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INvolving Students In DEsigning Research (INSIDER): Delivering Hands-On Research Seminars to Empower Undergraduate Students to Pursue Research Earlier in their University Career

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Abstract

Anthropology often lacks sufficient research opportunities for undergraduates. In this manuscript, we describe the development, delivery, and pilot assessment of INvolving Students In DEsigning Research (INSIDER), a seminar-style course designed to provide undergraduates with research experience. The first INSIDER seminar was team-taught by three anthropology graduate instructors, mentored by a faculty member, and taught research skills through the lens of their research in sociocultural, psychological/medical, and biological anthropology. The course focused on hands-on skill development, small-group work with mentorship, and demystifying the research process. INSIDER improved students' research self-efficacy and provided concrete skills to support them in pursuing research earlier in their undergraduate careers than is typically the case. Graduate instructors gained valuable experience in research translation, acting as a course instructor, and communicating difficult concepts. Graduate instructors are key to INSIDER's success, as they are positioned closer to the undergraduate experience than faculty are, meaning they serve as important aspirational figures for undergraduate students.

Keywords: Research self-efficacy; hands-on research; methods; graduate instructors

Introduction

Anthropology, like most social sciences, lags behind STEM fields in offering research training and experiences to undergraduate students (Ruth et al. 2022; Zimbardi and Myatt 2014). Barriers to student engagement in research include limited opportunities, particularly opportunities with funding; lack of awareness of how to pursue research opportunities; and low research self-efficacy, which can manifest in ways like feeling

intimidated approaching faculty to request research assistantships (Copeland and Dengah 2016; Iris 2004). One solution is to incorporate research experience into courses (Zimbardi and Myatt 2014). This approach is particularly helpful for increasing accessibility of research to those who cannot otherwise engage in typically unpaid, extracurricular research, such as first-generation, minoritized, and working-class students (Ruth et al. 2022). While other social sciences often offer methods courses, one of the oft-cited shortcomings of anthropology curricula is a lack of research methods courses (Mills 2011; Ruth et al. 2022). Offering more of such courses can help students determine whether a research career such as academia is right for them, as well as make them more competitive in pursuits like graduate school and research-oriented jobs (Copeland and Dengah 2016; Stein et al. 2016).

In this manuscript, we describe the development, delivery, and pilot assessment of INSIDER, a team-taught seminar focused on research design delivered by doctoral (PhD-seeking) graduate instructors (ME, RI, SL) with a faculty mentor (BK) who oversaw the design and delivery of the course. The course has dual goals that are relevant to both undergraduate and graduate students: 1) to promote earlier and longer-term engagement of undergraduate students in research and 2) to provide mentored pedagogical training for graduate students. By engaging with graduate instructors' research, undergraduate students are exposed to cutting-edge research as it is happening and learn about the research process from an early point in their undergraduate career. INSIDER is a modified version of an interdisciplinary program offered at Emory University (Kaiser et al. 2014).

The goal of the program is for students to leave the course motivated and empowered to seek out long-term research opportunities on campus. Because graduate instructors are one step removed from the undergraduate level, they serve as effective aspirational figures, empowering undergraduates to see themselves as potential researchers. Students also learn about the hidden curriculum¹ of research and gain graduate student and faculty mentors who can help them navigate the process of identifying and pursuing future research opportunities. Together, these supports aim to increase students' belonging and self-efficacy and ultimately their likelihood to engage in research in the remainder of their undergraduate careers (Koutsouris et al. 2021; Museus and Chang 2021).

Additionally, having graduate instructors teach the course can be beneficial for departments whose faculty are stretched thin, as it expands the range of people who can offer mentored research opportunities and courses for undergraduate students. INSIDER aims to optimize use of faculty time: while there is a faculty mentor focused on training and supervising graduate instructors, their time commitment is much lower than teaching a course. As a group, the graduate instructors and faculty mentor met for three 90-minute planning meetings the quarter before the class was held. The graduate instructors then developed course material between sessions with advice from the faculty mentor, who also

¹ The hidden curriculum consists of the "unspoken or implicit values, behaviors, and norms that exist in the educational setting" (Alsubaie 2015, 125).

attended class sessions, though this was done for the purpose of piloting INSIDER and is not planned in future iterations. This model is also beneficial for graduate instructors, who were able to gain teaching experience that can advance their careers in academia (e.g., writing a teaching statement, teaching experience on a CV) and learn how to communicate their own research projects to undergraduates.

Course Structure and Content

INSIDER was piloted in 2021 as a quarter-long (10-week) course that met 3 days a week for 50 minutes. The course was split into 3 modules, with each graduate instructor teaching a module that focused on one phase of research design (Developing a research question, Designing methodology, or Conducting analysis), drawing on examples from that graduate instructor's areas of focus (climate change, the global refugee crisis, and quarantine and mental health, respectively). The graduate instructional team came from 3 different subfields of Anthropology (Sociocultural, Psychological/Medical, and Biological), providing a range of perspectives. Each graduate instructor led a 3-week module of the course that combined 1) a "behind-the-scenes" lens onto one phase of the research process through examining that instructor's research project and 2) having students work in teams to design and conduct their own project (see Table 1). For example, the first module was based on a graduate instructor's research on climate change and explored positionality and drawing on one's interests and experiences, as well as scientific literature.

Student learning objectives were to:

1. Compare, evaluate, and select appropriate research strategies for addressing a problem;
2. Design and implement a research project to address a real-world problem, including developing a research question, designing data collection tools, conducting data collection and analysis, and answering the research question; and
3. Communicate results and real-world implications of a research project to an interdisciplinary audience.

Assessments included individual homework for each module and group assignments related to their research projects. Students worked in small groups weekly to apply lessons drawn from each module to design and conduct a research project that they presented to the class during the last two days of the course. They also submitted a final project write-up.

Table 1 provides brief descriptions of each module's main themes, topics covered, and individual and group assignments. See supplementary materials for the course syllabus and lesson plans.

Table 1. Overview of Course Content and Assessments

	Main Themes	Topics Covered	Individual Assignments	Group Module Assignment
<p>Module 1 (Weeks 1–3)</p> <p>Instructor: SL</p>	<p>Research focus: Research Questions</p> <p>Topical focus: Climate change</p> <p>Graduate instructor subfield: Sociocultural</p>	<ul style="list-style-type: none"> ● Positionality ● Research questions ● Engaging literature ● Making an argument 	<ol style="list-style-type: none"> 1. Identify 3 news sources on research topic of interest 2. Identify journal article related to research topic of interest 3. Analyze journal article’s argument, scholarly debates engaged with, and author’s positionality 	<p>Topic, research questions, and research plan</p>
<p>Module 2 (Weeks 4–6)</p> <p>Instructor: ME</p>	<p>Research focus: Methods of data collection</p> <p>Topical focus: Global refugee crisis</p> <p>Graduate instructor subfield: Biological</p>	<ul style="list-style-type: none"> ● Media discourse analysis/ Corpus linguistics ● Mapping ● Surveys ● Ethnography: Interviews, focus groups, participant observation ● Biological methods 	<ol style="list-style-type: none"> 1. Media discourse analysis using group topics 2. Mapping exercise using campus map 3. Practice interview using class topic (undergraduate well-being) 	<p>Detailed methods plan</p>
<p>Module 3 (Weeks 7–9)</p>	<p>Research focus: Analysis and interpreting</p>	<ul style="list-style-type: none"> ● Participant observation ● Analyzing data 	<ol style="list-style-type: none"> 1. Survey on quarantine and mental health 2. Analyze survey 	<p>Analysis plan and broader impacts statement</p>

Instructor: RI	data Topical focus: Quarantine and mental health Graduate instructor subfield: Psychological /Medical	<ul style="list-style-type: none"> ● Triangulating mixed-methods data ● Connecting local to global ● Broader impacts 	and interview data 3. Broader impacts statement on class topic	
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Research Projects and Skill-Building

The application of research skills was a key goal of the course. In addition to hands-on investigations embedded within each module, students worked in small groups to design and conduct a small research project throughout the quarter. This project was the most direct way of achieving the main goal of this course – to demystify the research process for undergraduates by providing step-by-step guidance from graduate students who are themselves in the thick of their own projects.

At the beginning of the course, students identified some of their own topical interests (e.g., climate change, indigenous activism movements), and the instructional team used this information to organize them into three groups, each mentored by a graduate instructor. Student groups met with their graduate advisers and collaboratively developed a research project that could be conducted within the timeframe and purview of the course. Graduate instructors worked closely with groups as they developed a feasible research question, developed an appropriate research design for answering the question, collected and analyzed data, and presented their project. Some, though not all, projects were broadly related to one of the three themes covered by graduate students: climate change, migration studies/refugee crisis, and global mental health. However, none of the class projects involved working on a graduate instructor or faculty member’s research; rather, these projects were developed and conducted entirely by the students. Half of each Friday class session was devoted to working in small groups, which minimized time required for group work outside of class. We found this to be an important aspect of accessibility, as many in our student population face difficulties meeting outside of class due to work, long commutes, caregiving, and other responsibilities.

We also included “research how-to” sessions, which provided additional insight regarding the hidden curriculum of conducting research. These were 20–30-minute sessions each Friday of class and covered topics ranging from identifying research opportunities on campus to requesting letters of recommendation (see Table 2). In

discussing the hidden curriculum of research and strategies for connecting and collaborating with faculty in the future, our goal was to enhance student confidence pursuing research, in addition to understanding of the research process.

Table 2. Research “How-to” Topics

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| <ul style="list-style-type: none"> ✓ How to identify a research opportunity on campus ✓ How to email professors about research opportunities/joining their lab ✓ How to request letters of recommendation ✓ How to get support from a librarian for your research ✓ How to write grants ✓ How to apply to graduate school |
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Module 1: Research Questions & Climate Change

To contribute to current pedagogical efforts in anthropology, the first module brought together Freirean praxis and decolonizing and feminist anthropology literature to consider how students’ own life stories are connected to the research projects they hope to undertake. Anthropology has undergone various iterations of reflexivity, each of which has questioned the colonial roots underpinning our modes of inquiry and “raison d’être” (Trouillot 1991). Out of these many moments of critique, our identity, motives, and objectives in relation to our research, research site, and interlocutors have become increasingly important to contemplate prior to fieldwork. Module 1 class sessions were split between short lectures on the main topic of the day and group/individual activities that students completed on online platforms like Jamboard or a Google Doc with guiding discussion questions. The instructor’s research on glaciers and climate change in the South American Andes and her own positionality as an Argentine migrant in the U.S. were pivotal to exemplifying each lecture’s main objective.

This module’s classes centered on identifying research problems and asking and improving research questions, finding and entering academic conversations, and constructing an argument in response to the available literature. Yet the overarching intent of the three-week module was three-fold: to show students that they already have the skills of a researcher, to guide them in their use, and to convey that positionality matters and should inform the development of their research. Rather than seeing this last point as a deterrent to research, it should be seen as a means to enrich the sort of project that students can create and the researchers they can become. At the conclusion of the first module, student teams identified their topic of research and the academic conversation they would enter, and they developed a preliminary research question.

Module 2: Methods & Global Refugee Crisis

Module 2 continued the process of research design by introducing methods through which students could collect data, as well as the ways they could adjust their project according to the methods they used. The goals of this module included: 1) introduce a variety of traditional and non-traditional methods in anthropology; 2) facilitate practicing several methods in class and/or in students' projects; and 3) demonstrate how research design is iterative and flexible, depending on the methods used. To accomplish these goals, each class introduced 1–3 anthropological methods. Lesson plans ranged from detailed instructions on specific methods (e.g., media discourse analysis) to more general introductions to give students an idea of how interdisciplinary methods can be used in anthropology (e.g., biomarker methods). Thematically, this module gave students a background on migration and refugee studies by introducing them to theories about borders, geography, and human movement; media portrayals of migrants; and psychosocial and biological health outcomes. This module also explored ways to ethically design and conduct research with vulnerable populations. Each class had a practical component where students applied the methodological skills in small groups (see Table 3).

These in-class practice periods were followed by class debriefs and homework assignments in which students practiced these methods outside of class. Introducing a range of methods that could be used in anthropology showed students the different types of data that can be collected, as well as the ways methods are selected and adjusted to fit with research questions and overall research design. It also provided concrete skills and insights into anthropological methods that are not often taught in undergraduate or graduate training.

Module 3: Data Analysis & Mental Health During Quarantine

Module 3 wrapped up the process of research design by introducing students to strategies for interpreting multiple, and sometimes conflicting, sources of data via the broad project lens of quarantine and mental health. The goals of this module were threefold: 1) to introduce students to the variety of data types they might generate from their methods; 2) to facilitate practice interpreting these various sources of data; and 3) to show students how to connect these data and their projects to broader, impactful public research initiatives. Most lessons included hands-on data interpretation exercises, including the use of news articles, ethnography, survey data, and an online journaling project. In one assignment, students were shown conflicting sources of data about experiences during the pandemic, in which the well-represented struggle to adjust to the greater time alone and at home posed a potential boon to another population (*hikikomori*), whose previously stigmatized resistance to leaving the house and socializing with others became a desirable trait during the pandemic. These various sources were then combined in a case-study assignment that had students draw tentative conclusions based on

numerous sources of data. Students then learned how to frame their research in a way that communicates broader impacts for the public, including global health.

This module thus addressed two limitations of much research-focused coursework: first, that while students are taught how to identify and draw on multiple sources, they are rarely taught how to approach their data and draw conclusions from partial, biased, and/or conflicting sources. Second, while they are taught that research is important, they are rarely taught how to communicate that importance to a broader public.

Table 3. Examples of Hands-on Methods Practice

<p>Module 1 Research Questions Climate change</p>	<p>Compiling their “personal inventories” (Said 1978): Students were asked to think about their positionality after reading excerpts by Faye Harrison (1991) and Diane Lewis (1973). They were asked to reflect on how their positionality influenced the research questions they posed and how they posed them. They discussed what topics are easier to research and which are more difficult, sometimes because they are “too close to home,” and why.</p>
<p>Module 2 Methods of data collection Global refugee crisis</p>	<p>Media discourse analysis: Students were asked to find news articles related to their project topics and apply the discourse and corpus linguistic analysis skills they learned in class. As a group, they discussed how media discourse analysis could be used as a method for their group research projects.</p>
<p>Module 3 Analysis and interpreting data Quarantine and mental health</p>	<p>Analyzing interview and survey data: Students completed short interviews and anonymous surveys on experiences of quarantine and mental health. As a class, they discussed themes identified in interviews and how they agree or disagree with survey results. The class discussed the strengths and limitations of qualitative and quantitative data and how to reconcile findings that seem to contradict each other.</p>

Intentional Course Design and Instructor Support

As part of the design and implementation of the INSIDER program, our team leveraged the support of the faculty development center on campus, called the Teaching and Learning Commons. With the support of our colleagues (EH, PH), we used Wiggins and McTighe’s (2005) Backward Course Design model and a Teaching for Social Justice framework (adapted from Adams and Love 2009) to deliver an equity-minded, learner-

centered curriculum. The model helped us identify the course goals, write specific, measurable course learning outcomes, and consider the situational factors impacting the design of the course (Fink 2013; Wiggins et al. 2005). This was particularly important to this project due to the importance of addressing situational factors that directly limit access and opportunity to marginalized groups (Fink 2013). We worked through examples from anthropologists who have questioned the specific privileges that conducting “classic” ethnographic research entails and offered some alternative perspectives.

The second stage in this process helped design authentic course-level assessments engaging students on real-world tasks and demonstrating the meaningful application of essential knowledge and skills, specifically, the skills required to be a successful researcher in this field. These types of assessments have been shown to support equitable outcomes for underrepresented students specifically (Koh 2017; Mullen et al. 2018; Wiggins et al. 2005). Finally, the team designed active learning experiences to engage students and provide the opportunity to master the content, engage with the learning process, and meet the outcomes of the course (Ambrose 2010; Hattie 2012; Wiggins et al. 2005). By following this Backward Course Design model, the team was able to design and deliver a well-aligned learning experience and offer curriculum design training to the graduate students who were responsible for the execution of the course.

To support the independent teaching experience of the graduate students, the INSIDER program incorporated structured and intentional opportunities for the graduate student instructors to engage in reflective and inquiry-based practice about their teaching. These opportunities included both regular meetings with the teaching team for the course, as well as observations of teaching with consultants from the Teaching and Learning Commons. The observations of teaching included written formative feedback, self-reflection on the teaching experience, and a post-observation consultation to discuss strengths and areas for growth. This reflective practice empowered the graduate student instructors to assess and improve their teaching in community with other instructors, a key pedagogical competency for graduate and professional students (Hansen and Rentschler 2021).

Lessons Learned

We initiated the INSIDER project with two main goals in mind: promoting research engagement and confidence for undergraduate students and providing instructional and research translation skills for graduate instructors. Here we reflect on the extent to which those goals were achieved and how to improve future iterations of INSIDER courses.

“We Are All Researchers”

One intention of this course was for students to gain an early introduction to research design, so that the prospect of doing research was not intimidating or inaccessible. When students are trained in research, it is typically late in their undergraduate careers and often

outside the course context (Iris 2004). As such, INSIDER sought to demystify the research design process, as well as its complexities and challenges, so that more students have access to do anthropology research. Significantly, because the introduction to research was occurring within a course, it made research more accessible to all, rather than limited to those who had sufficient time and funding to pursue research as an extracurricular—often unpaid—activity (Bangera and Brownell 2014; Pierszalowski et al. 2021). In the future, we hope to track whether INSIDER students go on to pursue research, including whether they engage in research sooner or longer-term than those who did not complete an INSIDER course.

Similarly, a primary aim was to increase students' sense of self-efficacy in relation to research. The goal was for students to understand that, across fields, professions, and industries, many of their daily and professional activities will involve collecting, interpreting, and acting on new information. Graduate instructors achieved this aim in part by connecting to students' prior knowledge, skills, and expertise that prepare them to be researchers. For example, in module 3, the graduate instructor emphasized how both public knowledge, such as newspaper articles, and personal experiences are useful information from everyday life. Even when not collected or used as part of a systematic research project, these sources can nevertheless inform research topics and conclusions. Many INSIDER students intended to work in climate change or mental health industries but not research per se. Whether students aim to work in research in academia or beyond, the goal is for them to recognize the utility of research skills, as well as their capability to apply them in their daily and professional lives. In pre/post-course surveys, we found that students' research self-efficacy and research identity increased. In the future, we hope to test the impact of INSIDER courses on these outcomes through comparison to other courses.

INSIDER aimed to recruit lower-division and transfer students to provide earlier exposure to research and mentorship in pursuing research opportunities. One of the goals in recruiting these students was to build their confidence as researchers early on so that they would be more likely to pursue research during the remainder of their undergraduate career. To do so, we presented them with a wide diversity of anthropologists, beyond ourselves, whose own personal experiences and positionalities have led them to thinking of research on their own terms. The elective course was advertised to Anthropology majors, affiliate majors (Global Health, Public Health, Sociology, etc.), and specifically to transfer students. The seminar had 9 students enrolled, all of whom were Anthropology majors; five were lower-division students, two were juniors, and two were seniors.

In the future, the course could more explicitly focus on supporting students who are particularly under-represented in research, such as BIPOC (Black, Indigenous, and People of Color), first-generation, and students with disabilities. In some ways, the logistics of the course helped address this equity gap: it was taught to a small group of students, during the academic year, for academic credit, thus allowing students of all socioeconomic

backgrounds and abilities to engage in research. While the course was not explicitly designed to recruit and retain diverse learners, aspects of the course were certainly oriented towards highlighting the importance of diverse perspectives and life experiences for effective research. For example, in the first module, students discussed positionality and decolonial approaches to research, which seemed to resonate strongly with students. The class returned to the topic in the methods and analysis modules, considering how positionality affects data collection and analysis. This approach empowered students to speak about their life experiences as strengths in relation to research, although students were not required to share positionality statements or discuss life experiences publicly.

Transparency and De-mystifying the Research Process

Due to the instructional team and seminar nature of the course, it had a low student-to-instructor ratio: one graduate instructor for every three students plus the faculty mentor. This unique format allowed undergraduate students plenty of opportunity to engage with graduate instructors' work across different fields within anthropology. Additionally, graduate instructors created lesson plans geared towards smaller discussions, through breakout rooms, in addition to traditional lectures and full-group discussion. Student evaluations mentioned the low ratio and small group sizes as benefits of the course because they facilitated interaction. The benefit of a low student-to-instructor ratio is two-fold. First, having so many instructors accessible to students meant greater opportunity to ask questions in less intimidating and low-stakes environments. An environment that promoted engagement was "baked into" the course through small group work, how-to sessions, mentoring sessions, and office hours. In each of these spaces, students were given varied opportunities to engage with each other, the instructional team, and individual graduate instructors regarding their experiences studying and writing anthropology.

Second, graduate instructors teaching about their own process in developing sound, exciting, and ethical anthropological dissertation projects made the process of "doing" anthropology more accessible for undergraduate students. Most often, undergraduate exposure to anthropology is with fully formed research projects at sites in which professors have been working for years, if not decades, and with a focus on "polished," complete outcomes. In contrast, it was the struggles, trade-offs, and decision-making that graduate instructors faced in their own projects that undergraduate students seemed most interested in exploring. For example, students were interested in graduate instructors' decisions to work with populations in specific regions of the world, and they asked many questions about the decision-making process of choosing which methods to use and how to adjust the methods to fit their research question. In course evaluations, one student commented, "I really liked having examples from each grad student to gain a better understanding of each module and seeing how it directly connects to their research."

Another way this course sought to demystify anthropology was to provide concrete skills to undergraduate students necessary to actually *do* anthropology, or to address the hidden curriculum of research. Student evaluations often mentioned that learning the entire research process was a strength of the course, with one explaining, “This course was really great at walking students through the steps of conducting and presenting a research project, as well as showing us the many options for how to approach and go about conducting it.” A major complaint of both undergraduate and graduate students in anthropology writ large is the lack of methods training—not only how to do anthropology in the field but how to write a strong research question, choose appropriate methods for it, and analyze the data correctly and efficiently. By setting up the course to follow the process of anthropological research, we gave students the skills to actually conduct research. Graduate instructors accomplished this by providing instruction in developing a research question, choosing methods, and analyzing data in each of the three modules. Another student evaluation explained that “Module 3 was really helpful in walking us through how to analyze data, connect the specific to global contexts, and in writing the broader impacts statements of papers. None of this is really taught outside of this class and [is] just assumed to be intuitive, so I really appreciate that a couple of weeks were spent on these topics.”

Additionally, assignments and how-to sessions allowed students to develop skills to pursue research in the future, by asking them to write emails to professors inquiring about their research activities, find research opportunities on campus, and practice developing research questions, methods skills, and data analysis. It also allowed them to explore whether they even *want* to do anthropological research and if it aligns with their career goals. In fact, one student in the post-course survey answered they were less interested in pursuing research after the course, an important outcome for students deciding whether they would like to attend graduate school for anthropology.

Another important aspect of de-mystifying research was helping students to understand the iterative nature of research. For example, student teams developed research questions but then changed them somewhat after learning more about what methods are available and best fit certain question, as well as what questions are and are not answerable with research. Throughout the modules, graduate instructors emphasized that there are no perfect methods or research designs, as every research decision entails trade-offs. Students’ introduction to these epistemological concerns ideally enables them to approach all their courses in a more critically informed way. Undergraduate students tend to understand the material they encounter in their courses as definitive and established. Instead, this course introduces students to the process of knowledge production and enables them to critically evaluate the strengths and shortcomings of varied epistemological approaches to answering research questions. While this aspect of de-mystifying research is important for students to learn, it is one of the areas that they seemed to find most frustrating—wanting instead to have firm research questions and

methods rather than having to make changes—so it likely needs even greater emphasis, particularly early in the course.

Introducing Difficult Concepts

Classroom settings are not always the most inviting places to navigate questions of identity and positionality, especially regarding race, class, and gender, yet they are one of the key places where it should happen. In part, the difficulty is because classrooms, more often than not, elicit pressure on students to answer correctly or be judged negatively. Discussing our positionality and coming to terms with how we may be potentially inflicting harm on others through our own research interests and methods could lead students to become defensive or feel judged by their peers. It requires a respectful classroom environment, as well as a scaffolded process through which to think through what positionality means. Module 1 prompted students to explore the relationship between their research interests and personal background through individual, in-class reflections and peer-shares. As a third step, they had the opportunity to read articles on the topic and then participate in class discussions through these scholars' work.

Perhaps the most useful space to discuss matters regarding positionality and choices of research topics was the Friday meeting time with students' research groups. Meeting consistently with the same small group provided a space that was more amenable to discussions regarding positionality and research interests. This allowed graduate instructors to engage with students frankly and to openly question their subjects/objects of study. For example, one group became adamant about studying Indigenous people (which in part reflects a long history of anthropologists studying the "other," who is often Indigenous). This topic choice led to important discussions about consent (including IRB considerations), consultation, and mutual benefit, as well as the limitations of navigating such considerations in a quarter-long research project. The group ultimately created a spatial archive of Indigenous activism amidst ongoing dispossession in the U.S. and a timeline of acts of resistance, documented as a story map. The small group format provides an avenue to better address difficult questions like positionality in a scaffolded manner and through direct guidance and research experience.

Team-based Projects

Imaginations of the anthropologist are typically of a sole researcher amidst their interlocutors in some remote, faraway place. Anthropologists, and particularly sociocultural anthropologists, are expected to think alone, work alone, and undergo the often lonely and difficult fieldwork experience on their own, like a rite of passage (Berry et al. 2017; Kennemore and Postero 2021; Stein et al. 2016). As anthropology's methods and intentions are questioned, there have been calls for more collaborative forms of research. One challenge is that we have been taught to be solo researchers—more so in sociocultural, but nevertheless often the case, in biological and archaeology subfields as

well—socialized to guard our project as though it were our own rather than seeing it as belonging to those with and for whom we study. Teaching undergraduate students how to think through an anthropological project collectively—by structuring the course around group projects—pushes back against the idea that we work in a vacuum or that ideas are born individually rather than interactively and collaboratively.

We attempted to overcome the logistical challenges of group work by providing time in class at least weekly for mentored group project work. Nevertheless, it was particularly difficult to get one of the groups in this cohort to work as a team rather than as three individuals. They had chosen to ask a comparative question that they would each research through different countries. During Friday meetings and particularly during their mock presentation, it became apparent that the students continued to think across rather than with each other. Only after receiving feedback did they begin to understand the ways in which they lacked cohesion and held on to their project as though it were their own rather than a shared component of a greater question they all aimed to answer together. This example shows the importance of pushing our students to think collectively rather than as individual parts of a disjointed whole.

As graduate instructors (ME, RI, SL), this course was helpful in our own work because it gave us the opportunity to reflect on our own motivations to work in the places and with the people we have chosen. By answering student questions about our research choices, we were able to also think deeply about our research questions and positionality, the methods we chose to collect data, and the broader impacts of our work. The questions, comments, and feedback we received from students in class opened our projects to collaboration and flexibility.

Practical Considerations

We faced several challenges specific to the bureaucratic structures of our institution; others should consider how to apply these lessons to their own institutions, particularly considering funding and credit systems.

First, while graduate instructors were paid to teach the course, funding came from a one-time grant from the university. In the future, we intend to leverage the per-course funding amount that the department receives to pay graduate instructors, which would currently equal about \$3,000 per graduate instructor. This level of funding is insufficient to replace the quarterly part-time teaching assistantships (TAs) that fund graduate students' stipends and tuition in the social sciences and humanities at our institution, which themselves average up to 20 hours of work per week. In the absence of sufficient alternative funding to replace these positions, instructors' time spent developing and offering the INSIDER course— in addition to their TA work— creates competing demands on their research time. In the quarter prior to offering the course, we held three 90-minute planning meetings as a full team, and the graduate instructors spent about 5 hours independently developing course materials between meetings. During the quarter of

instruction, instructors averaged 7–10 hours per week on instruction during their modules and 5–8 hours per week during the remainder of the course. One solution in our department would be to recruit graduate instructors during their post-fieldwork year when they receive fellowship funding and are not TAing. Ideally, an institution would fully cover graduate instructors' funding needs (including tuition and fees) for the quarter of the course.

A second logistical challenge was fitting the course into institutional course credit systems. The general education requirements at our university are specific to each of the smaller colleges within it. We therefore decided to offer the course within the Anthropology major and advertised it to affiliate majors (Global Health, Public Health, Sociology, etc.) and transfer students. We had imagined creating interdisciplinary versions of this course in the future, following the ORDER model from Emory University (Kaiser et al. 2014), but these institutional restrictions make doing so logistically challenging.

Third, because our institution is on a quarter system (with ten instructional weeks per session) rather than a semester system, the timeline for planning and conducting research is quite tight. Multiple student evaluations commented that they would have benefited from more time to design, conduct, and reflect on their research project. One student described, "I was exposed to a lot of great new methods, and I'm very happy about that. The tradeoff for quantity is that we don't get to spend as much time on any of them though. I think that's just a function of the quarter system, and of course we can (and probably should) practice these outside of class."

Finally, our institution is highly STEM-oriented, and as a result, most of the student body is more familiar with quantitative research and lab work paradigms, and STEM research and funding opportunities are more readily available to students. Providing training in ethnographic, qualitative, and humanistic research was thus fairly unique for our undergraduate students. For example, as part of our research "how-to" sessions, we discussed how to identify research and funding opportunities on campus. Most of the information available (e.g., research websites, funding) is oriented towards STEM fields, so we discussed how students could adapt this information towards other research models. Each year's INSIDER course covers epistemologies and methods from multiple anthropology subfields based on the graduate instructor cohort. While this typically includes a range of STEM and humanistic methods, we find the latter to be more novel for our students. Other institutions might not have as wide an existing disparity in terms of students' familiarity with and opportunities to pursue various kinds of research.

One strength of our institution that does not apply to all others is that we offer a graduate-level anthropological methods course, which all three instructors had previously completed. This course facilitated the train-the-trainer model used by INSIDER, as graduate instructors had been exposed to both didactic methods training and pedagogical strategies specific to teaching methods courses.

Graduate Instructor Development

The course was not only helpful for undergraduate students but provided an invaluable opportunity for the graduate instructors to reflect on the decisions they made, and are making, in constructing their own projects. A key focus of INSIDER was developing graduate instructors' research translation skills. The course provided us with in-depth experience and training in communicating about the discipline and our specific research projects to non-specialist audiences, including describing and justifying our methodological and analytic choices. Through designing lessons and responding to questions, graduate instructors gained clarity in our decisions about framing our own projects, research questions, and methods, and how our data fit with our research questions. Teaching our own projects allowed graduate instructors to receive feedback from anthropologists-in-training, who had insightful questions about positionality, ethical considerations, and what community-engaged research looks like.

INSIDER served as a first step for graduate instructors seeing ourselves not only as teaching assistants but instructors and researchers who have unique research experiences to share with students. Such empowering experiences ease the transition into being a sole instructor faced with a class full of students. As graduate instructors, we were often surprised to find that using the lens of our own research was engaging and compelling for students as a means of modeling processes of information synthesis and research design. Overcoming such hesitations is an important aspect of building confidence and reducing imposter syndrome. It requires not only providing graduate instructors with flexibility in curricular design but also supportive faculty mentorship in a setting built on respect, solidarity, and understanding. Just as INSIDER helped undergraduate students to see themselves as capable researchers, it also facilitated graduate instructors seeing ourselves as experts in both our own discipline and in our teaching ability.

Indeed, INSIDER centered pedagogical development and made it more accessible for graduate instructors. Graduate students and early-career faculty often bemoan the lack of formal pedagogical training available to them or, where such resources are available, they often struggle to prioritize participation in such activities, which compete with other work. With support from the university's Teaching and Learning Commons, graduate instructors received didactic training, faculty mentorship, in-class observation, peer learning and support, pre-post self-assessment, and ongoing feedback. Following the course, graduate instructors completed a workshop on Writing Teaching Statements while the lessons learned from the course were fresh in their minds. In addition to helping us reflect and identify ways to improve the quality of our instruction in the future, this training aimed to make the graduate instructors more competitive in applying for teaching positions. The graduate instructors all went on to successfully and confidently teach our own courses as instructors of record, developing our own syllabi, lesson plans, and evaluations because of our experience teaching this team-taught course.

Through these resources, graduate instructors learned strategies for how to design and deliver course content effectively: developing learning goals to guide lessons, activating students' prior knowledge, applying new content through practicing during class time, and designing assignments that allowed instructors to determine whether students understood the course material. A challenge across all modules was planning a realistic amount of material for each class session. All graduate instructors began with an overestimate of what could be covered and had to scale back, outlining their teaching goals for each lesson and identifying the core lecture material and activities that would accomplish the goals. Rather than emphasizing lectures, graduate instructors found that learning was best facilitated through hands-on activities, open discussion, debriefing, and making space for questions. Additionally, we often found that our teaching was most effective when it moved away from the abstract and was grounded in the practical, everyday experiences to which students could relate, particularly when presenting complex and difficult concepts and conversations, such as positionality, reflexivity, and racism.

Conclusion

The INSIDER program aims to make research accessible and transparent to undergraduate students through centering research as a process with its inherent challenges. Making research hands-on, iterative, and co-constructed in teams helped build students' understanding of research and their sense of research self-efficacy. Additionally, INSIDER provides graduate instructors with both concrete pedagogical skills and general professionalization as an instructor and effective research communicator. While faculty can and do teach courses with a focus on research as a process, sometimes by drawing on the in-depth example of their ongoing research, what makes INSIDER unique is that there is an important and unique role for graduate instructors to serve as aspirational figures, as they are one-step removed from the undergraduate experience. We present the example of INSIDER as one approach that others could adopt to make research more accessible to undergraduate students.

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