COVID Information Commons (CIC) Research Lightning Talk

Transcript of a Presentation by Jennifer Hamilton (NORC, University of Chicago), June 2022

Jennifer Hamilton CIC Database Profile

Title: *Pandemic learning loss in U.S. high schools: A national examination of student experiences, a research update*

NSF Award #: 2030436

YouTube Recording with Slides

June 2022 CIC Webinar Information

Transcript Editor: Lauren Close

Transcript

Jennifer Hamilton:

Slide 1
Ok, fantastic, thank you. I am Jennifer Hamilton, I am Vice President of Education at NORC at the University of Chicago. And I'm here today to talk to you about what happened to high school students when schools went virtual back in the spring of 2020. And if you're a parent you probably have some idea of where this is going.

Slide 2
So the big concern at the time, based on anecdotal evidence and some of what was -what we were reading in the news, was that the COVID epidemic was disproportionately impacting poor and minority students specifically, you know, much harder than their counterparts. And so we wanted to investigate this and get some kind of empirical evidence as to what was going on.

Slide 3
So what we did was we designed this study with two goals. The first goal was to kind of to understand what was happening. And we did this through a nationally representative survey of teens. And we did this right in towards the end of the spring semester in 2020 because we wanted to get their impressions of what was going on as quickly as possible. And that's goal one, and that's what I'm going to be presenting on. Goal two, we're still working on, and we're working here with Infinite Campus, which is a student information system. And they have data on millions and millions of high school students all across the country. And this is a first of a kind partnership where researchers have never been able to access these data before. So we're working to look at this, you know, massive data set to try and

understand what was happening right before COVID, during COVID but schools were virtual, and what's happening now, right after, or kind of, continuing with COVID. And so we're hoping to come back and maybe do another presentation towards the end of the year once we finish that part of the study. But going back to the going back to the survey - Goal One was understanding.

Slide 4
So prior to COVID, back in the early spring of 2020, 46% of high school juniors had considered a STEM career, which is which is really nice. When you look at this broken now by low income and higher income, you'll see that that's proportionally much higher, statistically significantly higher, for high income students to be considering a STEM career. So this is before COVID hits.

Slide 5
Also before COVID, when we're looking at the classes that high school students were taking, we can see that higher income students were taking more STEM classes and enrolled in more AP classes. And you can see everything with a star is statistically significant.

Slide 6
So then, during COVID, we wanted to see how this was this was kind of changing.

Slide 7
We had some open-ended questions in the survey where we asked students about what was happening. And as you can see here we had a lot of feedback about not having a laptop, not having internet, not having enough laptops for all the kids in the family, like multiple kids had to share the same laptop, not having a webcam, not having the right calculator, having a very chaotic household. I mean, we had kids talk about how they had to drive, you know, four miles down the mountain to go to sit in the Dairy Queen parking lot to get wi-fi. All of those kinds of things. So these were all significant challenges to kids at that time.

Slide 8
And students were worried about their education. As you can see here, over a third of students were extremely or moderately worried about their STEM education. And if you look at that broken by income, again, over to the right here, you see that the highest income, 33% so a third of the higher income kids, were not really worried. They thought they were going to be fine. But when you look at the lower income kids, that's much much fewer. So only 17% were thought they were going to be fine.

Slide 9
And we also looked at the kids who were taking their AP exams. So these are some, you know, AP exams in STEM classes. And for most classes, about 50% of students did not take the exam. You know, calculus was a little bit was was lower. But so these are kids who are interested in math and science, signed up for AP classes, were taking AP classes, but then didn't take the test. And that's half. But then again when you break it out by income, you'll see a stark and very concerning difference between the higher income and the lower income kids where 72% of the lower income kids did not take the exam compared to only 29% of the higher income kids. So you can see here that it's very clearly disproportionately affecting these these lower income kids. And I want to say here also we talked to the College Board about this and they did some massive outreach at this time. They waived the exam fees, they changed the exam to only cover content from the beginning of the semester, they reached out to a lot of kids and provided internet and laptops so that they would be able to take the exam, and even with this massive outreach we still had this kind of result.

Slide 10
So where do we go from here? So this is the the million dollar question, right?

Slide 11
Everybody in education is trying to grapple with this. It's very clear that there are, you know, lots of problems and kids coming off of the trajectory and it's very concerning because these are kids that were were on the right path, right? They were doing everything they were supposed to be doing, they were taking the AP classes, and then this kind of just knocked them off kilter. And so what we're trying to do is give some policy, you know, guidance that that's kind of around this topic. One of the primary things is prioritizing reliable access to online instruction because, you know, online instruction is now, I think, going to be part and parcel of education moving forward. And folks like the Bureau of Indian Education are already doing a lot of this work. They have a lot of kids in rural areas, they making sure everybody has my MiFis and trying to make sure everybody has laptops, to kind of bridge that gap. We're also advising teachers and educators to assess students early so that they can differentiate instruction moving forward and to coordinate this instruction across grades so you can do some some looping backwards and kind of try to keep things moving ahead. One of the things is really popular that folks are talking a lot about is high-dose tutoring. There's a lot of evidence in the literature to show that this is very effective, so three or more times a week, very small groups, one, two, or three kids per tutor. They've found this is very effective in accelerating learning. So that is an option for folks. And the College Board did a study with us on this, looking at doing this virtually because the problem with high-dose tutoring, of course, is it's hard to bring it to scale when it's one-on-one. But doing it virtually, with small groups, had some great promise there. And there's also summer acceleration programs and extended learning time and out of school time interventions that could be useful. So that is my presentation for today and I'm happy to take some questions.