

Improving Undergraduate Oral Communication of Research Results

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Global Environmental Science (GES) Program Details

- ~85 students and ~15 graduates per year (first graduate in 2000)
- Supported by 30 Oceanography faculty
- Degree requires students complete an environmentally-related
 - UHM faculty-mentored undergraduate research experience
 - Publicly-delivered, oral presentation of research results
 - Written thesis

Target Student Learning Outcome

Demonstrate skilled delivery of well-organized informal and formal oral presentations

Oral Presentation Assessment Challenges

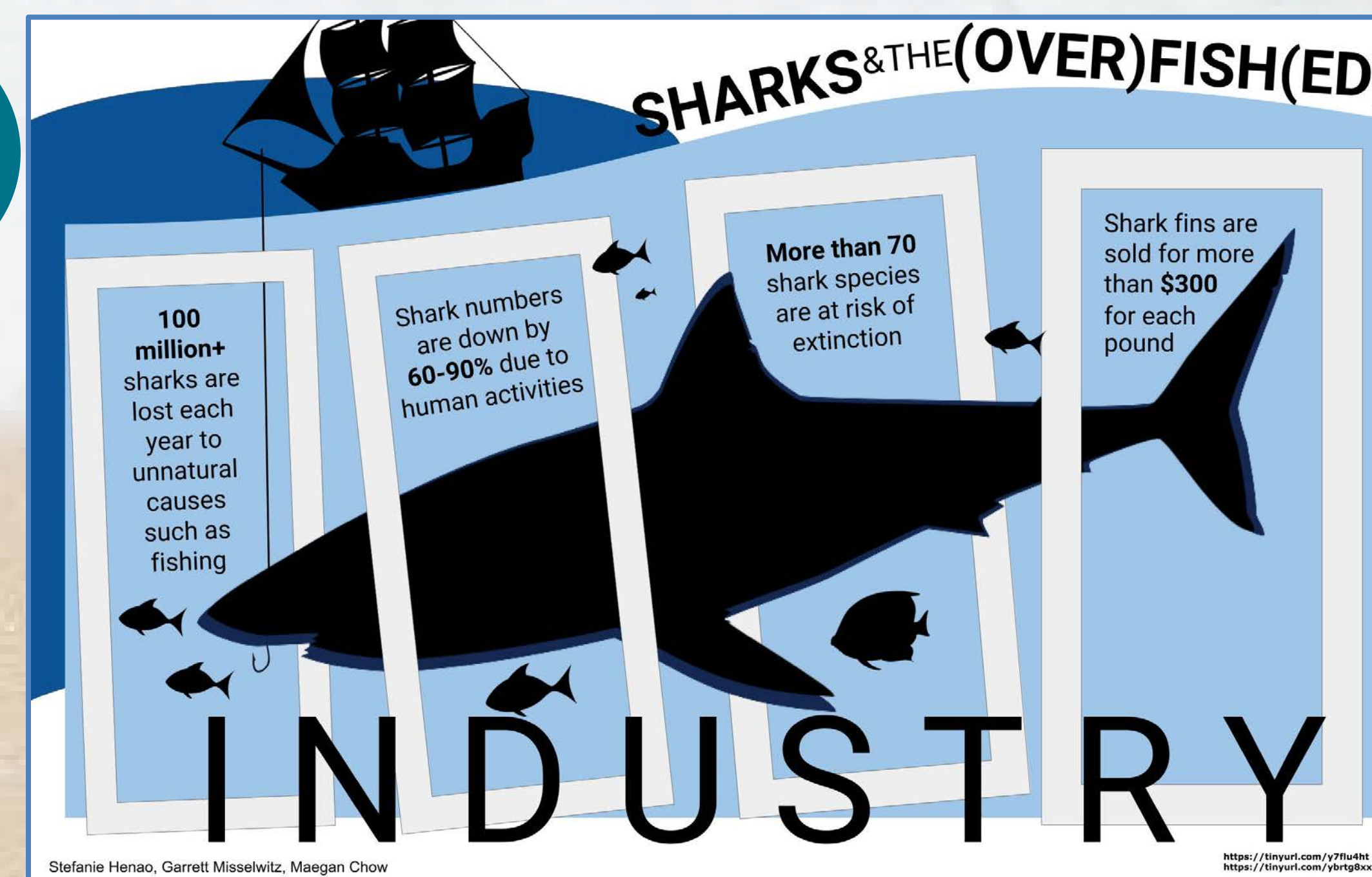
- Feedback primarily from student's faculty mentor
- No assessment mechanism for student other than mentor input
- Lacked of systematic, quantified evaluation for student and GES program to help improve student outcomes and curriculum

Curriculum-Assessment Improvements

Oral Pitch Exploring Research Topic

1

In *OCN 100: Global Env. Science Seminar*, the requirement has changed from students giving a PowerPoint presentation of their research topic to a 3-minute compelling pitch using infographics.



2

Hardwire Curricular Oral Presentation Training

Students receive presentation training, strategies, and practice time in *OCN 490: Communication of Research Results*. They begin preparing their GES Symposium presentation in this course.

Added Expert Feedback on Talk Rehearsal

3

In addition to getting feedback from their mentor, students now receive feedback from two designated "assessors," who give global & slide-by-slide feedback using a detailed rubric.

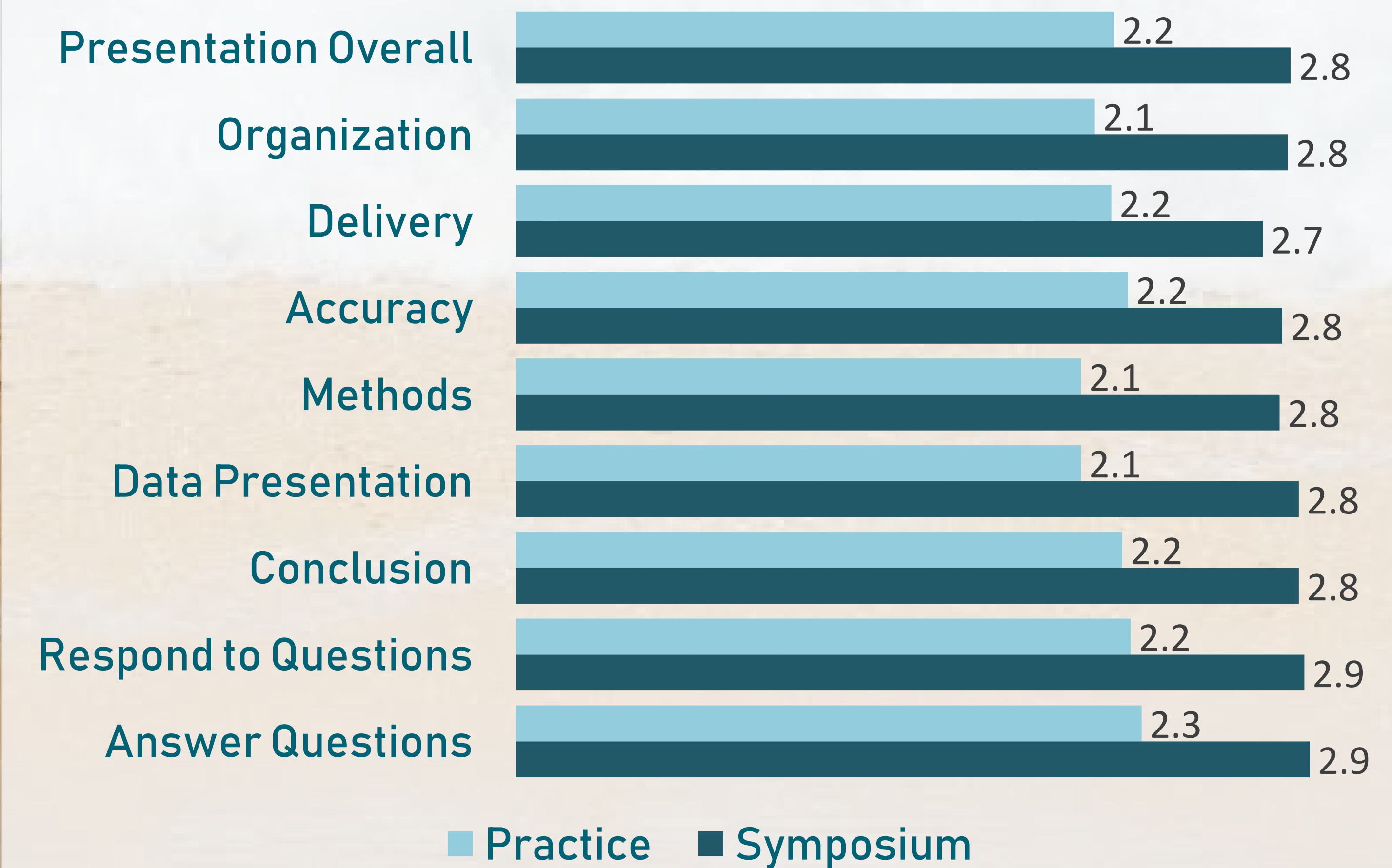


4

GES Symposium Presentation

Through the publicly attended GES Symposium, students experience presenting their research to, and answering questions from, a real academic audience. They receive graded rubrics at the end.

Oral Presentation Results (Scale 0 – 3)



- **98% SCORED HIGHER** on symposium vs. practice presentation
- **100% SCORED > 2** and **88% SCORED > 2.5** on symposium presentation

Insights

- Over the last 2 years, GES students won 2 first place and 1 honorable mention awards at UHM Undergraduate Showcase
- Students benefit from the scaffolded curricular experience
- Faculty from 8 units (OCN, ES, HIMB, PBRC, HNEI, HIGP, ATMO, ORE) have enjoyed participating in the practice sessions and completed 40+ expert evaluations over the last two years

Next Steps

- Give students the evaluation rubric when they enter the program and throughout the program (OCN 100, OCN 490)
- Record "model" presentations, note why they are exemplary, and have students, pre-presentation, watch and evaluate

