

On setting up and debriefing data impromptus

Note: This is designed as a start of class activity. It can be used in conjunction with the [Graph of the Day](#) assignment.

What is a data impromptu?

Data impromptus are impromptu presentations where a student presents a slide with a graph that they have only had a short time to prepare. They are a critical teaching tool that helps students better design and present explanatory data visualizations. When done well, they foster a sense of class cohesion and show students that their perception of their skill level is usually not in line with their actual skill level.

Ideally, every student in the class will do at least one data impromptu during the course. It's helpful if students know that all of them will have to stand in front of their classmates, because it encourages them to treat others as they hope to be treated. My experience is that students recognize how difficult this is and tend to be very supportive of each other.

Why use data impromptus

Data impromptus serve a variety of learning objectives simultaneously; they:

- Give students more opportunities to practice presenting and public speaking while still keeping the focus on the data.
- Train students to project comfort they might not feel about the data they are presenting, helping to build presentation confidence.
- Reinforce best practices in design and expose design challenges. Well designed-slides are easier to present and design issues often show up when a student is trying to orient.
- Expose the class to a variety of graph forms and design choices.
- Provide an opportunity to discuss design choices in slides. (Typically after we give feedback to the presenter, I will shift the discussion to the slide itself).
- Allow students to experience both the presenter and audience role with some distance because it's not their work.

Setting up a data impromptu

The student presenting should be given a printed version (if in person) or an electronic version of the graph 3-5 minutes before the presentation. A TA can handle this process. I

write on the slide or have the TA message the student: “Please prepare TOP-T for this slide to present it to your classmates. Include a transition to a hypothetical next slide.” This slide should be accompanied by notes explaining any concepts in the slide that students might be unfamiliar with and provide any necessary context.

After telling the class who will present, I insist they clap and make some noise to welcome their classmate. If the response is tepid, I will stop the class and remind them how challenging this exercise is and that it is worthy of support.

On setting up the first data impromptu of the course

Setting up the first data impromptu is a critical moment to establish the norms that will continue throughout the course. The first slide should be straightforward to present. The first student chosen should be someone who appears comfortable in front of their classmates. If doing this in the first class, I have the TA ask a student who they think would be comfortable presenting.

Here’s the script I generally use after dropping a slide in front of the student who will present:

It’s very difficult for us to simulate what it is like for an audience to be exposed to information for the first time. We are going to do that throughout the course with data impromptus. How it works is the TA or I will put a slide in front of you and give you only a few minutes to prepare TOP-T for that slide. Then you’ll present the slide to the class.

If you don’t have a slide in front of you right now, you can breathe a sigh of relief. You won’t be doing an impromptu today, but everyone will get a chance to do one at some point in the course.

*One of the things I want you to practice during these impromptus is presenting with confidence. Everyone here knows you didn’t make this slide. Imagine your team handing you this slide right before a presentation. You need to present it with confidence to your managers, even if you disagree with the choices. I promise we’ll have time to talk about those choices **after** the presentation.*

When I announce who is going to present, I would like you all to express your support for your classmate, and gratitude that it’s not you, by erupting into applause. We’ll clap a lot in this class as a way to show support for how difficult it is to get up in front of your peers.

During the data impromptu

There’s not much to do during the impromptu. If the student does not finish their presentation with a transition to a hypothetical next slide, I will ask them to redo the transition. This cements the norm of providing transitions between slides and signals to the

rest of the class that it's time to clap again. I always clap loudly as soon as the student is done to boost class energy and move the class along.

Leading the debrief

I first have the students give feedback to the presenter. Afterward, I transition to a discussion on the slide's design. Good debrief practices create safety and push the students to a higher level, so I intervene often to maintain feedback best practices. See [How to facilitate productive student feedback](#).

Wrapping up

After discussing the design, end with the key takeaway. I usually frame this as “The key point I want you to take from this slide is...”

If possible, record the presenters

For all the reasons that this is a critical tool in teaching communications.

When students are visibly uncomfortable during the presentation

Students are often uncomfortable delivering impromptu. They will stammer, lose their place, and/or apologize to the audience for minor or imperceptible verbal gaffes. If the student is struggling to continue, I try to be encouraging and remind them that this is a very difficult task. If the class is bonded, you can sometimes get the other students to cheer on their classmate. More often, however, a presenter will apologize to the audience for not knowing something, stumbling, or losing their place.

I ask the audience to provide feedback on this. Reliably, someone says that the apology wasn't needed or that the long pause, while noticed, didn't significantly detract from the presentation. If the presenter is unconvinced, I may ask the class, by show of hands, who agrees with this feedback. I may suggest that the presenter “Consider, just consider, the possibility that your classmates are telling you the truth.” I'm amazed how well this line works from undergraduate students through late career executives.

Sources for impromptu slides

I'm always on the lookout for new impromptu slides. My rule is that the slide must have appeared in the wild for use in class. That means no slides conform to all the best practices, so I frequently remind students that these are real slides. They often express frustration that

they don't see more "good" slides. I acknowledge their desire for models that express all the best practices of the class, but try to guide them to the view that the right choice is the choice that serves the audience. There's no such thing as a perfect slide.

Some resources I use for impromptu slides:

- Some slides from my [Data Impromptu Slide Library](#)
- My favorite source is Mary Meeker's Annual Internet Trends Report. It's full of topics that students can immediately understand, with a data density that doesn't quite present easily. Unfortunately, she has not reliably updated it during COVID. It's a great source of discussion. <https://www.bondcap.com/#internettrends>
- Presentations from venture capitalists and early stage investors. Many VCs produce analyses designed for general business consumers. These slides are less technical than most investor presentations, but students still often need context.
- Consulting firm whitepapers. These slides are often conceptual enough to support the kinds of conversations desired in class.
 - <https://www.bain.com/insights/>
 - <https://www.mckinsey.com/featured-insights>
 - <https://www.bcg.com/en-us/featured-insights/thought-leadership-ideas>
 - <https://www.accenture.com/us-en/insights/voices>
- IPO roadshow presentations: <https://www.retailroadshow.com/>
 - The SEC website also hosts copies of roadshow presentations