

## August 24, 2020 newsletter theme: Back to school!



**Dear Grey House team and esteemed colleagues,**

Hi lovely quaranteamates!

It's now 174 days into our team-building adventure, and.....

**It's time to go back to school!**

Meanwhile, here is all the news I have that's fit to print since 17 August:

### **FIRST THE HAPPY NEWS!**

**Temi did a radio show about the 4-decades of mental health project.** Top of Mind with Julie Rose is daily, live news, talk and interview show heard nationally on BYUradio's satellite channel (SiriusXM 143), online at [byuradio.org/topofmind](http://byuradio.org/topofmind) and via iTunes or TuneIn radio apps [from 4:00-8:00 pm EDT](#). SiriusXM has a national subscriber base of over 26 million listeners. Podcast downloads of the show are available on iTunes, Spotify, Stitcher, TuneIn and Google Play. In Northern Utah, BYUradio can be heard on 107.9FM.

**More happy news!**

**Our Chloe Wong promoted to Senior Lecturer at KCL! Go Chloe go!**



**Upcoming August birthdays, send greetings now! Tracy D'Arbeloff Aug. 26<sup>th</sup>.  
(If I don't have your birthday, send it to me!)**

### **NEXT, THE UNHAPPY NEWS:**

**Temi's dad, the real Terry Moffitt, has been in hospital for a week.** He is being moved this week to a senior care center to see if he can regain his strength.

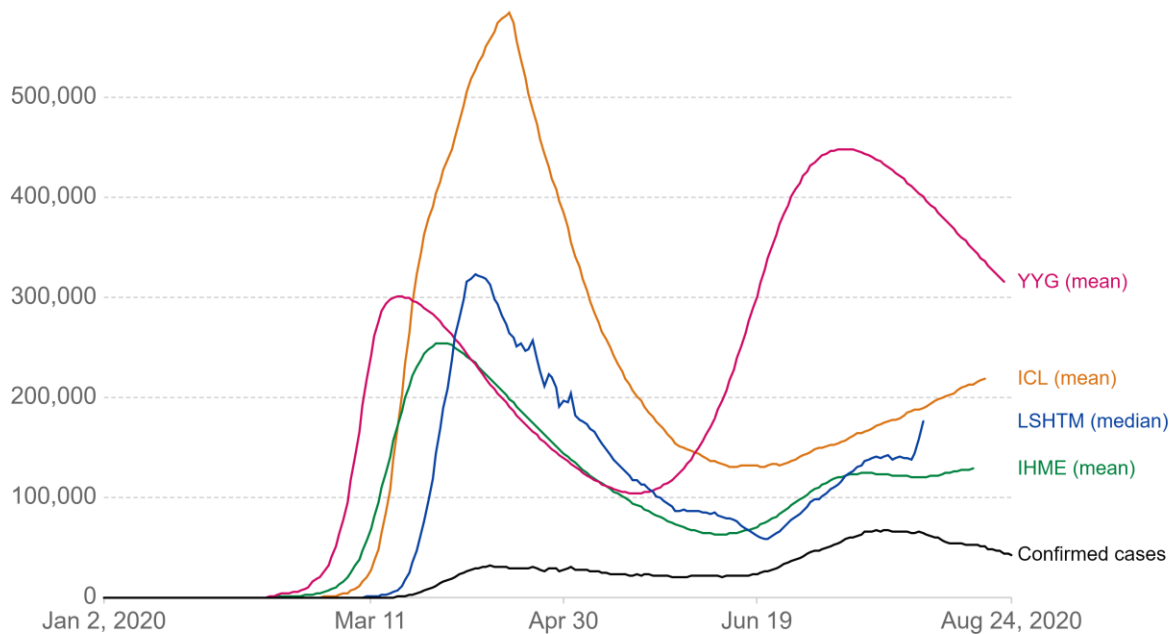
Please give us a bit of leeway this week as we don't entirely have control over our work schedule. And Tem and Avshalom have become parents of little Josie, Dad's dog.



## More un-happy news: In case you have been wondering how many people really have the Coronavirus.

### Daily new estimated infections of COVID-19, United States

Mean estimates from epidemiological models of the true number of infections. Estimates differ because the models differ in data used and assumptions made. For comparison, confirmed cases are infections that have been confirmed with a test.



Source: ICL (2020), IHME (2020), YYG (2020), LSHTM (2020), ECDC (2020)

OurWorldInData.org/covid-models • CC BY

Note: This chart shows the latest available model estimates as of 23 August 2020. The uncertainty range for each estimate is not shown here but can be found in the individual model charts.

A key limitation in our understanding of the COVID-19 pandemic is that we do not know the *true* number of infections. Instead, we only know of infections that have been confirmed by a test – the confirmed cases. But because most infected people never get tested, we know that confirmed cases are only a fraction of true infections. How small a fraction though?

To answer this question, several research groups have developed epidemiological models of COVID-19. These models use the data we have – confirmed cases and deaths, testing rates, and more – plus a range of assumptions and epidemiological knowledge to estimate true infections and other important metrics.

The chart here shows the mean estimates of the true number of daily new infections in the United States from four of the most prominent models. For comparison, the number of confirmed cases is also shown.

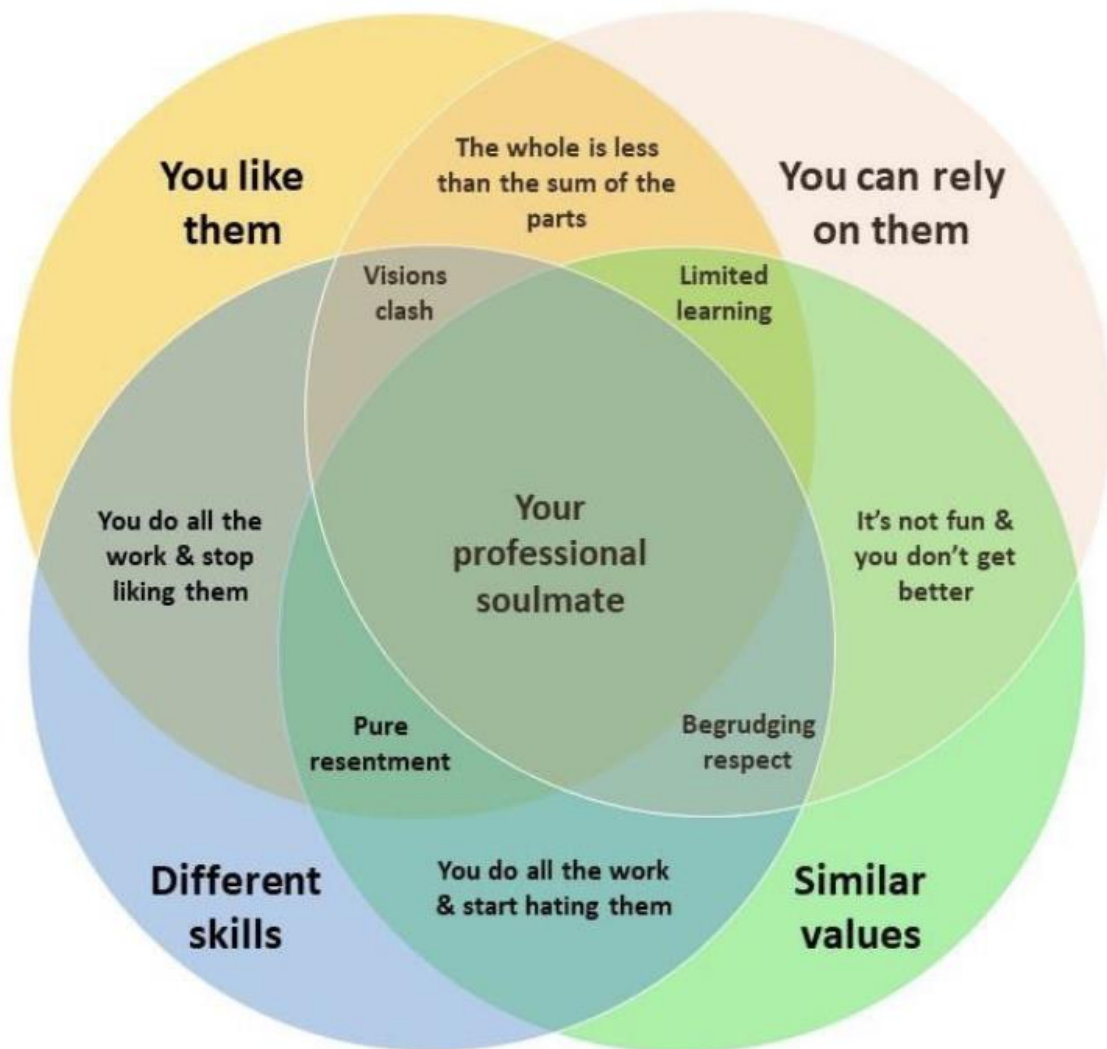
**Learn more at:** <https://ourworldindata.org/covid-models>



## Science-visualizations:

From Jessie Baldwin in London...

### How to Pick a Collaborator



adamgrant.net

## DUKE LIBRARIES Center for Data and Visualization Sciences

The mission of the [Center for Data and Visualization Sciences](#) is to partner with faculty, researchers, and students through consultation, instruction, co-curricular programming, and research assistance throughout the research data life cycle.

### Data Workshops

[CDVS Data Workshops](#) are moving fully online for fall 2020. Join us to learn more about data science tools, data visualization, research data management, digital mapping, and much more. [Registration and course information are available online](#). We are also happy to provide access to our online collection of [previously recorded workshops](#).

### Consulting Services

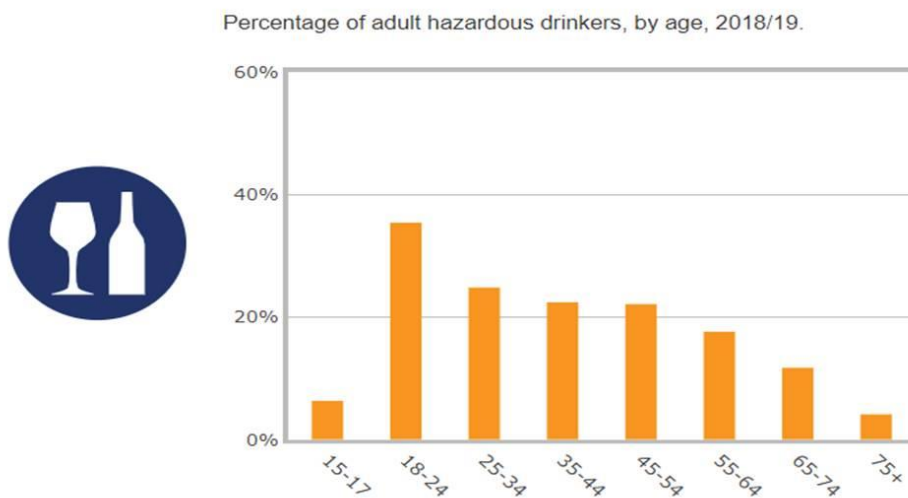
Questions about data tools, visualization strategies, data publishing, and digital mapping? We are happy to consult with you by email ([askdata@duke.edu](mailto:askdata@duke.edu)), zoom, and [chat](#). Our team of consultants can address your questions and concerns about data driven research. We look forward to hearing from you (or your research team)!

### Data News and Events

As part of efforts to reach both the local and international Duke data community, CDVS has expanded our online sources of information on data news and events. Our [CDVS-Announce monthly data newsletter](#) provides monthly details on data events, sources, and training. The [CDVS Blog](#) provides regular stories on data resources, methods, and tools at Duke. Finally, our twitter feed [@duke\\_data](#) rounds out our social media presence of Duke.

## Alcohol as a hazard in New Zealand, data visualization from Barry and Stephanie:

### Hazardous drinking



- One in five adults (20.0%) drank alcohol in a way that could harm themselves or others.

## RESEARCH-PROJECT PROGRESS SINCE 17 August:

New article in ***Nature*** from Dr. Ed Mabaya, husband of our former team member Dr. Krisztina Tihanyi who worked with us at Univ of Wisconsin, both now at Cornell:

“Averting hunger in sub-Saharan Africa requires data and synthesis.”

[https://www.nature.com/articles/d41586-020-02281-w?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+nature%2Frss%2Fcurent+%28Nature+-+Issue%29&utm\\_content=Google+Feedfetcher](https://www.nature.com/articles/d41586-020-02281-w?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+nature%2Frss%2Fcurent+%28Nature+-+Issue%29&utm_content=Google+Feedfetcher)



**More research progress.....**

**Maria Gehred's first-year project paper was submitted to *Biological Psychiatry*, AND SENT OUT FOR REVIEW THIS WEEK.** “Long-term neural embedding of adverse childhood experiences: a population-representative birth cohort followed for five decades.” Good luck Maria!

**Jasmin's paper submitted to *American J of Psychiatry* last week, YAY! YAY!:** “History of psychiatric illness as a risk factor for accelerated aging: Evidence from a population-representative longitudinal cohort study”. Fingers crossed!

**Submitted at last! This behemoth paper, with some of our team as authors.**

Becker, Joel, Casper A.P. Burik, Grant Goldman, Nancy Wang, Hariharan Jayashankar, Richard Karlsson Linnér, **Daniel W. Belsky**, Aaron Kleinman, David Hinds, 23andMe Research Group, **Avshalom Caspi**, **David L. Corcoran**, **Terrie E. Moffitt**, **Richie Poulton**, **Karen Sugden**, **Benjamin S. Williams**, Kathleen Mullan Harris, Andrew Steptoe, Olesya Ajnakina, Lili Milani, Tõnu Esko, Jessica D. Faul, Erin B. Ware, David R. Weir, William G. Iacono, Matt McGue, Patrik K.E. Magnusson, K. Paige Harden, Elliot M. Tucker-Drob, Pamela Herd, Jeremy Freese, Alexander Young, Jonathan P. Beauchamp, Philipp Koellinger, Sven Oskarsson, Magnus Johannesson, Peter Visscher, Michelle Meyer, David Laibson, David Cesarini, Daniel J. Benjamin, Patrick Turley, and Aysu Okbay (submitted). "The Polygenic Index Repository: Resource Profile and User Guide." *Nature Human Behaviour*

**Christina Carlisi and Essi Viding's paper was submitted to JCPP** this week. It was submitted to Molecular Psychiatry last week, and....the editor attempted to transfer it to his other, new journal, but we demurred. "Associations between life-course-persistent antisocial behavior and subcortical brain volume in a population-representative longitudinal birth cohort." Resubmitted.

**Jasmin blazed a trail of research progress this week!!!**

- Pmort Vital Personality paper is submitted
- P and Aging paper is submitted
- Review on polygenic scores and developmental psychology (with Ben Domingue and Emma Armstrong-Carter) is submitted
- Revised MRC and 1958 cohort access applications are submitted
- SRCD abstracts are submitted
- NPJ Learning commentary with Sophie has come back from review as a revise and resubmit (reviewers' comments were longer than the actual commentary, gulp! But all manageable, we hope)
- Cincinnati team's Parenting/Genes results have come back

***Not that there aren't a thousand other things I still want/have to do, but it's still nice to have a few things gone from my desk or at least progressed to the next stage 😊 Jasmin***



### Peer Review (*Tune: Be Our Guest*)

Peer review, peer review  
It's a lot like Waterloo  
You send off your best and finest  
To come back as barbecue  
It's your pride, it's your joy  
And they treat it like bok choy  
They will slice and dice and rice it  
Pan it twice and sacrifice it  
They've no heart, no respect  
Their default is to reject  
And they act like they're the kings of Katmandu  
They do their hatchet job. Just one more lynching mob.  
It's peer review, peer review, peer review

Peer review, peer review  
It's infernal déjà vu  
Cause they all consult one textbook:  
50 Shades of Misconstrue  
"Doesn't add to the lit"  
And "the length doesn't fit"  
"Please restate, update and weight it"  
Then they rate it. Don't you hate it?  
Did they read what you wrote?  
Did they just get off the boat  
With distemper or a case of stomach flu?  
How can they scoff and sneer  
At things you hold so dear?  
It's peer review, peer review, peer review

Peer review, peer review  
It's a court of kangaroo  
Where a bunch of half-wit, has-beens  
Treat your pearls like doggy do  
There they hide in the dark  
And apply their snide and snark  
But the day of reck'ning's coming  
We'll be drumming on their plumbing  
Let's give them a surprise  
We unmask their thin disguise  
We'll pick up the phone and call ACLU  
To hell with referees  
We need apologies, From guess who? Peer review is me and you.

**Projects underway and making good progress on the march toward mock review:**

Barry's paper on loneliness

Aaron Reuben and Helen Fisher, air pollution and mental health (E-Risk).

Leah and Signe Andersen, education disrupts the intergenerational transmission of disadvantage (Danish registers)

Jasmin Wertz, parenting genomics in multiple cohorts (many cohorts)

Kyle Bourassa and Line Rasmussen, stressful life events and suPAR (Dunedin)

Max Elliott & Line Rasmussen, brain and suPAR (Dunedin)

Karen Sugden, education and the methylation pace of aging (many cohorts)

Geli Ronald and Lizzie, Autism Q and p (Dunedin)

Franky Happe and David, Autism Q and midlife health (Dunedin)

**Leah and Jasmin have been invited to initiate projects in the Early Growth and Development Study**, launched by David Reiss, an adoption study that has assessments of biological parents as well as adoptees and adoptive parents.

**SSGAC (the social science genetics consortium) has provided Dunedin and E-Risk with about 40 new polygenic scores**, from enormous GWAS incorporating UKBiobank and 23andMe. **Honalee** has been hard at work managing this new influx of valuable data. The new scores will shortly be available to our team for analyses.

**Sean Hogan in Dunedin delivered two new admin data sets to Honalee:** Accident Compensation Corporation and Ministry of Social Development. Ministry of Health to come.

**Kyle is drafting a grant application** to the American Heart Association, who are postponing their usual application deadlines.

**Barry and Stephanie in Auckland** are doing analyses in the NZIDI for the new paper with Leah on deaths of despair.

**Ben finished analyzing polygenic scores for Jorim Tielbeek's antisocial meta-GWAS in E-risk and Dunedin.** Delivered amazing findings to Jorim and JC Barnes last week in a zoom meeting.

**Ben is also deriving the education3 polygenic score in the ALSPAC** data that Jasmin has obtained, as soon as ALPAC Deliver their data Thanks Ben!

**Ben is further investigating** brain biomarker plasma assays, investigating UK data sets that have methylation data for validating the DunedinPoAm, and reviewing methodology for Dunedin and E-Risk telomere work.

**Susan** is doing a budget for a new application to NIA, chasing up **Max's** fellowship, developing different budget scenarios to handle any potential cuts to the cannabis grant, working on **Stephanie's visa**, and maintaining our website. [www.moffittcaspi.com](http://www.moffittcaspi.com)

**Susan** is working with Emiko Higashi and Harvard University Press to promote our book with zoom book launches in September and October.

**Honalee's creating a spreadsheet table of reasons for missing data at Phase 45 in Dunedin.** 94% of Study members took part at 45. However, variable by variable, there are a few data missing for many different reasons. Before phase 52, we want to inform PI's about opportunities to improve their data-collection and avoid missing data.

**Antony Ambler in London is** analysing incoming data from the E-risk survey.

**Annchen, Maria, Max** are making progress on characterizing gradients of brain organization.

**Jasmin's working with Sara Jaffee** on an application to study the Next Gen sample of Study member's children in Dunedin.

**Aaron and Max are writing applications for clinical hospital internships** while also starting new clinical rotations.

**Jo Newbury is updating some of the neighbourhood data on E-Risk twins,** because now she can reduce missing data.

If you are working on something you want others to know about, please let me know.

## Resources:

Duke's COVID-19 testing program can be found here:

<https://coronavirus.duke.edu/covid-testing/>.

Results for N of cases on campus are updated every Monday.

**Don't Forget to check the American presidential race poll** being updated daily by the Economist.

<https://projects.economist.com/us-2020-forecast/president>

## FYI - VOTING INFO

North Carolina Residents.

You can check your NC voter registration status here:

<https://vt.ncsbe.gov/RegLkup/>

Register online if you have an NC license or DMV-issued ID here:

<https://www.ncsbe.gov/Voters/Registering-to-Vote>

Info on NC absentee voting, here:

<https://www.ncsbe.gov/Voting-Options/Absentee-Voting>

One stop website for residents of other states:

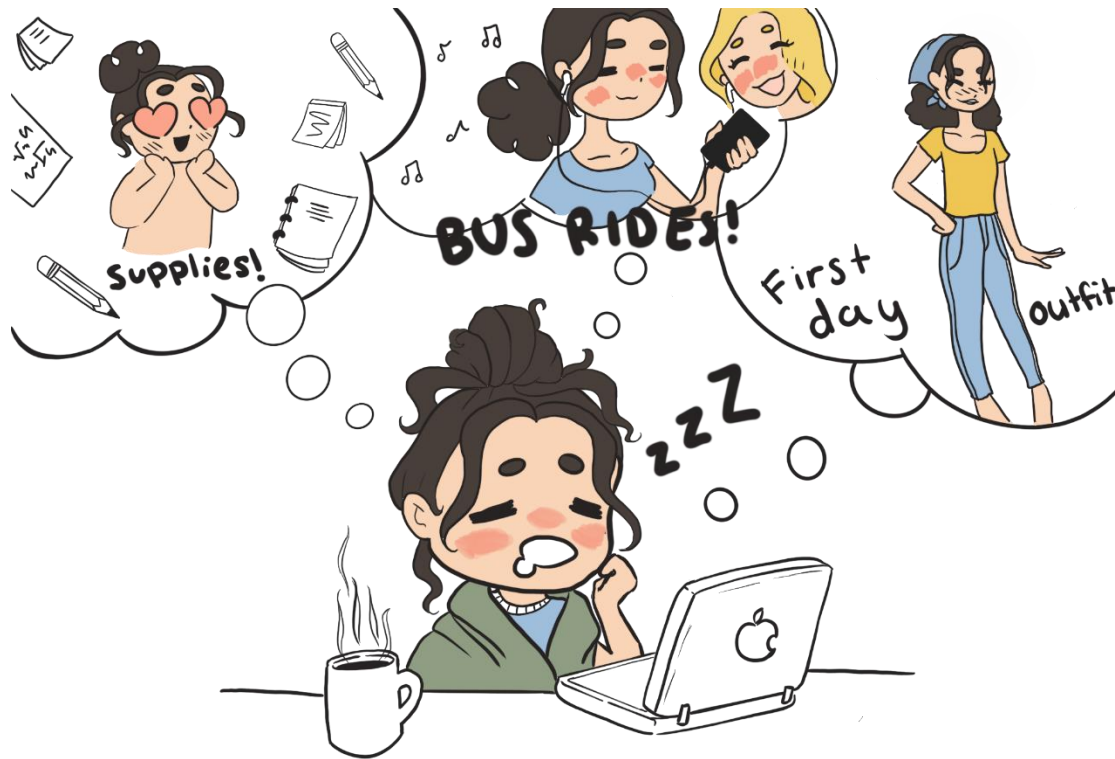
Register - <https://www.usa.gov/register-to-vote>

Early voting/absentee voting: <https://www.usa.gov/how-to-vote>

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## This week's newsletter theme: **Back to school!**



**Art by Izabella Mabaya, age 13, Ithaca New York. Yes, she is the daughter of Ed and Krisztina, who you met earlier in this newsletter!**

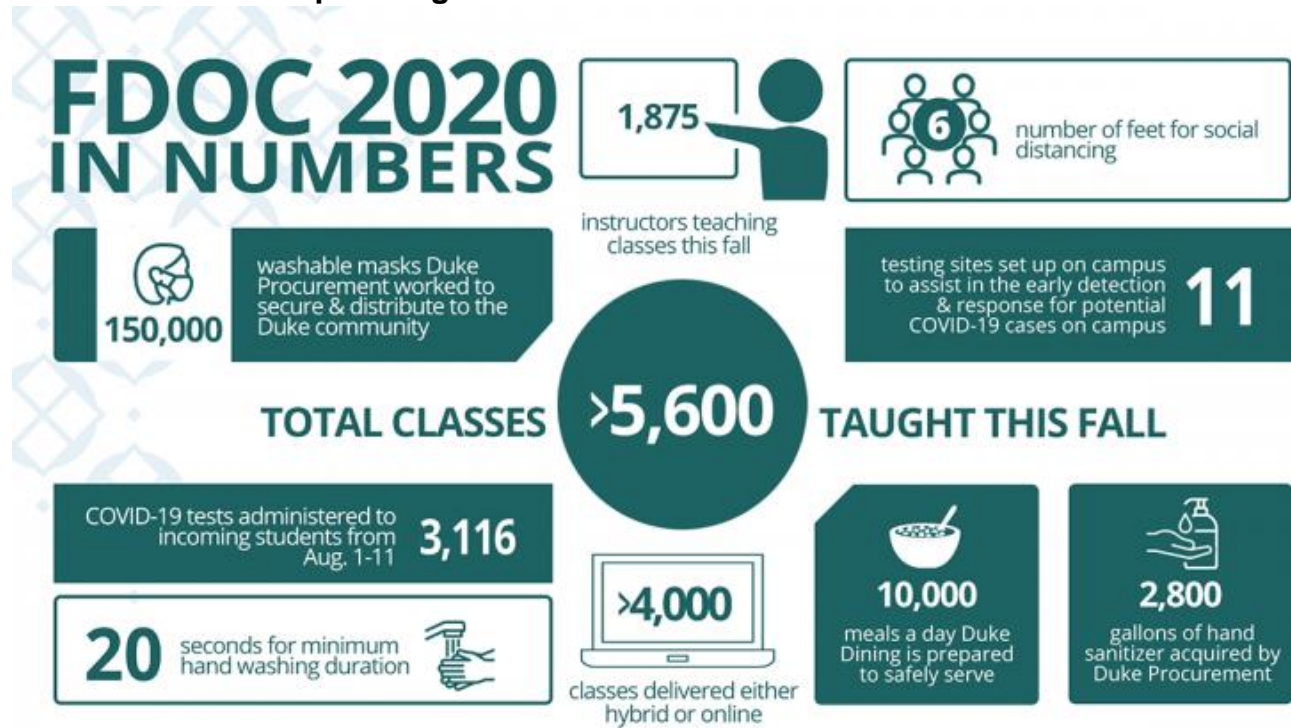
For me, back to school is my favorite time of the year, as I'm sure it is for other students. I like shopping for new backpacks and school supplies, listening to music on the way to school, and eating lunch with my friends (not to mention picking out outfits for the first day of school!). This year will be different in many ways. Ever since quarantine started, people have been trying to find ways to continue schooling. Personally, I liked at-home-learning, but I know many others who despised it. I think it's best to continue online learning for the time being, and find a way to make it enjoyable for everyone! Whether you like it or not, learning from home will save lives and lower COVID-19 numbers.

Sent by Bella, age 13

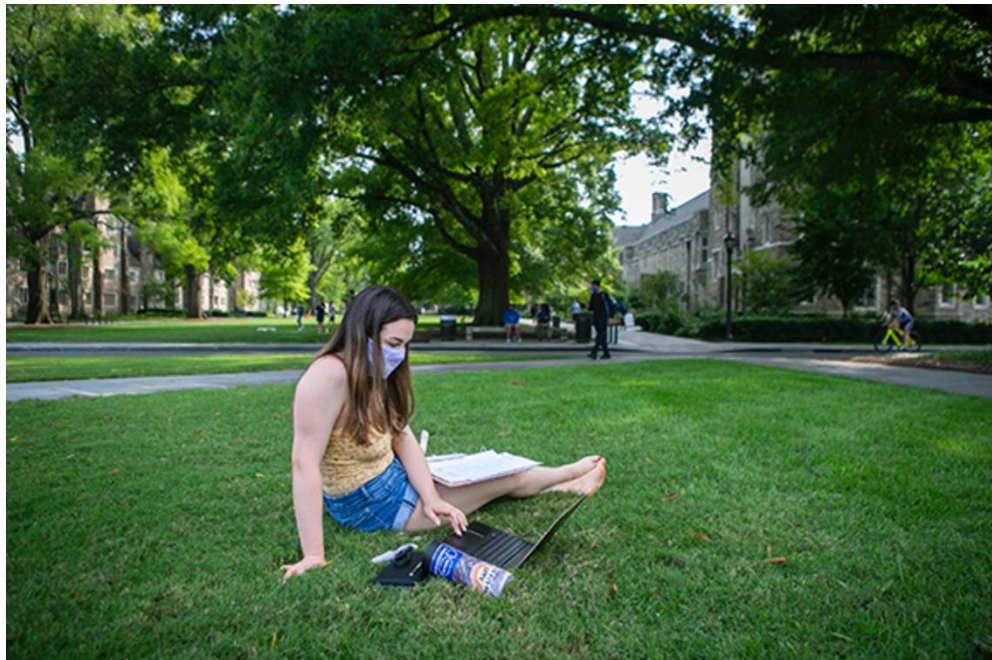


**Izabella and her mom, about 10 years ago.**

## Duke's back-to-campus brag sheet:



For our newsletter readers who are not at Duke, this is what back-to-school at Duke looks like today, nice huh?



**Our poor neighbor university, UNC-Chapel Hill Carolina had to go back online after COVID surge the first week of classes in person.**

[https://www.nytimes.com/2020/08/17/us/unc-chapel-hill-covid.html?campaign\\_id=9&emc=edit\\_nn\\_20200818&instance\\_id=21370&nl=the-morning&regi\\_id=135095071&section\\_index=2&section\\_name=five more big stories&segment\\_id=36386&te=1&user\\_id=2efa51833f1079b665c68673b27f0eea](https://www.nytimes.com/2020/08/17/us/unc-chapel-hill-covid.html?campaign_id=9&emc=edit_nn_20200818&instance_id=21370&nl=the-morning&regi_id=135095071&section_index=2&section_name=five%20more%20big%20stories&segment_id=36386&te=1&user_id=2efa51833f1079b665c68673b27f0eea)



**Boooooooooo!**



## **Old style back to school:**

**Tracy Darbeloff. New Red Dress!**



**I used to walk to school every day with my brother, says Tracy.**

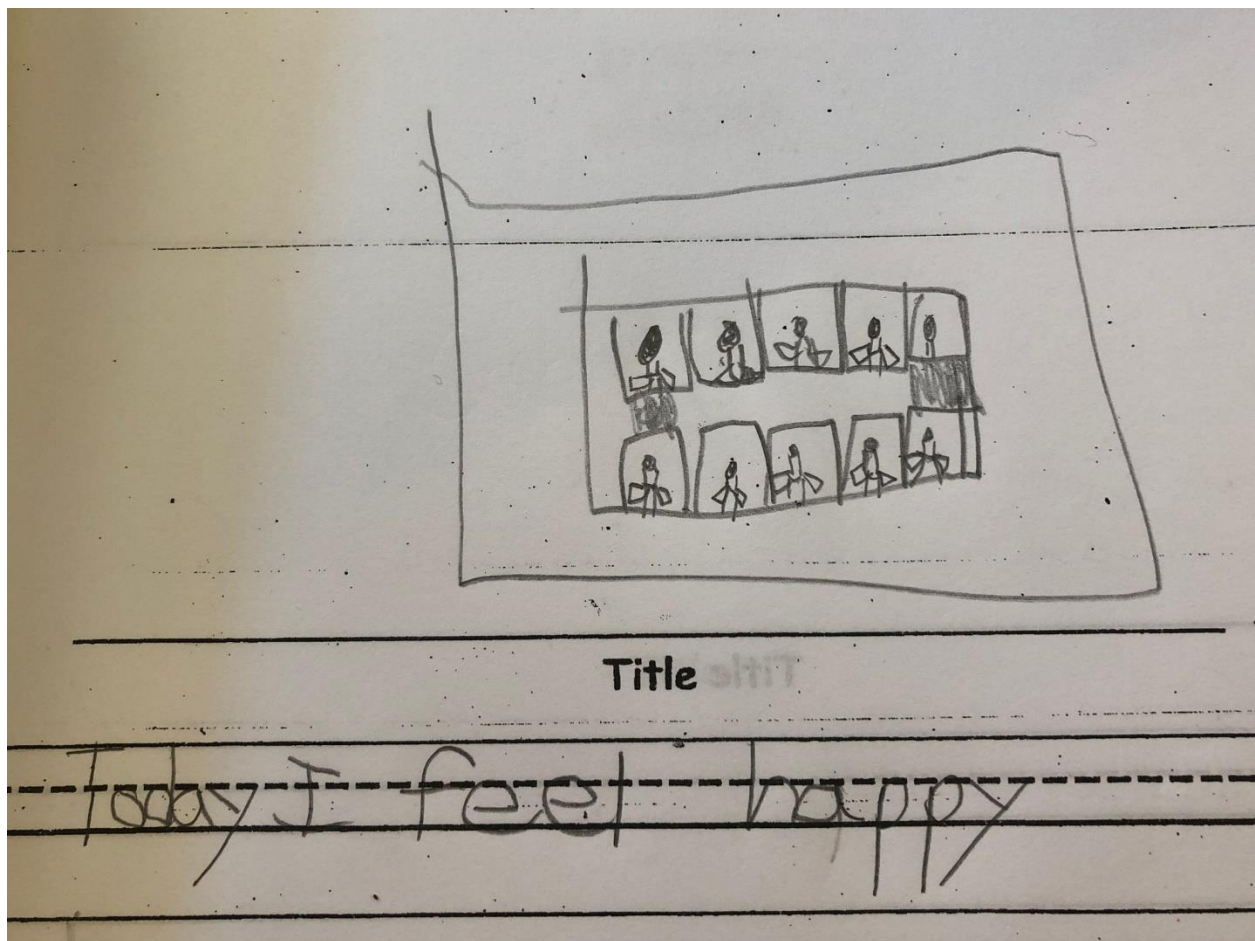




## New-style back to school:

**School has started for Sidra's daughter Sabine in Merced California-** all remote for now, but we've joined a "pod" with a few other families so she gets to go to a friend's house every day and join distance-schooling from there, and then play in the afternoon. It's all outside, in the current 107 degree heat... but they're surviving so far, courtesy of lots of fans and an outdoor swamp cooler! She's thrilled and we're even happier. Having several consecutive hours in which to do work feels like an incredible luxury! Hugs to all, Sidra

**Sabine's drawing of her first day of first grade:**



### From Madeline Meier in Arizona:

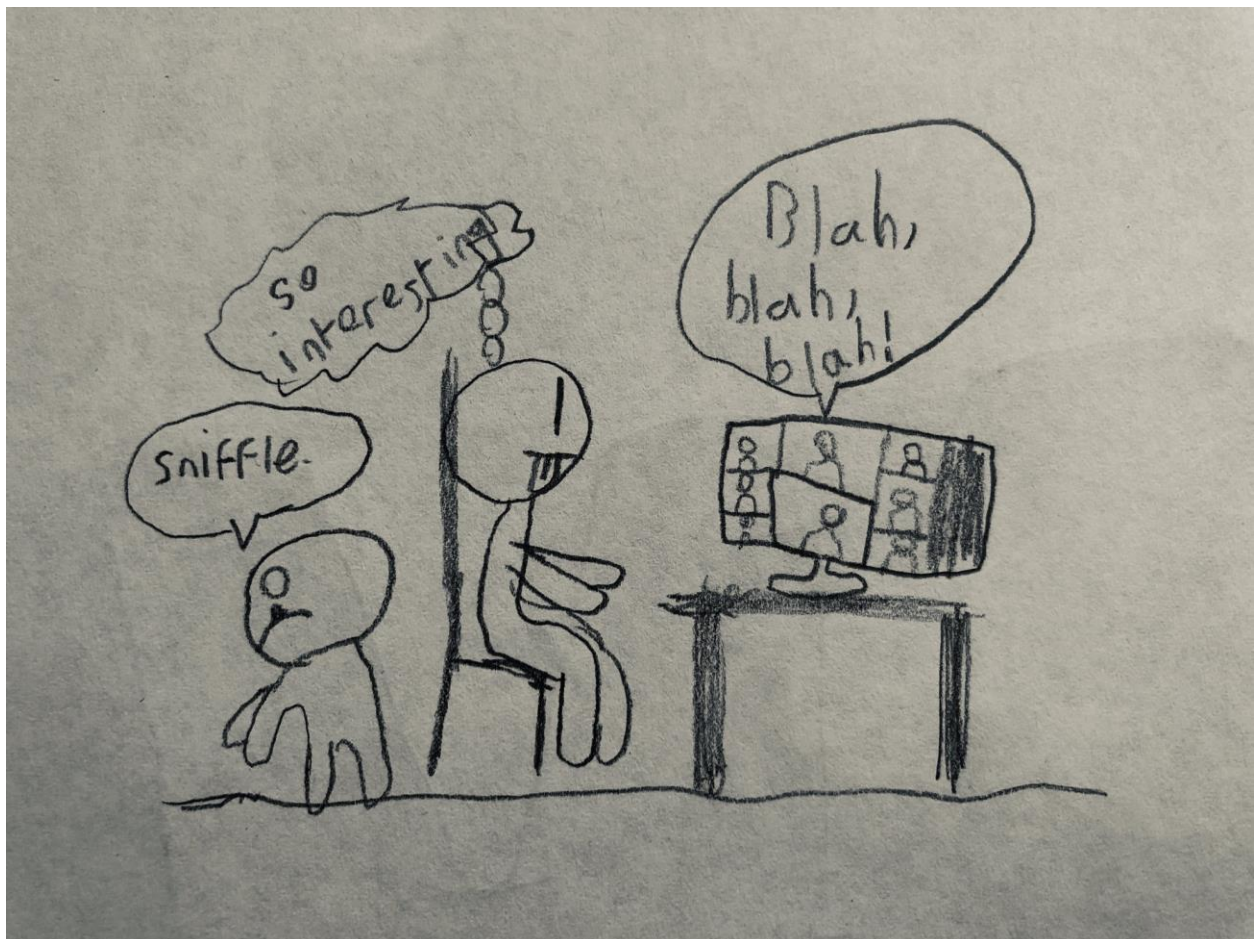
Looking forward to back to school. I've learned a few things.

1. Monitor the messages your kids are sending to their teachers. "WHADDYA KNOW...it didn't work" is not the appropriate way to communicate to your teacher that the zoom link or online video didn't work.
2. Recognize that your kid probably learned that response from you. Try to self-regulate.
3. Don't walk around in PJs in the morning. Even if you have no zoom meetings, your kids do.

### Poor Cecelia and William, with their whole class seeing mom's PJs!

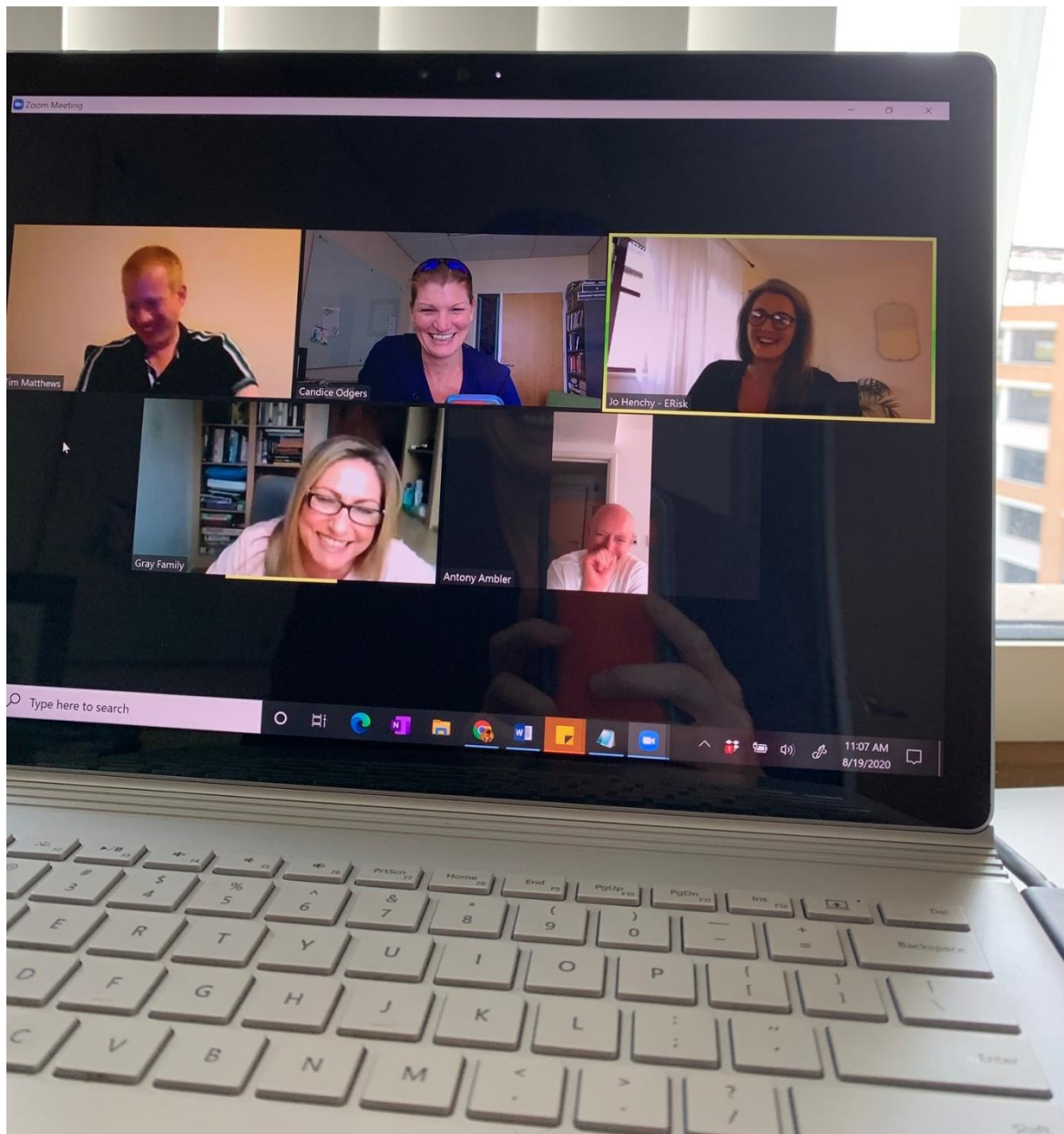
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### From Jasmin: Child's drawing of mom teaching on zoom.



**London E-Risk team zooms in anticipation of back to school:**

Not sure if this counts as “back to school” but we did spend the first part of the call this week talking about what the hell to do with our children and school this fall, ranging from 2nd grade to uni! We decided, or maybe admitted is a better word, that **our decisions were no longer guided by concerns for our kids’ health, but by our need for sanity** as this rages on... Candice and co.





**Antony Ambler, back at school in the SGDP building, with typical school lunch:**



**Chloe and Helen, first day back in central London, across the Thames from KCL's main campus on The Strand,.**



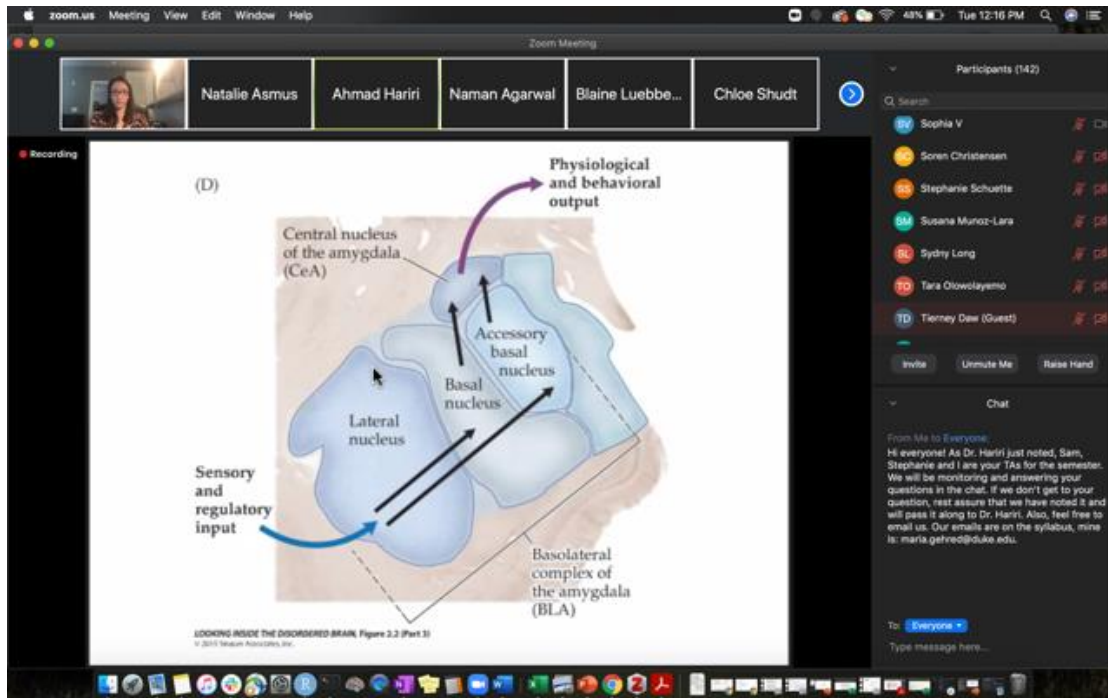


**From Maria Gehred:**

Hi Temi, First day back at school for me was today, perfect timing!

Just got out of Ahmad's lecture :)

Here's a photo of what back to school looks like for PhD students these days:





## Bear and Clara go back to school!



**Back to school national exam disaster in the UK, from Christina Carlisi:**

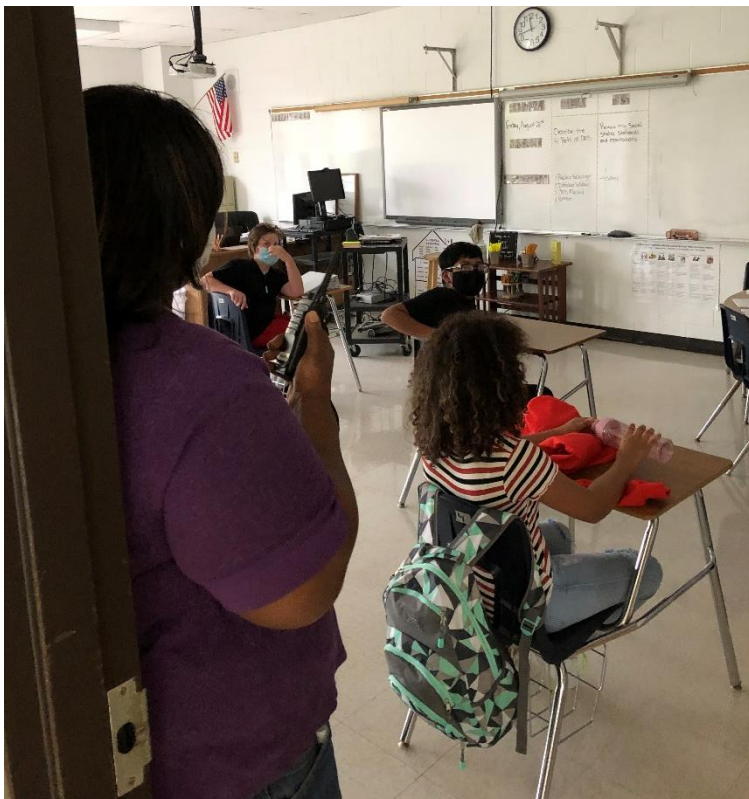
Sadly I have no cute pictures of children going back to school or anything more light-hearted, but I thought I'd share a tid-bit of the recent happenings in the UK regarding 'back to school' for universities. I imagine you've seen the news about A level results and the UK government's disastrous response...In the UK, university places are offered on a conditional basis pending high-school exam results, so unis typically over-offer, assuming some students won't meet the mark. But, **since there were no exams this year...what to do?? The government's solution was to use an algorithm** that would predict a student's grades based on their entire high-school's past performance (I found humor in this in light of our recent discussions around algorithms with paper submissions...!). This didn't go over too well as this preferentially upgraded low-performing students from private schools, and **downgraded high-performing students from schools in more disadvantaged areas (meaning they unfairly miss out on their grades required for university).**

After a week of protests, thankfully the **govt. saw the light and did away with the algorithm.** But, this means now most unis have now made offers to far more students than they are allowed to accept (or can physically cope with!). From the provost's email this morning, "UCL has received more than 3,500 emails since the UK government announcement, more than 4,500 calls since the beginning of the week and answered over 2,200 yesterday alone. **In less than 2 hours, almost 900 previously rejected applicants expressed a desire to take up their place at UCL**". How will everyone handle the added teaching load while there are still hiring freezes in place?? Safe to say 'back to school' will look a little different this year, for staff and students alike!

Cheers, Christina



**Middle-school Principal welcoming his pupils back, here in Randolph County, NC.**





**From our Oslo University collaborator, Espen Roysamb, in Norway.** As our campus offices don't feel so safe these days, we seek out some open space and fresh air 😊



**Have a serene week everyone, wherever you are! Temi**



**View from an evening kayak paddle on the Thames, photo by Helen Fisher**