

$$F = G \frac{m_1 m_2}{d^2}$$

Research in the Classroom

A panel offered by the Faculty Success Office and the
Division of Research & Innovation

$$\phi(x) = \frac{1}{\sqrt{2\sigma^2}} e^{-\frac{(x-\mu)^2}{2\sigma^2}}$$

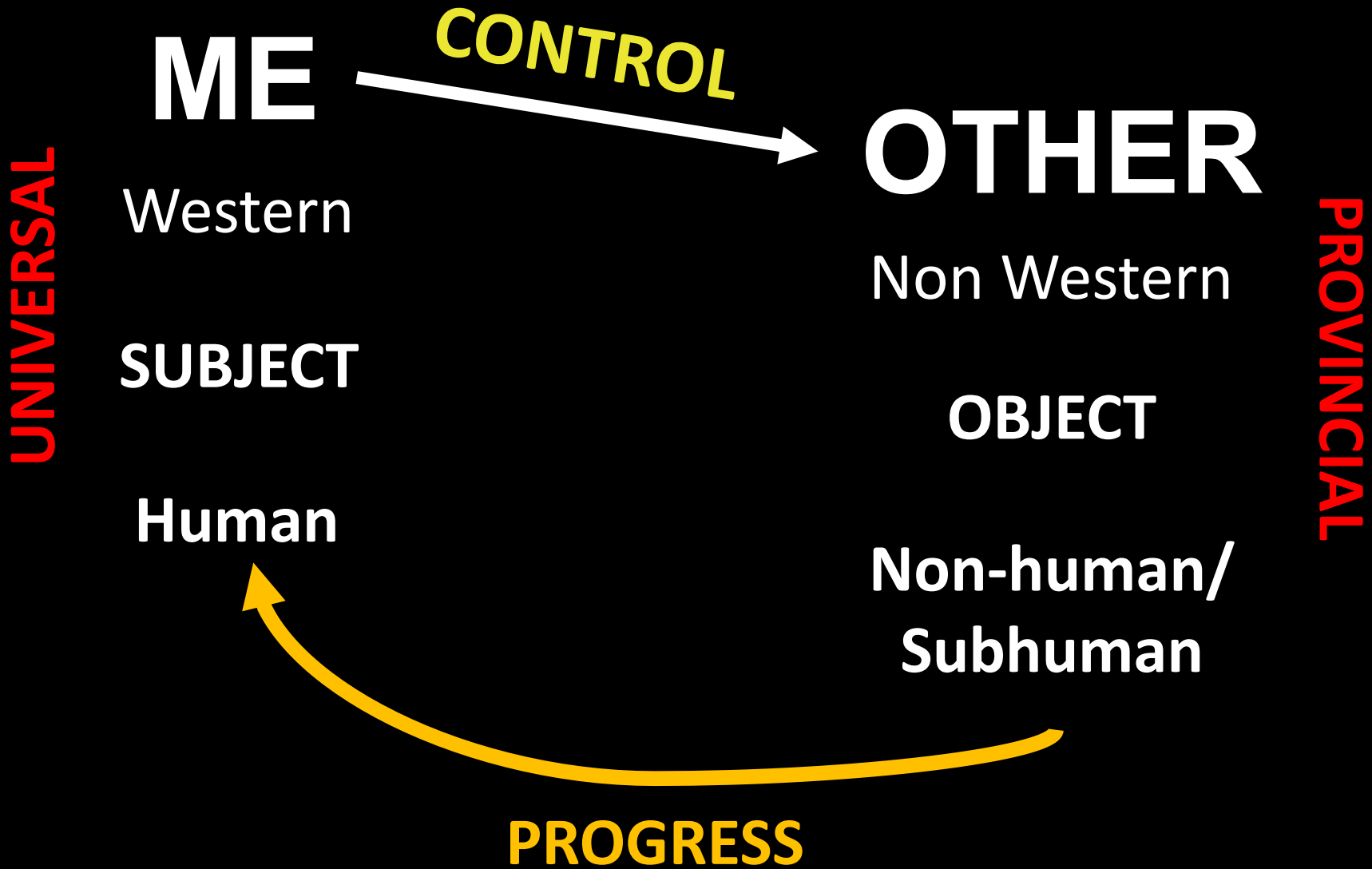
$$E = mc^2$$

$$ds \geq 0$$

$$\frac{df}{dt} = \lim_{h \rightarrow 0} \frac{f(t+h) - f(t)}{h}$$

What the environmental crisis has to do with this picture?





Mental Map Exercise



Perception of Food Project – Coding Interviews

Research title: Perceptions of Quality of Food and Nutrition Among UNT Students

Purpose of study: The research will describe and evaluate aspects of what is considered food and nutrition of quality by the students, especially in relation to the food services offered by UNT.

Codelist

food quality	General aspects of food quality
food nutrition	Any aspects related to food in terms of nutrition
food health	General aspects of the relation between health and food
food unhealth	Anything related to unhealthy food

Interviewer: Yeah, yeah. Would you say that quality is something that is important to you when you're making choices about your food in your day to day, or is it more something that just kind of happens you're like, oh, that's great?

P3: So, for me, it's varied and sometimes specific, like, one thing that I personally have is, whenever I go to the store to get butter. I always get real butter. I don't care how expensive it is, 'cause a lot of cheaper butters are spiced with, like, seed oils and that sort of thing.

Interviewer: Absolutely

P3: I- I find personally, that butter just tastes better at the end of the day. But yeah.

Interviewer: Absolutely. So. So what comes to mind when we start talking about, like, healthy versus unhealthy food?

P3: So, unhealthy foods would be like, fried foods, sodas. I've just got kind of, very, like, a classical, standard mindset about it. And then, obviously, healthy foods are like, you know, fresh meat, fresh vegetables, milk, butter, like, all that sort of stuff.

Interviewer: Mhmmm. Is healthy food something that guides your decision making process on the day to day, basis or is it more something that's a little bit more passive?

P3: So I- I am fine with getting unhealthy food. But as long as most of the time I'm getting healthy food at the end of the day, that's kind of what really matters. Like, like, going back to my Eagle landing meal, like, you know 2 cups of milk, pulled pork, and that sort of stuff, however, it's kind of offset a little bit by the macaroni and the biscuits and gravy, but I consider that kind of okay, because I'm getting cleaner protein, anyway, than like, fried chicken tenders or something.

food nutrition

food health

Let's see, how do I define healthy? I just, I don't know if I have a definition. I just know that I remember like growing up in school, you know, your fruits, your vegetables, your salads, you know, your greeneries, those types of things, healthy. I did learn, cause I do enjoy going to Mean Green. Is it Mean Green? Yes, Mean Green, the vegan dining hall. That's a different type of healthy because it's deceiving because it looks just like just ordinary food, but it's so healthy in a sense because it's vegan. So, I don't know. I think the healthy piece that I would define would be just kind of what I was taught in school, when school, your vegetables, your fruits, yogurts, granolas, those types of things.

00:13:16 Caliopy

I'm curious how your kind of concept of healthy and as it applies to your own eating choices has changed over time.

00:13:27 CA

So, I will tell you. So, when I first got here, I must have gained 30 pounds cause I was eating every day and I was trying to look up the actual restaurant inside of Eagle Landing. But every day, I think it's something Haven. Does that sound about right? Let's see. Leave, Bamboo, Clark, let's see. It's Avenue A, I believe it's what it's called. And that's where the good fried chicken and the mac and cheese and the okras and all the strips and everything. And I was eating that like it was my comfort food because it's what I, I'm a Southern boy. So, I mean, it's down home cooked meals. So, I was eating that and I found myself like, I'm gaining some weight because you go back to the definition of healthy. I know that, you know, a fried food or in this case, maybe pressure cooked food or whatever. It's not your best. So, I need to be able to leave and eat some greenery and all of that. So, it changed over time where I still enjoy Avenue A and eating my Southern food, but I really try to participate and get a few heppings of Kewon or salads and fruit and yogurt and granola to balance it. So, that way I won't eat so much of what we would consider unhealthy, but it's so good.

00:15:01 Caliopy

Yeah, yeah. And you mentioned it as being comfort food.

00:15:05 CA

Yes. Yeah, well, because I mean, you know, I would usually eat it for dinner. And so, at dinner, you want a nice sensible meal and I don't cook. And so, me living on campus is a cost savings in a sense and time savings because I get to go and enjoy all of the dining experiences here. And, but when I want a meal, I want a good down home cooked meal. And so, I usually go over there at Eagle Landing and Avenue A is usually my spot because it's what I'm used to.

food quality

ire is, is pretty much

food unhealth

food unhealth

food unhealth

Cross-exercises in class

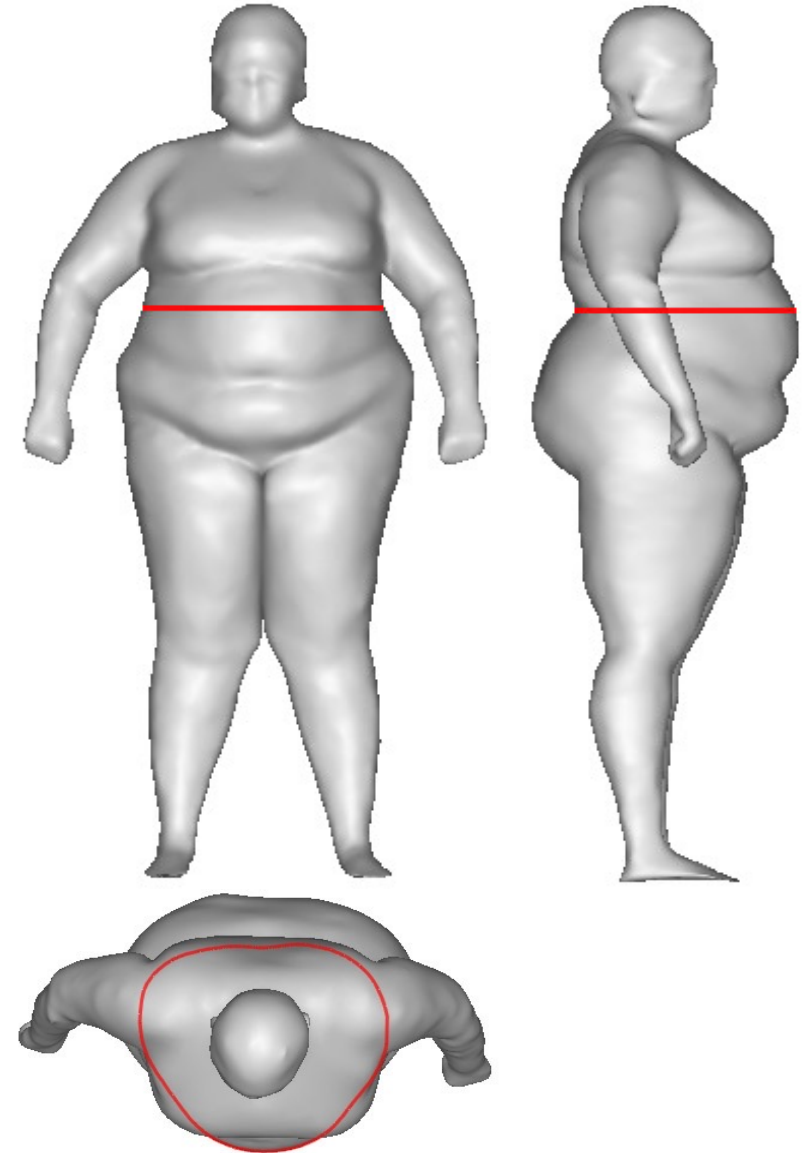
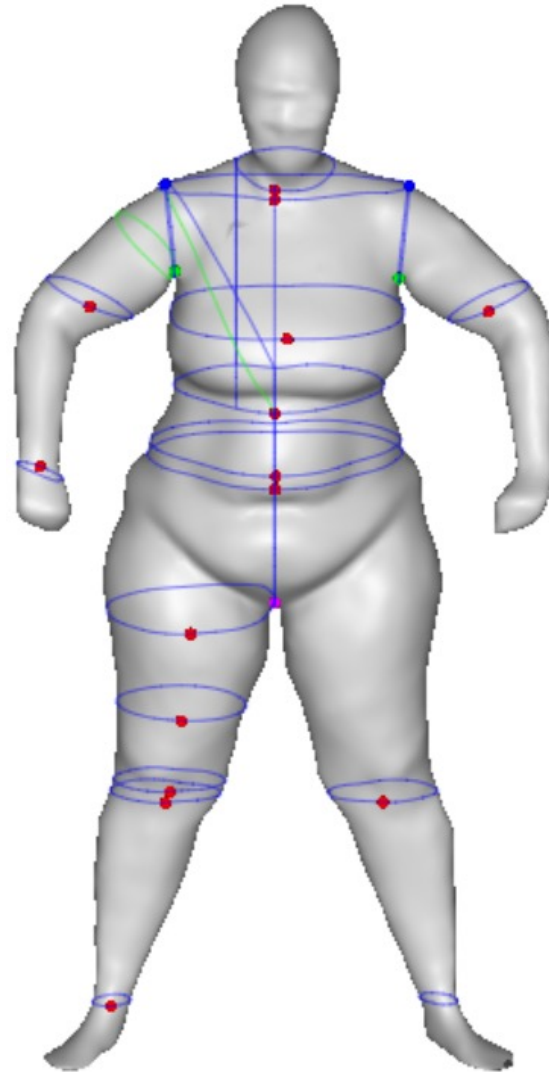


Building a management plan for 2 Protected Areas

Big-body Size Survey Using 3D Scanning System

Landmark:

- Neck
- Shoulder
- Chest
- Waist
- Ab
- Hip
- Thigh
- Knee
- Calf



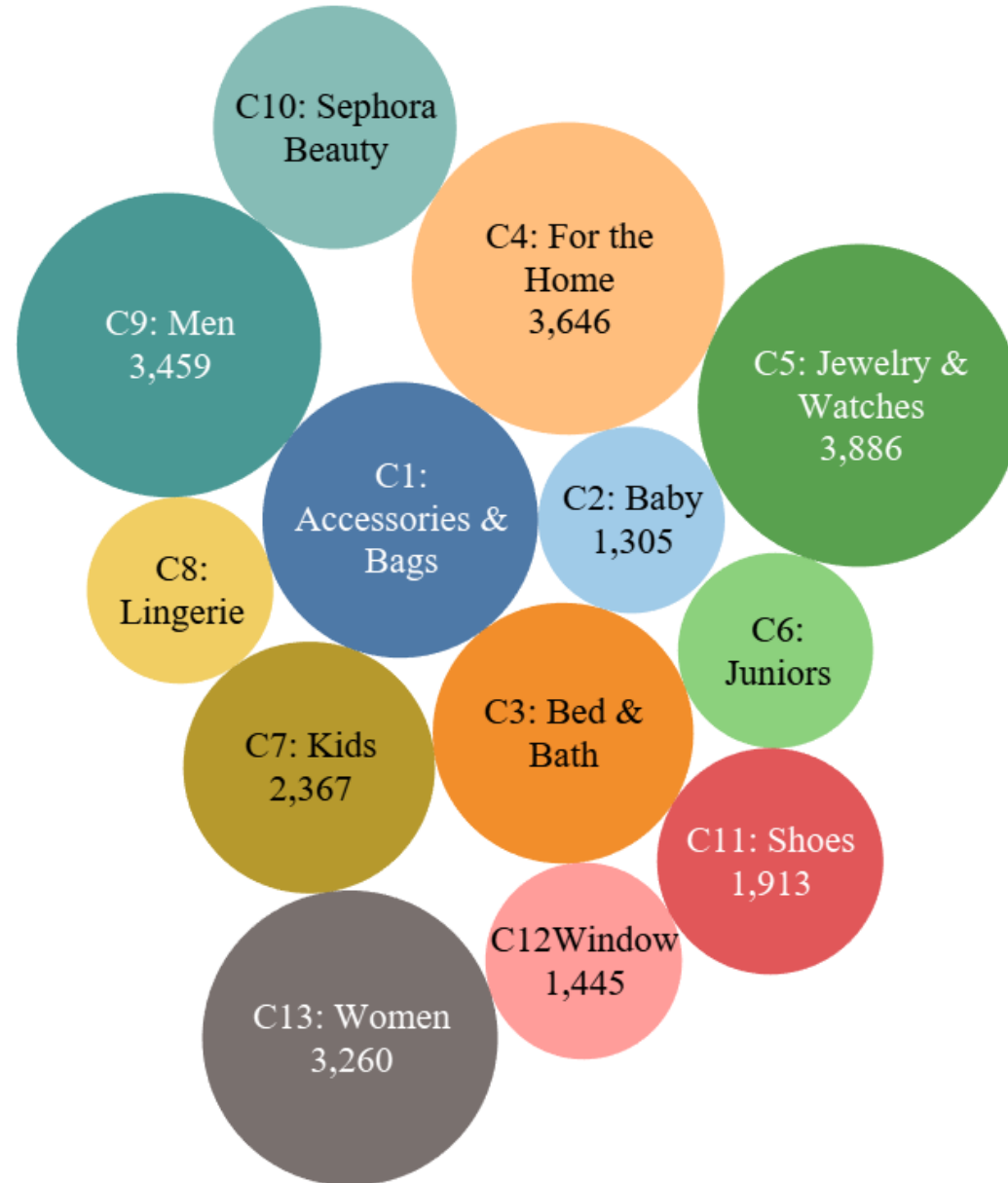
Web Mining for Consumer Analytics

Crawling retailer's website: <https://www.jcpenney.com/>

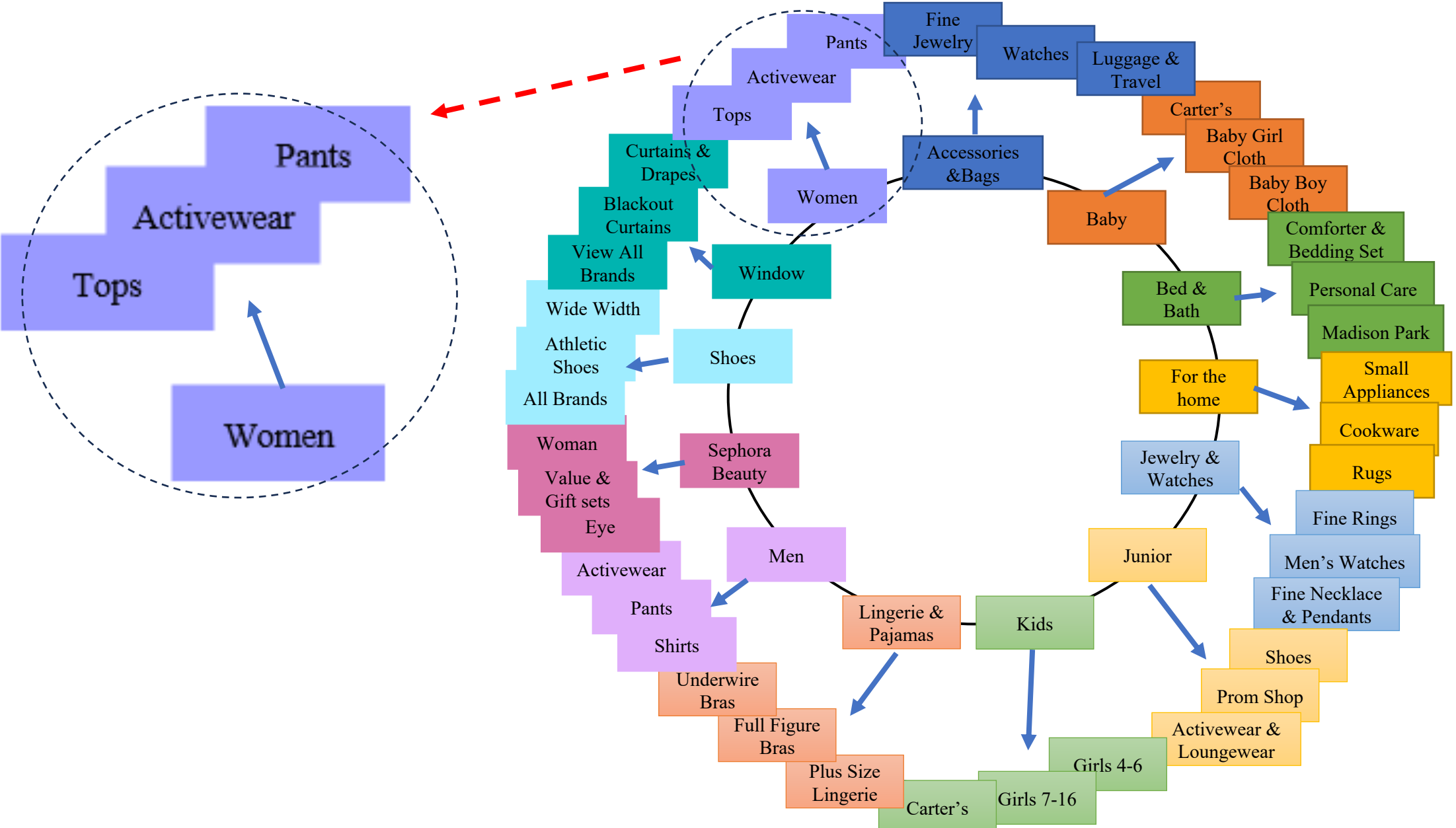
ID	Nickname	Age group	Gender	Location	Product _name	Product _category	Product _price	Review _date	Rating
1	LadyFville	Over 60	Female	NY	Stripe legging	Woman	32.99	2018-02-28	4
1	LadyFville	Over 60	Female	NY	Power Stripe legging	Women	6.99	2018-02-28	5
2	O2Gramma	Over 60	Female	MD	Wireless Full Coverage Bra	Lingeries& Pajamas	25.99	2013-09-18	5
2	O2Gramma	Over 60	Female	MD	Flip Flops	Woman	16.8	2012-05-17	5

A total of **151,797** records. The students analyzed the data and draw business insights.

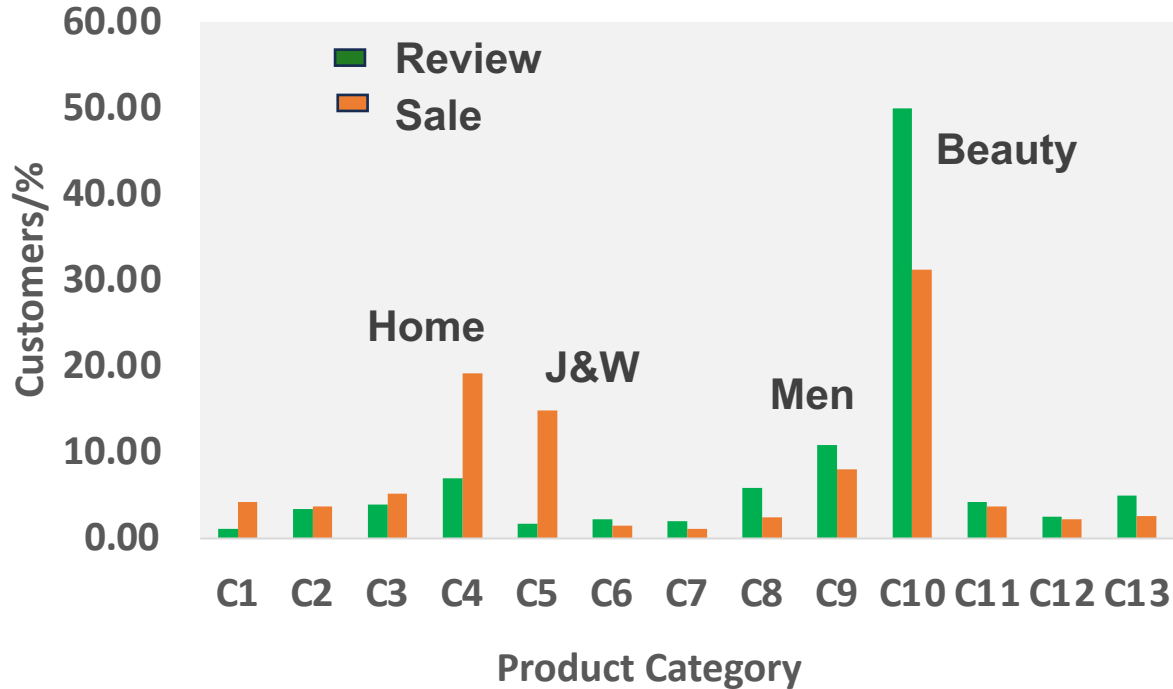
Main Categories of Purchased Products



Top 3 Subcategories in Each Main Category



Review, Sale and Price Distributions



Most popular

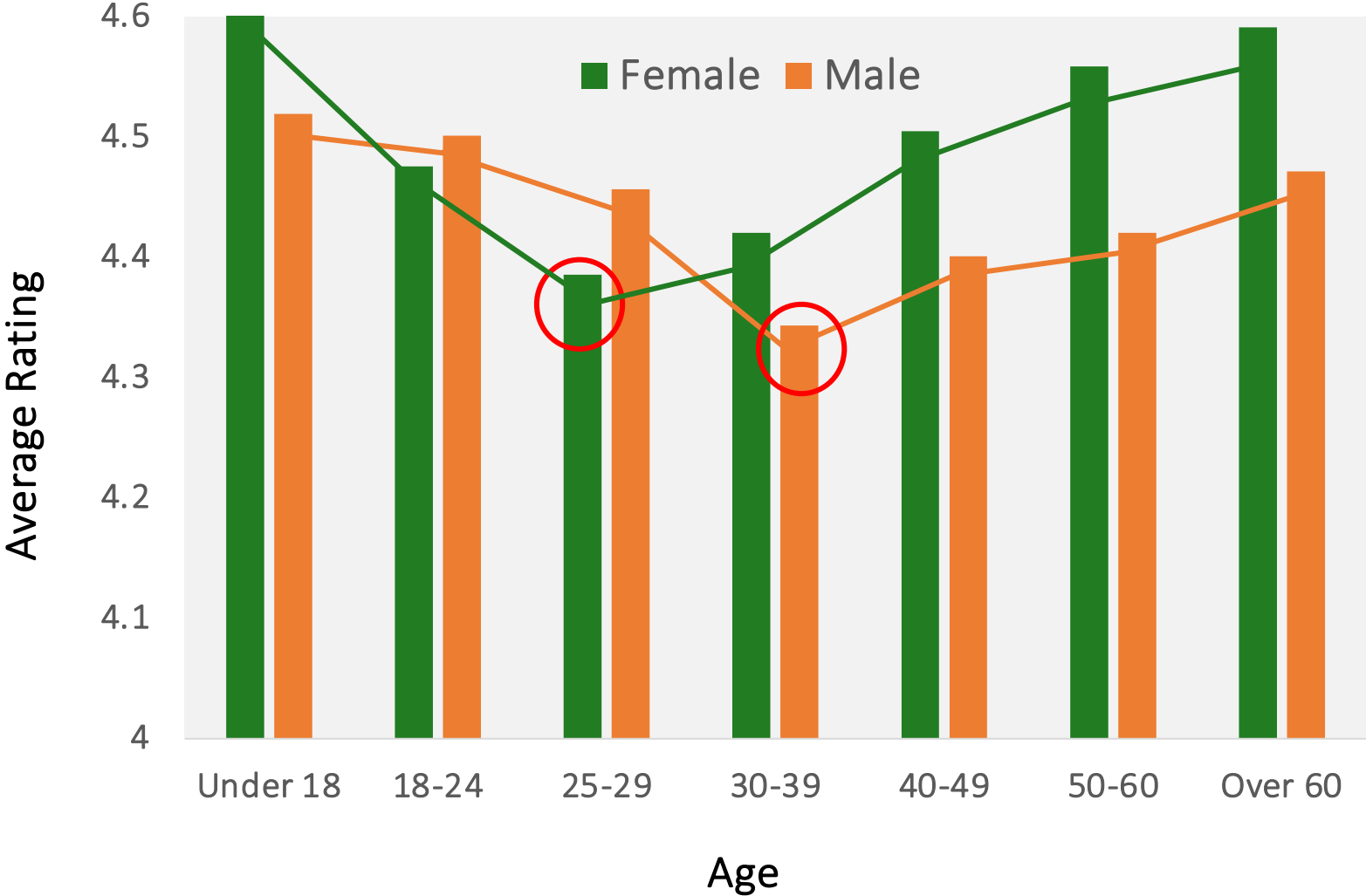
C10: Beauty



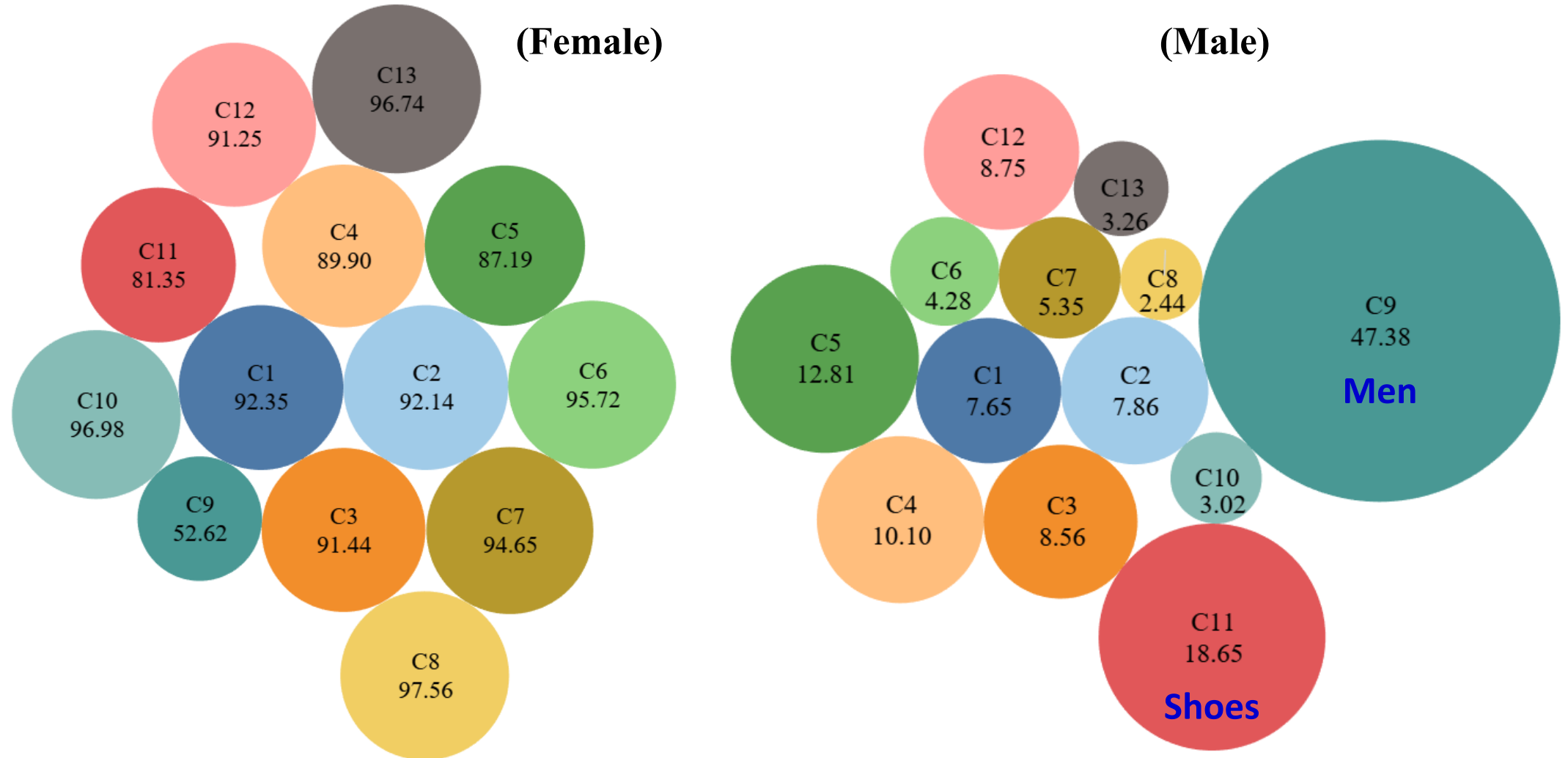
Most expensive products

C5: Jewelry & Watches

Rating Comparison by Age and Gender



Purchase Distributions by Gender



Accessories & Bag (C1), Baby (C2), Bed & Bath (C3), Home (C4), Jewelry & Watches (C5), Juniors (C6), Kids (C7), Lingerie & Pajamas (C8), Men (C9), Beauty (C10), Shoes (C11), Window (C12), Women (C13)

Additional Resources

Developing Course Undergraduate Research Experiences (CUREs) in Chemistry:

<https://pubs.acs.org/doi/epdf/10.1021/acs.jchemed.2c00390>

Developing Course-Based Research Experiences in Discipline-Based Education Research: Lessons Learned and Recommendations:

<https://journals.asm.org/doi/full/10.1128/jmbe.v19i2.1567>

Specific Assignment Examples: Laboratory Experiment Manuscript (Inorganic Chemistry Lab Multi-Week Research Discovery Experiment, Collaboration with Dr. Mohammad Omary): <https://pubs.acs.org/doi/full/10.1021/acs.jchemed.2c00288>

Paper: "Preparing Teaching Assistants to Facilitate Course-based Undergraduate Research Experiences (CUREs) in the Biological Sciences: A Call to Action" - <https://www.lifescied.org/doi/10.1187/cbe.22-09-0183>

Perusall via Canvas--You can find it in the "navigation" section of your settings within any canvas course.

Eve Tuck on suspending damage: https://pages.ucsd.edu/~rfrank/class_web/ES-114A/Week%204/TuckHEdR79-3.pdf

Resources/Questions from the Chat

How do you deal with IRB with students and classroom research?

- We had IRB prior to the class. IRB takes time. Have it in place and modify it if needed.
- Yes! A lot of advance work to set up the IRB, but then you can modify the application to ensure students are able to contribute to co-production of knowledge.
- I highly recommend connecting with one of our IRB staff members to help with the design as well - if you have questions or thinking about ways that you can include an IRB that would be sustainable as you teach the same course over and over.

What kind of technologies (software or programs) do you regularly use to foster research and collaborative projects in your classrooms? Even in lectures too. I am curious!

- For qualitative research, we have used brainstorming and visualization software like Miro. Dedoose has also been a really great collaborative qualitative data analysis software.
- I use tools such as Qualtrics, Poll Everywhere, or Mentimeter.
- Zoom - for interviews/transcriptions as well.
- We used Tableau and Power BI for data analytics.

I would also suggest reaching out to your department subject librarian. UNT Libraries has a number of resources that may help faculty and students with research. Check out the following url if you need further info.

<https://library.unt.edu/subject-librarians/>



We Want to Hear From You!

Thank you for participating today! Please give us your feedback on this workshop in this brief survey:

https://unt.az1.qualtrics.com/jfe/form/SV_agw7GbxvUpsXH06

