Biology FEST:
Faculty Explorations in Scientific Teaching

Welcome to the
Biology FEST
Launch Party!

SEPAL
The Science Education
Partnership & Assessment Laboratory
San Francisco State University

HHMI
Biology FEST: Faculty Explorations in Scientific Teaching

Agenda

12:30 Arrival, Lunch, and Agenda

12:45 Welcome, Goals, & Advisory Board

12:55 Table Introductions

1:05 Unpacking HHMI Biology FEST Proposal

1:35 Exploring Opportunities for Involvement

1:50 Reflection and Assessment

1:55 Looking Forward and Next Steps
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Goals for today…

• Begin to build a community in our biology department focused on exploring scientific teaching
• Unpack the proposed effort and address clarifying questions
• Explore the many opportunities to be involved
• Share what we’re excited and concerned about
• Look forward to gathering more often to learn from one another

SEPAL
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HHMI
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2012-13 Advisory Board

Zheng-Hui He
Jonathan Knight
Leticia Marquez-Magaña
Chris Moffatt
Sally Pasion
Andy Zink
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Introductions

Write on an index card:

1. Your name...

2. One thing you do – that you are most proud – to support the teaching and learning of biology in our department...
Introductions

Share with your tablemates:

1. Your name...
2. One thing you do – that you are most proud – to support the teaching and learning of biology in our department...
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Why you are all here!

• HHMI has invested in all of us, as a department, including faculty, staff, and students

• Last year was first year SFSU was eligible to apply

• 43 awards made to 47 institutions

• SFSU will receive $1.5 million over 4 years

• Largest award to single campus
"Excellent potential for impact, given the survey data about the desire of faculty in the Biology Department for this change…"

"…likely to be successful as a large percentage of the faculty (88%) indicated interest in additional pedagogical training."

"It is so true that the vast majority of us that teach do so having come straight from graduate school with little to no teaching experience. It is also true that most of us are so busy that we aren't current with theories of/best practices for teaching. And, there is a high activation energy barrier to change... The department survey data presented builds a compelling case that this biology department is ready for this type of change."
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Framing Questions

Share with your table partners:

What questions do you have about the HHMI Biology FEST Project Summary and/or grant narrative that you’d like to have clarified?
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Framing Questions

- How are funds allocated? Monies for coordinator for each lab course? $ to work on labs over summer?
- Grant focused on pedagogy versus content? How can we improve quantitative skills at all levels?
- What resources are available to improve our teaching?
- What does intellectual resources mean?
- Foster infrastructure development? What the ?!% $#?! Is that? What ‘s the impact on curriculum?
- How do we reckon with the fact that at RTP meetings we talk about research? What are the rewards for teaching innovation?
- What % grant is faculty devo vs. curriculum development?
- How does this grant address online teaching?
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Overarching Goals…

• Build a professional community among SFSU biology faculty focused on exploring scientific teaching methods

• Provide material and intellectual resources to support teaching innovation among biology faculty

• Engage faculty in design and analysis of assessments to gauge student learning in classrooms and across the curriculum

• Foster discussions and development of visions for future curricular change based on assessment evidence
Scientific teaching does not attempt to provide particular solutions to teaching challenges, but rather charges instructors to apply their analytical skills to gain insights into effective approaches for:

- engaging students in learning,
- designing assessments that gauge student conceptions, and
- promoting equity and access to science learning for all students.

“Scientific teaching” does not attempt to provide particular solutions to teaching challenges, but rather charges instructors to apply their analytical skills to gain insights into effective approaches for:

1. Scientific Teaching: What the heck is that?

Strategies to address our goals…

- Active Learning
- Assessment
- Equity and Diversity
- Collecting Classroom Evidence
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Strategies to address our goals...

2. Provide multiple ways to participate...

- **Spring Term**: Scientific Teaching: *Monthly Workshop Series* (drop-in, introductory)
- **Spring Term** → **Summer Term**: Scientific Teaching: *Weeklong Summer Institute* (intensive, advanced)
- **Summer Term** → **Fall Term**: Teaching Squares
- **Fall Term**: Luncheon Workshops
- **Fall Term**: Classroom Partnerships
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Opportunities to be Involved…

Please see handout!
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Reflection and Assessment

• On one side of an index card…
  What are you most excited about in looking forward to our HHMI Biology FEST efforts together?

• On the other side…
  What about you most concerned about?

Anonymous!
Looking Forward & Next Steps

Biology FEST Luncheon Workshop #1
Tuesday, November 27th
12:30-2 pm

Simple Strategies to Promote Active Learning and Engagement in Biology Courses

...invitation and rsvp link will arrive in your email inbox soon...