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Online Is Not Just as Good as F2F for Teaching Research Methods – It's Better

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Abstract

We know, from many studies, the advantages and disadvantages of online learning.[1] No need to go over them here. There are, however, several important lessons about the teaching of research methods—like statistics, text analysis, network analysis, cultural domain analysis, direct and unobtrusive observation, etc.—online that may not be obvious:

1. It is more effective in achieving learning objectives than in-person instruction.
2. It is the best way to ensure that students will focus their attention on the work.
3. It is the only way to scale up the teaching of methods and to make that teaching available to the anthropology students who want it but cannot get it in any other way.

I treat each of these lessons in turn.

Lesson 1: Achieving Learning Objectives

First, when it comes to research methods, online education is much, much more effective than in-person learning. A few years ago, my wife, Carole Bernard, said to me:

> I wish they had cooking classes online. … When you take a cooking class, you're in a little amphitheater, with staggered rows of seats so everyone can see what the chef is doing at the table … chopping, dicing, blending. … But you can never say 'Stop! Do that again! I need to see how you did that thing with the knife!' … Even if everyone else in the room wants to see it again, you can't just stop the class. You feel like such a jerk! …

In an online course, students can rerun any lesson and capture screen shots to see exactly what the result should be of any operation—what an artichoke ought to look like if you have trimmed it right or what a computer screen should look like if you have mastered some piece of software and pushed all the right buttons. That is why there are now thousands of cooking classes online and why online is the best way to teach any methods course.

The usual objection to this argument is: "It's not just about pushing the right buttons. You need to know *why* you're pushing those buttons." And that, too, is easier to guarantee with online instruction than with live, face-to-face instruction. Any good course on, say, how to code and analyze interviews and other texts, will start with background material on the history and theory behind content analysis, schema analysis, narrative analysis, grounded theory, and so on. Any course on methods for

direct observation of behavior will start with background material on the history and practice of these methods in clinical and industrial psychology as well as its practice in sociology and anthropology. Students can go back to those background lessons and read—or reread, as often as they like—the written materials about history and theory that go with any lesson.

The same is true for learning statistics—the set of methods that cultural anthropologists need to analyze properly the gargantuan amounts of observational and narrative data that they collect in any field project. Coding text and recording behavior alike are prone to errors of omission (failing to see themes or behaviors that actually occur) and errors of commission (seeing and noting themes and behaviors that do not actually occur). Testing the reliability of the people or machines that discern and record themes in text or behaviors in the wild is an essential component of any research project that is based on these methods. There is a long and continuing debate on the best statistics for assessing intercoder reliability. Good teaching of these statistics will be preceded by a discussion of theories behind the competing methods and the pros and cons of each.

In every case, whether it is about coding behaviors or texts or whether it is the statistics for analyzing data, online teaching is effective because students can take all the time and repetition they need, at their own pace, and without anyone judging them, to master the material.

Lesson 2: Student Focus

Second, students today—really, anyone under 40—prefer to consume content via the Internet. And by consume content, I mean everything: snacking or binge-watching TV and movies; getting caught up on the news or weather; comparing prices on plane tickets and making travel arrangements; reading books; shopping for almost everything (which often involves reading dozens of product reviews); finding out what friends and acquaintances are up to and then interacting with those friends.

There is certainly value in in-person instruction, especially for subjects that are best explored by interactive give-and-take. But note: Unless the lectures are recorded and available digitally, they are ephemeral. Once you have watched a live lecture, you cannot go back over it. Learning research methods, however, takes practice, practice, and more practice, not lectures. In the 50 years before Gutenberg, ordinary (that is, not heavily illuminated) books at universities cost about 215 pence each in England. Ordinary laborers earned about 1 to 1.5 pence per day; thatchers earned up to 5 pence per day; and knights earned 24 pence per day (Dyer 1989; and see http://medieval.ucdavis.edu/120D/Money.html). It could take several years for even a moderately well-off family to save up for the parchment, copying, illuminating, and binding of a Bible. At universities, *the* professor on any subject was the person who wrote *the* book on the

subject. Since the students could not buy books, the professor would stand and lecture (from Latin *lectus*, the past participle of the verb *legere*)—that is, read the book while students took notes.

The argument, then, that sitting in a room for 45 or 50 minutes at a time, two or three times a week, and listening to a lecture is better for learning than getting the content of a course on your own time is, to put it gently, soooo last millennium to today's students. We might reasonably ask: Why have live lectures at all today?

Lesson 3. Scaling Up

Third, online education is the only way to scale up training in statistics and research methods for both graduate students and undergraduate students of anthropology. Why do anthropology students, and especially undergraduates, need this training? The answer is in a 2017 report by Daniel Ginsberg from the American Anthropological Association. From 1987 to 2013, the number of bachelor's degrees in anthropology in the United States rose steadily from about 2,500 (0.28% of all undergraduate degrees) to 11,270 (0.63% of all degrees) and then went into a steep decline, dropping 19% to 9,135 degrees (0.47% of all degrees) in 2016.

Notably, there was a similar drop for history, sociology, and political science but not for psychology, economics, and criminology—fields, as Ginsberg (2017) notes, that have "better-established connections to the professions." Reversing this decline, Ginsberg went on to say, requires making "clearer connections between anthropological training and diverse careers, advancing the idea that anthropology is a job-ready major that provides solid training for a wide range of meaningful careers."

Advancing this idea is easiest to do if anthropology students add lots of methods training to the terrific liberal arts education that a BA in anthropology already signifies, with its attendant appreciation for cultural diversity, critical thinking, and solid writing skills. Adding statistics, through multivariate analysis, and several other methods courses (like content analysis, observing and recording behavior in the wild, network analysis, and geospatial analysis) to a liberal arts degree in anthropology gives undergraduates the answer to their parents' inevitable question: "What are you going to do with that degree in anthropology when you get out?" The answer is that an anthropology degree and strong skills in research methods makes you competitive for hundreds of different careers.

Some undergraduate programs in anthropology include a requirement for a course in statistics. For students who want real training in research methods an introduction course in statistics is not enough. Those students should not have to wait until graduate school to take courses in multivariate statistics and nonparametric statistics. The statistics are exactly the same whether you study them when you're

18 or 28. If those advanced courses are only open to graduate students at a college or university, online courses are the answer, and online courses are plentiful and affordable.

In fact, my own graduate students never had trouble getting really good jobs. But then, I never saw my job as training anthropology professors but rather as training anthropologists who had lots of skills in designing research, in collecting and analyzing data of all kinds (qualitative and quantitative), and in writing up the results of analysis in clear prose—in other words, skills that could be put to work in the vast array of jobs that are available to people whose sense of self-worth is not tied to landing a tenure track job at a research university.

Note

1 See Baran et al. 2011; Coates et al. 2004; Henrie et al. 2015; Jelfs et al. 2009; and Paechter and Maier 2010 and the many citations to those articles. See also literature in the following: *Computers in Human Behavior*, *Computers and Education*, *Journal of Computing in Higher Education*, *Internet and Higher Education*, *International Review of Research in Open and Distributed Learning*, *Studies in Higher Education*, *Review of Educational Research*, *British Journal of Educational Technology*, *Economics of Education Review, Distance Education*, *Teachers College Record*.

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