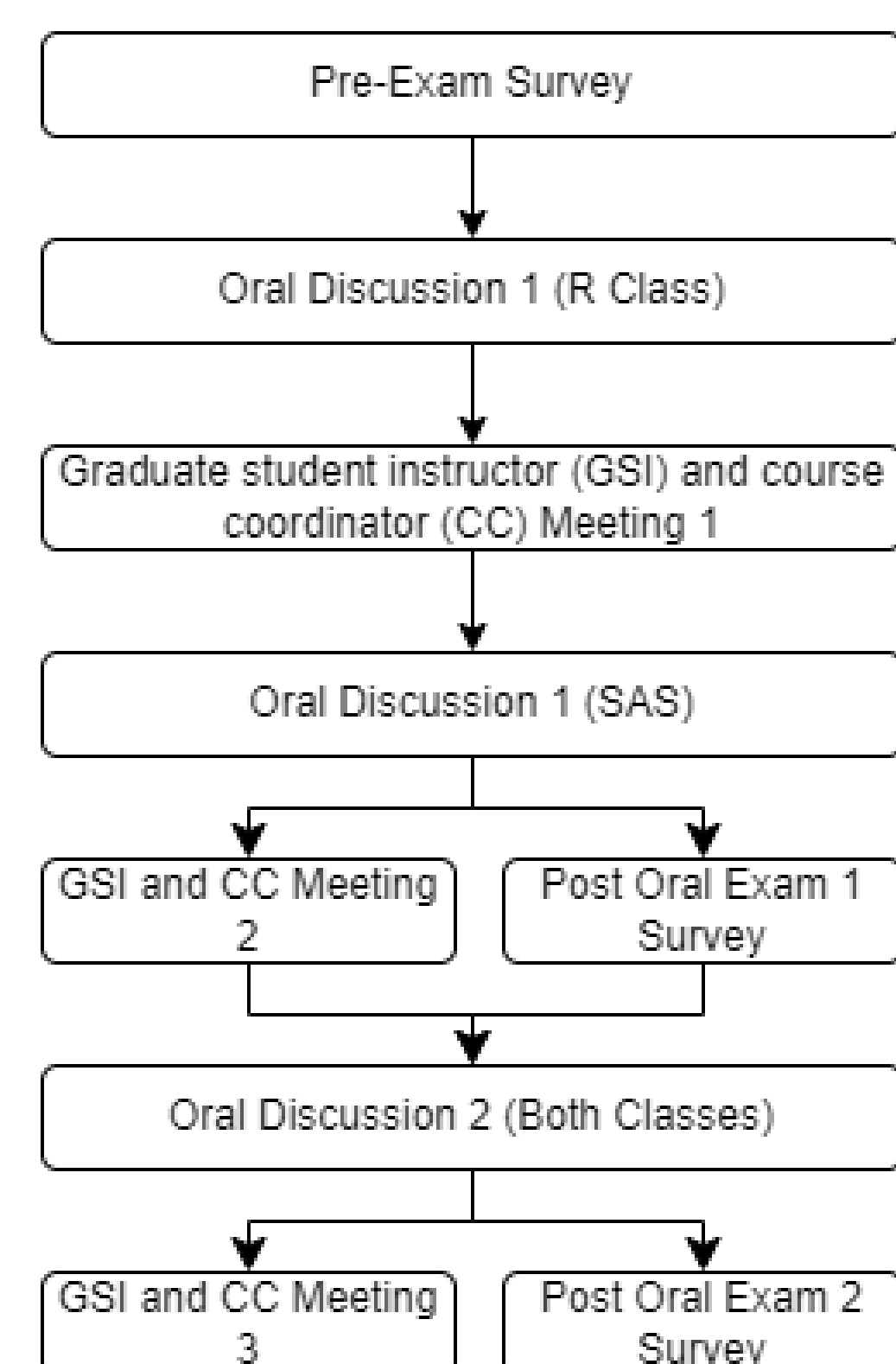
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## Background

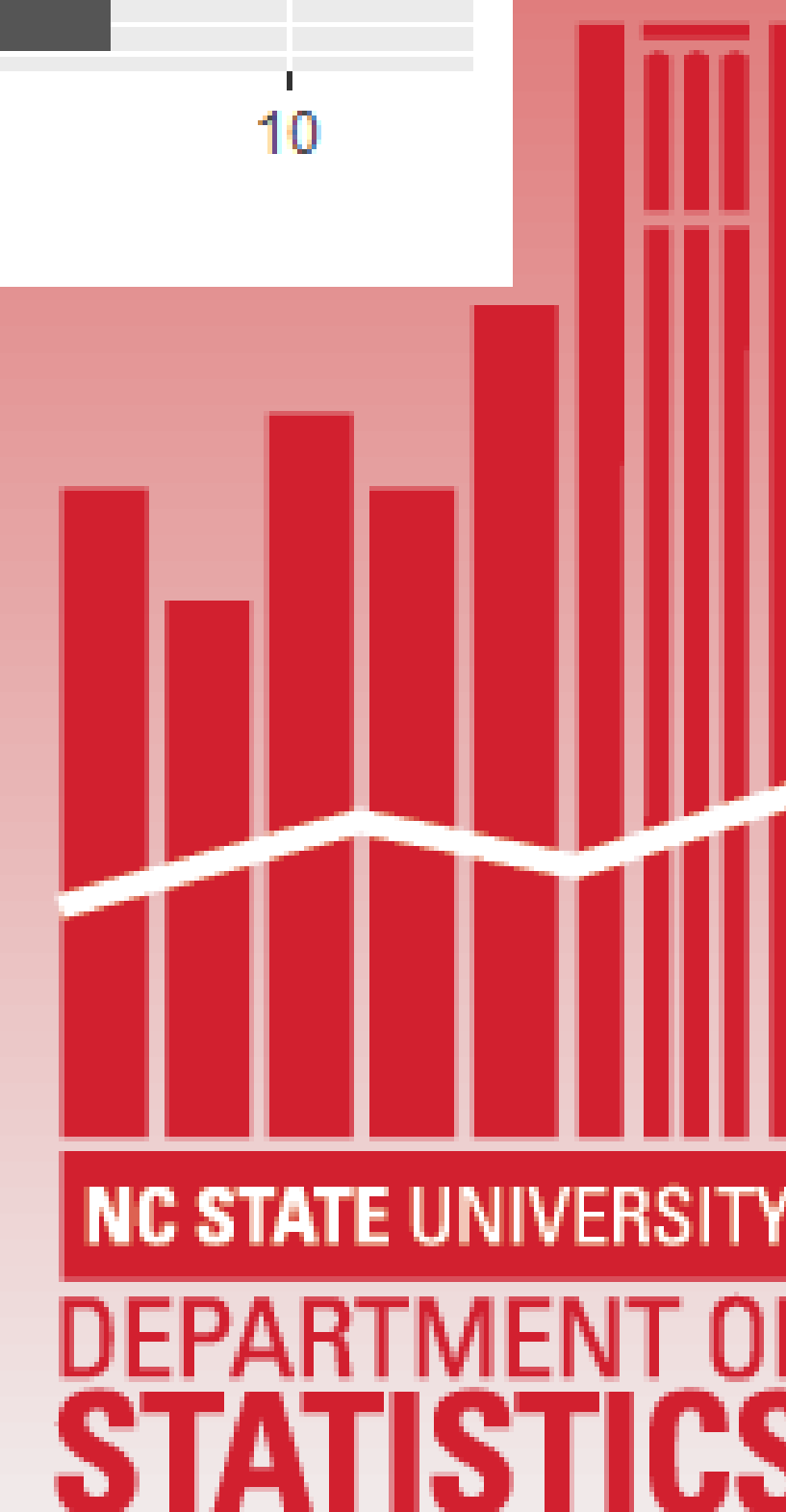
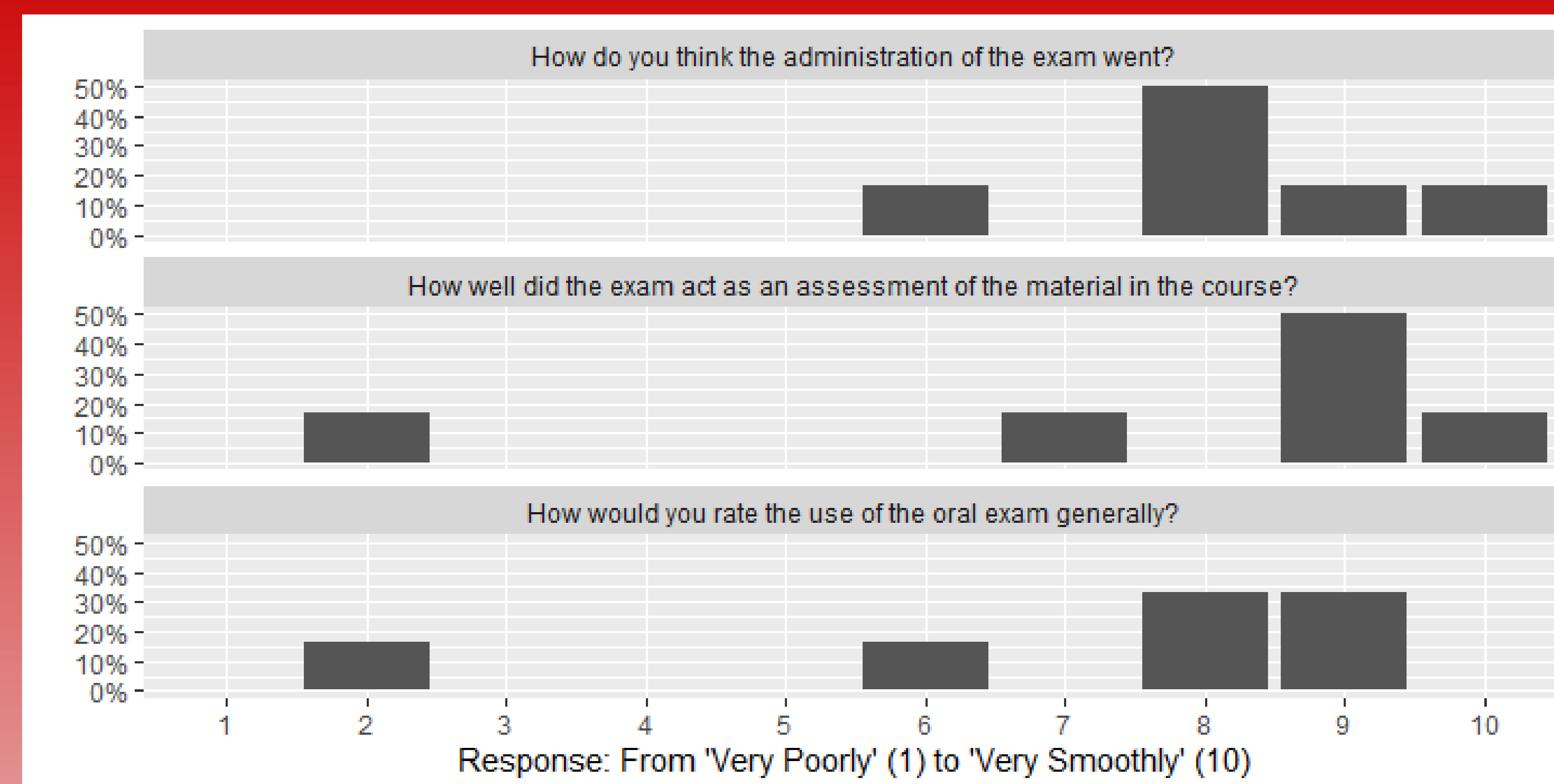
- Six GSIs teaching 3-4 sections of introductory programming
- Approximately 700 total students
- Two oral exams given

## Setup & Planning

- Full week dedicated to each oral exam
- Five minute zoom meetings
- Moodle scheduler for sign up
- Rubric on Moodle for live grading
- Structured interview protocol style questions
- Data collected on GSI thoughts & experience



Proper support, training, and care for graduate student well-being is required to successfully implement oral exams to a large number of students.



## Results

### 1. GSI Challenges

- Scheduling of students & time management (self-care)
- Balancing other responsibilities
- Extra time for make-up exams
- Initial Zoom & Moodle training

### 2. Oral Exam Grading

- Novice instructors had concerns about their ability to be unbiased and fair to students
- Oral exam rubric required a finer scale

### 3. GSI Experience

- Some enjoyed getting to know students and interacting in a new setting
- Others disliked the time & schedule required and talking with struggling students
- Anecdotally, students had a lot of anxiety for the first exam but felt positively toward the second exam

### 4. Future Student Preparation

- Need to incorporate more opportunities for students to practice verbalizing concepts
- Ensuring students focus on the vocabulary of the language (i.e. data frame vs vector)

## Recommendations

### 1. Multiple Forms of GSI Feedback is Essential

### 2. Optimize Scheduling for GSIs

### 3. Preach the why for oral exams

### 4. Prepare through practice

- Roleplay prior to implementation
- Provide follow-up questions
- Bring GSIs into the creation process

### 5. Use Technology

- Use video conferencing software (ease of scheduling, recording of discussion)
- Practice on the technology you'll use!

### 6. Prepare your students

- Opportunities to practice discussing the material

## Future

Understand the student experience! Do oral exams still give the same benefits if they are only 5 minutes? Can generative AI provide similar experiences (at least for practice)?