

Stats LIVE!: How to Plan an Impactful Event for Statistics Students

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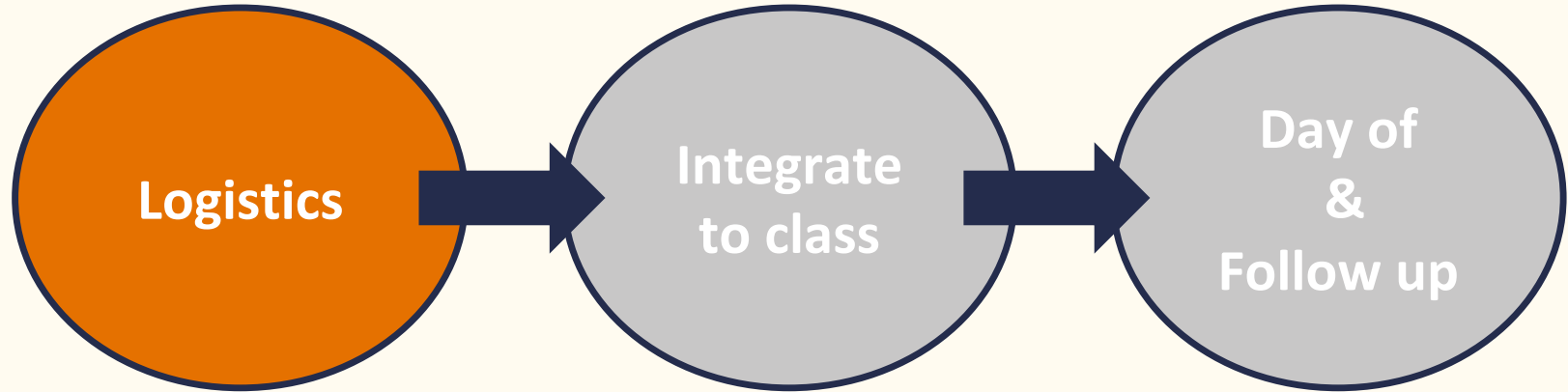
**University of Virginia
Department of Statistics**

Background

Introductory statistics courses are often the first time students are exposed to statistics and its versatility across disciplines. Professors of introductory courses often struggle to engage their students, because students do not see a connection between the curriculum and their future careers. With this goal in mind, the faculty at the University of Virginia host “Stats Live!” for introductory and intermediate statistics students.

- The event’s main purpose is to connect students to professionals in various fields with the theme of ‘data and its everyday uses’ through panels and workshops.
- Students across various introductory and intermediate statistics courses attend (over 500 students).

How to Plan a “Stats Live”



Logistics

- Decide on the classes to be involved
- Find a location with the appropriate capacity
- Invite a panel of speakers *
- Decide to hold event virtually or in person *



Logistics: Invite a Panel

Selecting a panel, may seem like a simple task. However, there are several factors to consider when doing so:

- Do you have a budget to compensate panelists?
 - The Department of Statistics at UVA had a grant to support panelists for the first two year, but for the past year, panelists have been volunteering their time freely
- What is the demographic of your students?
 - Biostats, business, gen ed, stat majors
- Are the panelists available on the date?



Rachael Brady

Customer Experience & Data Specialist at the Mann Center for the Performing Arts



Kristina Wells

NIH post-Baccalaureate research fellow



Griffin Walker

Senior Data Scientist at Capital One

Data Journalists from Numlock and FiveThirtyEight



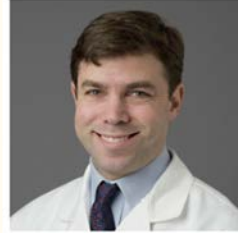
Walt Hickey

Walt Hickey is the lead lifestyle writer and host for Numlock. Intrigued by the new trend of journalists using data and statistics to tell stories, he interned at Business Insider before becoming lead lifestyle writer for FiveThirtyEight. He graduated as an applied math major with a focus on probability and statistics.



Ella Koeze

Ella Koeze is a visual journalist for FiveThirtyEight. She writes articles on public health, politics, movies, elections, and climate conditions. She graduated from UNC Chapel Hill with degrees in Geography and English. She has experience in Geographic Information Systems and working with spatial data.



Kenneth Bilchick

Cardiologist at UVA Health System

Kenneth attended John Hopkins University School of Medicine, where he received his MD. He specializes in the cardiovascular system, specifically focusing on cardiac rhythm problems. His research includes using cardiac resonance magnetic imaging as a way to determine optimal patient therapy.



Kathy Evans

Biostatistics PhD Candidate

Kathy attended Harvard University and received her BA in statistics. She then studied biostatistics at The University of California, Berkeley (MA) and is now a PhD candidate in biostatistics at Harvard. She is passionate about communicating statistical concepts to non-quantitative audiences. Her research interests are diverse – from infectious disease to sports analytics.



Al Ozonoff

Director, Center for Patient Safety and Quality Research at Boston Children's Hospital; Associate Professor, Harvard Medical School

Al received his PhD in mathematics from The University of California, Santa Barbara. He then joined the faculty at Boston University School of Public Health, where he focused on disease surveillance. Currently, he is a Patient Safety Leader at Boston Children's Hospital. Al is passionate about making healthcare safer for patients and healthcare workers.

Logistics: Virtual vs In Person

Virtual

- Easier to coordinate with panelists out of town
- Record & meet via Zoom
- Less personal with students
- More likely to have tech issues

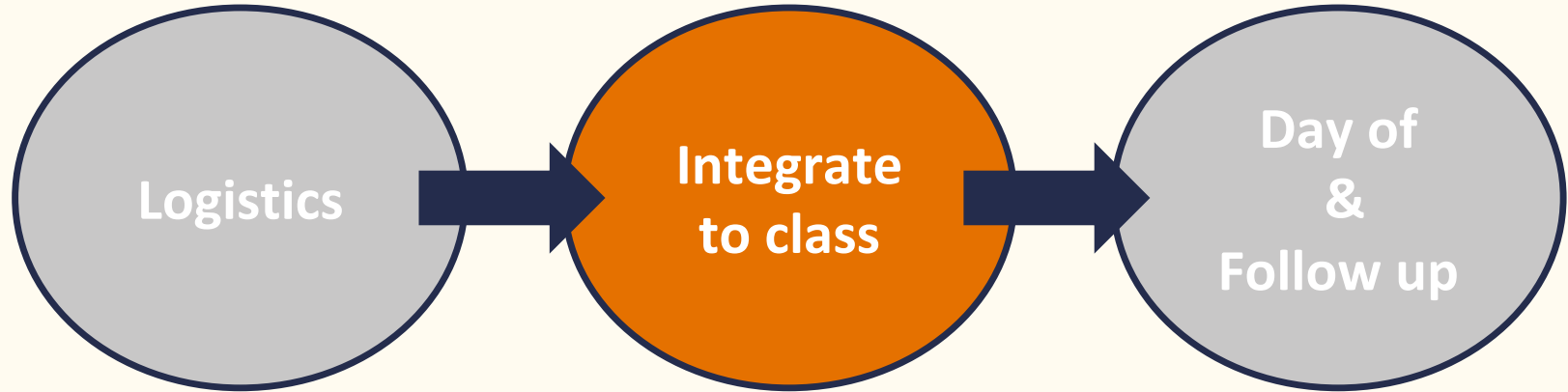


In Person

- Ability to have interactive workshop
- Limited to panelists in the area
- More personal with a limited class size
- Less likely to depend on tech



How to Plan a “Stats Live”



Integrate to a class

- Add the event to your syllabus calendar
- Weight the event with a portion of the grade
- Create an assignment to go with the event *
- Students should be prepared to hear from the speakers

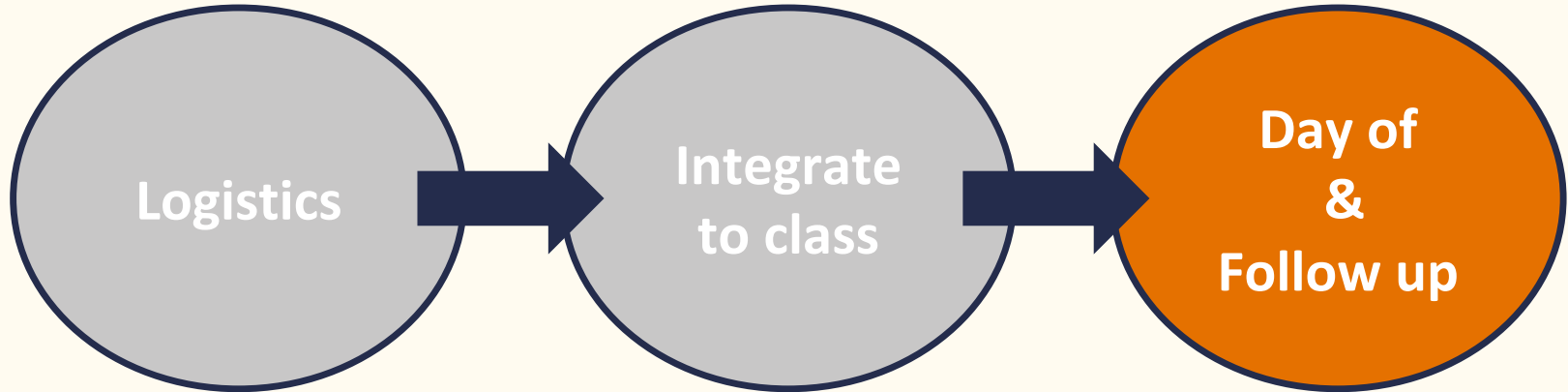


Integrate: Create an assignment

We have found students are more likely to attend and be engaged in the event when there is an assignment associated with it. (Beyond extra credit)

- Pre-Assignment
 - Read information about the speakers, when relevant and available works created
 - For upper level workshops, sometimes a lab assignment is created based on data provided by the speaker
- Attend the event
 - Attendance is taken
 - If students have class, the event is recorded and shared later
- Post-Event Reflection
 - Students submit a ~1 page reflection about the event with guided prompts

How to Plan a “Stats Live”



Day of and Follow up

- Test the technology in the room
- Assign TAs to handle class sign in
- Develop a program for the event *
- Establish “rules” for the event
- Review student reflections



Day of: Planning a Program

It is important to be prepared with a program, instead of “winging it” and hoping the panelists will lead the conversation.

- Introduce the hosts and panel
- Panelists should have some “prepared questions”:
 - How did you end up in your career?
 - What does your typical day-to-day look like?
 - What is your favorite aspect of your job?
 - What would you recommend to students who want to choose a similar career path?
- Have “pre-selected” questions from the pre-assignment with students prepared to ask them
- Fill the remaining 10-15 minutes with live questions from students
- Time permitting, and depending on availability of speakers, hold a reception to follow for further discussion

Impact on students

“I found that a big takeaway for me was that there are many way statistics can be applied to different careers. Although I previously knew that there are many ways to use statistics in this field, I found it interesting that there are many different careers that have statistics in them. I also found it useful to learn that statistics can be transferred into other interests.”

“The symposium was a very effective supplement to our regular class because it turned my focus away from the actual content and towards application. This is especially helpful for this class because instead of only hearing about numerous theoretical situations, we were able to see examples of how real professionals interact with these strategies that we learn in class and how they apply them so that we can understand their conclusions in the news or a newspaper. This has made me appreciate what we learn, as well as understand why the strategies are so important to receive an accurate result.”

“My main conclusions from this symposium are that statistics is very essential to many different career paths, an understanding of statistics can help grow my critical thinking and analysis skills, and that statistics programs such as R and RStudio are looked well upon by employers as a very beneficial skill set to have. I plan to take at least one more statistics course after this semester and I think that statistics will definitely help me in higher level biology classes to enhance my understanding.”