Fostering Undergraduate Research Among Black Identified Students in a First-Year Seminar

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The Context

Colleges and universities are grappling with two issues pertinent to this article: (1) how to provide a high-quality undergraduate education that communicates the value of higher learning and meets the needs of students in the 21st century and (2) how to recruit and retain students from diverse backgrounds and support their sense of belonging and outcomes. High impact practices are useful strategies for achieving both goals especially when modified to meet the needs of vulnerable student populations.

In 2019, I brought students together under three high impact practices—a living learning community of Black-identified students in a first-year seminar focused on undergraduate research. Specifically, I used a course embedded research (CER) framework to prepare the first-year students to complete stand-alone research later in their third or fourth year. CER is a valuable strategy for engaging first-year students, students new to research, and students who have had educational trauma or deficiencies. The assignments allowed students to practice the skills of research – identifying an issue, collecting and analyzing resources, and framing an argument – without the trepidation of producing a full-length paper or project. We were able to concentrate on skill development and iterative processes, build confidence, and produce a final assignment that was both useful to the students and pedagogically appropriate for first-year students.

Living & Learning Communities (LLCs) are well-established tools for recruitment and retention at institutions of higher learning (Gabelnick et al., 1990). In 1993, Tinto posited that students were less likely to leave school if they were fully integrated in the life of the institution (Tinto, 1993). Smith et al. (2009) demonstrated that learning cohorts were a useful tool of integration. They help students integrate academic and co-curricular learning while also promoting personal and professional benefits for faculty mentors. Building on scholarship of the general efficacy of learning cohorts, Fink and Hummel (2015) have provided evidence that learning communities can have a particularly significant educational impact for underserved students. These cohorts help marginalized and underrepresented students form connections with peers, thereby increasing the sense of belonging and support (Fischer, 2007; Inkelas et al., 2007; Johnson et al., 2007). Baker and Belinda (2012) showed that Black students who study and participate in co-curricular activities on campus together were more likely to be retained on predominantly white campuses.

The research on the positive impacts of first year seminars and undergraduate research on student learning and retention has been equally prolific. Kuh (2008) argued that student engagement, learning, and success improved when students participated in active learning environments. He identified several educational practices that have since been recognized by the Association of

American Colleges and Universities as high impact practices (HIPs) (Association of American Colleges & Universities [AAC&U], n.d.; Kuh, 2008). First year seminars and undergraduate research are two of the eleven high impact practices on that list. As early as 1986, John Gardner of the Gardner Institute noted that the first year was instrumental for setting the tone for a student's collegiate experience (Gardner, 1986). The first year is also an important indicator of the students' overall academic success, satisfaction, and retainability (McInnis, 2001; Nelson et al., 2012). It is of little surprise then that first-year seminars, which usually foster discussion-based learning and faculty mentoring in smaller-sized classes, have become increasingly popular at colleges and universities.

Likewise, undergraduate research—both independent and course-embedded as employed in our model—promotes hands-on learning and close partnership with a faculty or staff mentor (Kinkead, 2003; Lopatto, 2010). Scholars have highlighted the benefits of undergraduate research on student learning (Bowman & Holmes, 2018; Russell et al., 2007; Stanford et al., 2017), their sense of belonging (Cole & Espinoza, 2008; Ishiyama, 2002; Nagda et al., 1998) and personal and professional success (Hathaway et al., 2002; Ratnesh et al., 2002; Russell, 2008). Nevertheless, faculty and staff mentors have expressed concerns about how these time-intensive relationships might lead to a loss of productivity (Adedokun et al., 2010; Dolan & Johnson, 2010; Harvey & Thompson, 2009). Real or perceived reduction in faculty research or publications, particularly at research intensive institutions, can be detrimental to a faculty member's reputation and career. Despite these concerns, many faculty and staff mentors have enthusiastically taken on undergraduate research mentees and recorded positive personal and professional gains. The benefits to mentors include increased work satisfaction, enhanced teaching preparedness, access to new scholarship pathways, and improved communication (Hathaway et al., 2002; Zydney et al., 2002; Zambrana et al., 2015). Course-embedded research produces similar results for mentors and students when the assignments are calibrated to the needs of those enrolled in the class. Course-embedded research, then, can be a useful avenue through which faculty at research-intensive schools can promote and support undergraduate research without the potential risks associated with independent projects.

It is within the context of a first-year seminar at Elon University that Dr. Amy Johnson and Ms. Delyla Makki first embarked on course-embedded research journey. The goal was to lay the foundations for undergraduate research with a residential cohort of students connected to the African Diaspora LLC. The authors will reflect on the impact course-embedded research had on preparing these students to engage in independent research and more broadly on us as Black-identified women in academia.

Elon University, COR 1100, and the African Diaspora LLC

Founded in 1889, Elon University is a private, liberal arts institution situated on a 656-acre residential campus in Alamance County, NC. The university serves 6,000 domestic and international undergraduate and 800 graduate students studying in more than 60 majors and 10 graduate programs. The *US News and World Report Ranking and Ratings* has ranked Elon University #2 in First-Year Experience and Undergraduate Teaching, among other top 10 rankings, attesting to the institution's focus on student learning and success (Elon University, n.d.a, n.d.b).

The intentional and intensive integration of high impact practices like our first-year seminar (COR 1100 The Global Experience), experiential learning, and residential initiatives underpin the achievements of our First-year Experience. COR 1100 is a writing-intensive, interdisciplinary seminar taught by faculty across Elon's campus. Although the content and focus of each section vary depending on the instructor's interest and expertise, they are held together by the Common Reading text and four shared learning goals, which are Curiosity and Questioning, Global Perspectives, Communication, and Critical Thinking.

The COR 1100 section for the African Diaspora Living Learning Community (LLC) is one example of Elon's academic-residential integration. Elon's African Diaspora LLC was established in 2018. The goals were to support diversity and inclusion efforts by creating a residential space for incoming students who were interested in the African (or Black) Diaspora, many of whom were Black-identified, and connect them to faculty and staff through the Center for Race, Ethnicity, and Diversity Education (CREDE) and the African & African American Studies at Elon minor (AAASE minor). In addition to recruiting predominantly Black-identified students, the LLC, integrated with CREDE and AAASE, sought to foster retention among the students by facilitating social and academic support networks.[1]

Mentor and Mentee Positionality

Mentor: Dr. Amy Johnson, Associate Professor of History

For the first seven years of teaching the course, my section of COR 1100 centered broadly on poverty and social justice issues. This focus was largely inspired by my academic expertise and lived experiences as a Black American woman. My disciplinary scholarship focuses on pre-colonial West African history, early colonial Caribbean history, comparative slavery, and Black resistance. As a new professor, and for [insert] years, I regularly taught disciplinary courses such as Introduction to Caribbean History and Slavery and Resistance, the interdisciplinary courses in the Black Diaspora and Poverty and Social Justice, and routinely led study away courses in South America and Africa. The legacies of slavery in the Americas combined with the global nature of the institution proved an interesting way to engage students and meet the course learning objectives.

While I knew these topics fit my expertise and programmatic goals, I was extremely aware of how students might react to engaging this content in my section due to my racial identity. Unlike my disciplinary and elective interdisciplinary courses, COR 1100 was a required course and students had limited options for fulfilling the requirement. Although Pittman (2010) focused specifically on women of color [faculty?] and white male students, the research has consistently demonstrated that Black faculty members often had their expertise, credentials, and motives scrutinized by both white peers and students (Flowers et al., 2008; Louis et al., 2016; Pittman, 2012). Littleford et al. (2010) noted that students anticipated Black faculty to be more biased when discussing racial issues and subsequent research has affirmed that these preconceived notions could negatively affect students' evaluations of faculty (Bavishi et al., 2010; Perry et al., 2015; Smith & Hawkins, 2011;). Accordingly, teaching about social justice issues in a required first-year course was a significant concern as a pre-tenure faculty member.

For the first seven years that I taught the course, there was very little racial diversity among students in the classroom and students had limited opportunity to engage with peers from diverse backgrounds or holding diverse perspectives. I decided to embed community engagement opportunities (approximately 15 hours for the semester) in the course to further develop and encourage perspective-taking. The course was scaffolded with pre-, during- and post-writing assignments, readings, and discussions that aligned with the students' community engagement work. Students were asked to consider how their upbringing shaped their perceptions of service and the people who made use of those resources, talk with staff (and clients, when appropriate) to learn more about the specific community in which they worked, and reflect on their personal and intellectual growth around issues of civic and community engagement. For example, what distinguishes volunteerism from community engagement? What insights did they gain about

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[1] The LLC was initially connected to an elective AAASE course, but it was difficult to coordinate student schedules. In 2019 Dr. Shannon Lundeen, the Director of Academic-Residential Partnerships, cohorted the class in a section of COR 1100.

themselves and collaboration by working *in partnership* with community members? What was at the root of some of the issues our partners sought to address?

The readings and discussions about how race intersected with the issues (and people) they encountered in the community were highly structured for two main reasons. First, it is sound pedagogical practice to ask students to identify the argument(s) and evidence when they engage a text, especially if there is new or challenging content. Second, I hoped to mitigate against students focusing on their *feelings* and my perceived *agenda*, without fully engaging the ideas presented in the readings (Kelly & Gayles, 2010; Ortiz and Jani, 2010; Smith & Hawkins, 2011).

The African Diaspora LLC students were first assigned to my COR1100 section in Fall 2019. The class consisted of 16 Black-identified students (15 women and 1 man), three white men, and a Latinx woman.[2] Two things became immediately clear. First, I had largely designed the assignments and discussion prompts that accompanied the readings in anticipation of student unfamiliarity, pushback and skepticism. That fall, I significantly revised the assignments about a quarter of the way into the semester. Students were still required to summarize arguments and evaluate evidence. They then moved on to practice applying terms and content to their lived experiences and learning how to advocate for themselves and others. This does not mean that every student in the class (Black-identified or otherwise) had the same opinions or experiences; in fact, they were quite an ideologically, economically, and geographically diverse cohort. However, because the class consisted mostly of racialized and historically marginalized students – several students identified as queer, low income, or first-generation college students – I spent less energy explaining that oppression, discrimination, bias, and structures affected people in disparate ways.

Second, I quickly recognized that building empathy and examining issues from other perspectives were not the most pressing skills this African Diaspora LLC student cohort needed to develop. As I learned more about these students personally and academically, I realized that many of them were unfamiliar with, intimidated by, or unsure how to initiate undergraduate research. This resonated with me and mirrored my own undergraduate journey as a Black woman from a low-income family and a first-generation college student navigating a predominantly white institution (PWI). Teaching the African Diaspora students made me more cognizant of the important role I needed to play in mentoring Black, first-year students while teaching them how to participate in undergraduate research (Newman, 2015; Pascarella & Terenzini, 2005).

Mentee: Delyla Makki

I decided that Elon was my first choice for college during my sophomore year of high school. After passing the beautiful campus on a car ride through Elon, I was inspired to apply. After multiple tours and research, I was encouraged by the university's access to opportunity both academically and professionally, as well as Elon's impressive numbers of internships and similar learning experiences across all majors. What really sold me was the institution's commitment to "Diversity and Inclusion." I identify as a Black woman. Therefore, I believed inclusion would be a significant part of my experience at a predominantly white institution like Elon. However, my experiences at the institution proved that there were deficiencies in achieving this mission. My personal experiences and the environment at Elon have encouraged me grow into a leader and advocate for racial equity.

I joined the African Diaspora LLC in 2020 as a first-year student for an opportunity to explore my Black identity while finding a sense of community at Elon as a minority. The LLC felt like a safe haven where race could be discussed freely. I enrolled in Elon's COR 1100 course during my first semester at Elon. This was the most diverse class I have attended since elementary school. We studied the

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[2] No students in the course identified as non-binary at the time at the time of this article.

role of race in our society, both socially and institutionally. The course challenged me emotionally, allowing me to address my own internalized sense of racism. During COR 1100, I learned about microaggressions, personally mediated racism, and racism as a system of power. The discussion of racial disparities resonated with me the most. More personally, the course allowed me, to question and investigate the relationship between race and health. Thus, I was able to identify racism that I had previously experienced and continue to experience today. I credit the course with my greater awareness of my own identity and the impact it has on the spaces I walk into.

Framing the Project

Mentor: Dr. Amy Johnson

Asking a first-year student to engage in undergraduate research can be daunting. While some students may know exactly what they want to study, college is also a time for exploration and invention. Students are learning things about themselves and the world that they may not have previously considered for deeper investigation. Moreover, many first-year students lack the connections and networks for finding a research mentor or peer groups to help them navigate the challenges of developing, researching, and writing an independent project. And finally, students arrive at college with varying degrees of preparation for research and writing. Even those who arrive with strong foundations need time to learn the local library systems and the expectations of individual faculty. In short, first-year (first semester) students are typically not prepared to tackle these tasks (Madan & Teitge, 2013; The Boyer Commission on Educating Undergraduates in the Research University, 1998).

Consequently, I used a course-embedded framework to introduce undergraduate research through a backward design process. We reviewed undergraduate research projects from students currently in the third- and fourth years and then worked in reverse to develop a timeline for the class of first-year students in which to complete a project as juniors or seniors. The students then could visualize how our course-embedded work –brainstorming, preliminary researching, and identifying a potential mentor – fit within their long-term trajectories. I aligned the structure and assignments with the best practices outlined by Chickering and Gamson (1987) and Huba and Freed (2000). Each step of the process included opportunities for faculty and peer mentorship, reflection, and revision. Moreover, the students practiced writing in various genres and engaged in group and individual research to develop confidence and foster a community of peer scholars. The final product for the course was a research prospectus and introductory email that students could send to a potential undergraduate research mentor (Pagnac et al., 2014).

Mentee: Delyla Makki

As a first-generation college student, I had never heard of undergraduate research and quite honestly did not realize that it would satisfy Elon's Experiential Learning Requirement. I also did not really understand the networking and mentoring needed while navigating my college career. I had little understanding of the breadth opportunities available at Elon, so I elected to be pre-med because of my strong STEM grades in high school., Once I realized that there was a world beyond those courses, the opportunity to really learn how to research excited me. Moreover, once I focused on pursuing research, I was further emboldened when I noticed the underrepresentation of other Black students participating in this research. Elon's introduction of undergraduate research turned out to be an important aspect of inclusion for me. The course allowed my peers and me the opportunity to take our first steps toward research. The size of the class and level of interaction with the professor were also key to my internalizing how significant undergraduate research could be for exploring new pathways and careers.

Finding Topic and Mentor

Mentor: Dr. Amy Johnson

Finding a research topic can be difficult. Students often have multiple interests when they arrive on campus and are learning things every day that spark new avenues of investigation. In facilitating topic selection, I sought to normalize the challenges of narrowing down one's ideas and revising one's project. The first step in my course-embedded research process asked students to reflect on a topic of interest. It could be related to curricular or co-curricular work or based on one's background and experiences. I also invited several faculty and staff guest speakers to share their expertise. Sometimes guest speakers spoke directly to the topics we were covering in class, while other times they discussed their research agendas to give students an understanding of the breadth of topics they might pursue in their undergraduate research.

At this stage, I encouraged the students to dismiss concerns about whether a topic was "scholarly." These concerns seemed to be code for "worthy of academic investigation" and related to past educational trauma. Our class conversations around choosing a research topic exposed a disconnect between living and learning that has been perpetuated in academic institutions, especially for historically marginalized students (Yosso, 2005). As confirmed in the recent scholarship of Casanova et al. (2021) and Wallace and Ford (2021), I found that these students, largely from marginalized groups, had to be encouraged and validated in pursuing topics that stemmed from lived experiences.

It was important that students develop their confidence as scholars and build a community with peers who would support and encourage their intellectual endeavors. To facilitate this goal, students brainstormed ideas individually and then workshopped their research topics in small groups. As evidenced in Figure 1, the students reflected on their research topics and then shared their idea(s) and explained why the topic(s) resonated with them in the group. Group members were encouraged to be active listeners and provide a safe space for the student presenter to work through their plans. In the process, the students often reframed or deepened their topic and began to outline plans of inquiry. Only after the group understood the presenter's interests and goals were they encouraged to offer feedback and resources for developing the idea further. The group workshops were an iterative process that we revisited throughout the semester.

Once the students had a topic, they needed to find a mentor. In the past, I had allowed students to select anyone with expertise in the research area. I narrowed the pool to Elon faculty for the Fall 2020 cohort for three reasons. First, I learned that students did not always understand the kind of expertise needed to mentor a research project. Second, I wanted to push students to make connections with local experts. Finally, it was more pragmatic because they would eventually have to select an Elon faculty member to mentor their undergraduate research projects. Some students were concerned about contacting a faculty scholar with whom they may have had limited or no connection. Our guest speakers served as potential mentors or connectors to potential mentors while also exposing the class to a broad range of content.

A two-paragraph statement was the end product for this module. The first paragraph discussed the research topic and why the student was interested in pursuing a particular line of inquiry. In the second paragraph, the student identified a mentor and explained their rationale for selecting them. Students later edited these two paragraphs and incorporated them into the prospectus and introductory email to a potential faculty mentor.

Mentee: Delyla Makki

Dr. Johnson provided us many opportunities to connect with Elon's faculty and staff during our class time. This allowed the class to explore prospective topics for our research. The guest speakers represented a wide range of disciplines and offices on campus. For example, Dr. L. presented us with

new perspectives on social issues like gender dysphoria, while Dr. G. informed us of voter suppression in our community. One guest speaker offered some context for the "Trump parade" that occurred on campus, which really put my experiences at Elon and in Alamance County into perspective. I felt inspired to share the information I learned about the context and involvement of the Alamance County Taking Back Alamance County (ACTBAC) group in our community. Having people from the library, CREDE, LGBTQIA Center and other offices helped me see the importance of speaking out about these kinds of issues and helped build my confidence to do so. The guest speakers collectively enlightened us on many issues and our conversations with them provided my colleagues and me with a foundation for research topics.

Choosing a topic took my peers and me a long time. We had to consider our own passions and goals. Our class focused heavily on racism, poverty, and environmental justice in the United States and abroad. We also had to think about the fact that we were living in a pandemic. With everything going on in the world like #BLM, racial injustice, climate change, and mass killings, the process of choosing a topic at times became overwhelming. I personally considered some of these timely topics, but ultimately decided to do research that was inspired by and would benefit my future career in healthcare. Using the context of what I had learned during our class and in my life experience, I decided to focus on racial disparities in healthcare. As an African American, I am aware of the disparities that my family and I have endured. Therefore, my passion for the subject became more personal. It is because of these experiences that I struggle to trust the healthcare system.

When we discussed our topics as a class, we recognized the common theme of discrimination in our initial topics. We all discussed the presence of bias in our societies that tends to affect the lives of everyone, regardless of race or ethnicity. As a young generation, we all agreed that change is due. As we went on to do our own general non-academic research, we helped each other narrow down on our topics. We discussed possible solutions to gaps in our research and offered one another support. At the end of this process, many of us considered changing our subject completely. This was because some of our topics turned out to be too specific or too general for accurate research. This made the process frustrating for some of my classmates. Nevertheless, encouraged by our professor not to worry about whether our initial interests were scholarly, we were able to broaden our sense of how much information was available for our final chosen topics.

Dr. Johnson provided one-on-one mentorship during the entire process. She validated our interest in research topics and how they related to life experiences. This allowed my peers and I to investigate our research with an open mind, Dr. Johnson's mentorship helped me narrow down my topic. She encouraged me to ask myself what specific disparity I wanted to investigate, and how it relates to my life experiences.

With a topic in hand, I set out to find a mentor. Understanding the role and significance of a mentor varied by individual in the class. Dr. Johnson was able to explain the expectations that come from this kind of relationship. I knew exactly who I wanted to be my mentor. Dr. B. is an advocate for racial equity who did a presentation on racial disparities for Elon's Pre-Health Society student organization. Her talk about these disparities resonated with my personal experiences and I was eager to dive deeper. Viewing her curriculum vitae on the Elon website confirmed Dr. B.'s work in racial health inequities. Her research of inequities in cancer care treatment really appealed to me due to my research on prostate cancer. I became excited about presenting my research to her. I signed up for Dr. B.'s s Introduction to Public Health studies class in the spring and learned more vital information about racial disparities and her research partnership with the Greensboro Health Disparities Collaborative. She has been inspirational to me.

Figure 1. *Brainstorming draft*

Initial Questions:
What are racial health inequities? Why are there systematic differences in health status, health resources, and health outcomes in the population of different racial groups?

Why I'm Interested:
Social factors influence how healthy a person can be. Things like education, employment, income, and ethnicity all make a difference in a person's health. The lower the socioeconomic status, the higher the risk is for poor health. The healthcare system in the US is not universal like in other countries such as Canada. People leave the United States because of their lack of readily accessible healthcare. The only healthcare options available are Medicare, Medicaid, and private insurances. However, deductibles are high and eligibility makes it hard for some to access any insurance at all. There are plenty of organizations addressing health inequities, but I feel that government must also contribute to fixing the issues.

Things to touch on:

- US healthcare system
- Races and socioeconomic status
- Graphs displaying the data clearly
- What it will take to address health inequities
- Organizations that are making efforts to stop racial health inequity in America

Reflection on the Research:
So far my research has been consistent. I have yet to find any gaps in any information. My topic is broad so I can choose how deeply I want to go into my research. For now, I have decided to focus on all healthcare disparities in cancer, pregnancy, heart disease, etc. My sources have allotted me enough information on these broad subjects and I am excited to get started!

Research and the Annotated Bibliography

Mentor: Dr. Amy Johnson

The research component of the project included academic and personal development goals. First, I wanted students to enhance their skills and confidence in "independent" research. The second goal was to help students recognize the value of their peer networks and learn how to support each other's academic pursuits. Bauer and Bennett (2003) showed how transformative alumni found undergraduate research experiences to have been, especially when they were part of a learning community.

One deliverable for the final product was an annotated bibliography. The bibliography ensured that the proposed undergraduate research project was feasible. When included in the prospectus, the bibliography also demonstrated to the prospective mentor that the student was invested in the project and prepared to begin working.

Barker and Robnett (2012) asserted that students come to college with varying levels of preparedness and may not access the same resources for academic and social success when they arrive. To level the playing field, we began our course-embedded research process by inviting a library consultant to the classroom. The consultant showed the students how to navigate the various databases and locate physical resources in the library. The librarian then helped individual students refine search queries, evaluate sources, and access material. Here are a few observations about how the students approached this stage of the research process:

- Students were initially too specific in their search terms. For example, if they were interested in nutrition in rural communities in the northwestern United States, they would type in those precise terms. They became discouraged if there were no search results. I explained that this may signal gaps in the scholarship for their research to fill. Moreover, focusing too narrowly would make it difficult for the student to understand the broader context for their topic. I discussed how understanding farm cycles and techniques, as an example, could help the student better understand the nutritional choices made in that rural community.
- Students were intimidated by longer readings and texts written for scholarly audiences. In response, students searched inside the documents for specific words (i.e., "nutrition" or "rural") and only read the paragraphs surrounding those words. As a result, they sometimes failed to understand the author's larger argument or how they used evidence to come to their conclusions. Sometimes, the students simply dismissed the research entirely if they felt it was inaccessible. The librarian and I gave students practical tips for skimming and notetaking so that they could identify the author's thesis and evidence and evaluate the author's conclusions more effectively.

In addition to assisting students with this project, inviting the librarian into the classroom facilitated a relationship between them and a library staff member. Students reported feeling more comfortable reaching out to the library staff following this exercise (Pagnac et al., 2014).

Once the students were confident in finding and retrieving their source material, they next had to read and evaluate their evidence. Annotated bibliographies were new territory for most students in the class. Therefore, I provided very specific guidance for each annotation. I required students to provide basic information including a full citation of the source, a summary of main ideas or conclusions, and a discussion of the types of evidence used in the first draft of their annotated bibliography. I encouraged them to move toward analysis and evaluation in the first draft and required it in subsequent drafts. I used the following questions to help guide students through the process:

- Did the author use a variety of evidence to support their assertions?
- Was the evidence appropriate for the author's argument?
- Did you accept the author's conclusions and why?
- What questions emerged for you as you read the text?
- What connections can you draw between this work and other scholarly research or your own project?

This part of the course-embedded research process was framed to encourage students to think deeply and critically about their evidence and the relationship of other scholarly texts to their own research and ideas (Lapatto, 2003).

Mentee: Delyla Makki

Our COR 1100 final research project first consisted of preliminary research. The challenge I personally endured was narrowing down the topic selection based on available resources. There are countless examples of racial disparities in healthcare, but I limited my research scope to disparities in prostate cancer in African American males. The data I came across made me concerned with the experiences my grandfather endures as a black man with prostate cancer, encouraging me to investigate further. I wondered: why are African American men dying at disproportionate rates from prostate cancer compared to other races?

Although I had my peers to assist with finding scholarly research, many of us were inexperienced and did not understand where to look. In our groups, we took the time to find sources that weren't

considered scholarly in hopes that it would lead us to more academic sources. When we did find these academic sources, they were often daunting. Following Dr. Johnson's source evaluation questions, the class was able to scan sources to see whether they were reliable and significant to our research. In this way, we prepared ourselves to get further help from a librarian.

Figure 2. *Sample entry from annotated bibliography*

Zuvekas, S. H., & Taliaferro, G. S. (2003). Pathways to access: Health insurance, the health care delivery system, and racial/ethnic disparities, 1996-1999. *Health Affairs, 22*(2), 139-53. doi:http://dx.doi.org/10.1377/hlthaff.22.2.139

Taliaferro and Zuvekas discuss how ethnicity and race play a role in health insurance coverage. The racial and ethnic disparities in high-quality health coverage exist and appear to be growing at a fast rate. These disparities include using fewer preventative services, being less likely to have a source of usual care, and being more likely to lack health insurance. Employment and marital status are key determinants of disparities in access to health insurance. However, many disparities are still unexplained. As seen with prostate cancer, health care treatment and outcomes are influenced by access to the health care system. Disparities to this access are still evident across racial and ethnic groups. Many minorities tend to have poor access to high-quality health care. Whites are more likely than any other group to have insurance coverage. These racial and ethnic disparities in access to high-quality health care appear to be growing. This article is beneficial to my research because it explains the gap in health insurance access across race and ethnicity. This can explain why African American men have a higher mortality rate when it comes to prostate cancer compared to white men. This explains the fact that most African American men do not have access to high-quality healthcare and therefore are more at risk than other races. The author was not completely honest about why some health disparities are explained. There should have been talk of systemic racism, however, that was avoided by saying there were "unexplainable factors" that contribute as to why minorities are less likely to have health insurance. This could be a bias of the author. Therefore, I will need to get another source to answer my questions about systemic racism and its role in health disparities among African Americans. However, as a source, I will use this in conjunction with my first source as a contributing factor as to why there is such a disparity in prostate cancer in African American men.

Librarian S.T. was instrumental in my research journey. There were a lot of healthcare-related sources that consisted mostly of data and results rather than dialogue or deliberation. Librarian T. helped me narrow down my search to find statistics that were meaningful along with helpful analysis. The statistics validated my own experiences with healthcare in the United States. My annotated bibliography consisted of a small range of academic and scholarly sources that presented useful information for my research topic. The annotations allowed me to easily navigate the information I found most significant in my sources. As my research progressed, so did my annotated bibliography. I made sure to provide myself more than enough information so that when I began my prospectus, I would be able to rely on the annotations.

Writing and Revising

Mentor: Dr. Amy Johnson

Iteration and revision are hallmarks of course-embedded research and enhance student learning beyond the traditional research paper approach in courses where feedback and revision may be minimal, and students are unprepared for sustained independent research projects.

Each step of the research and writing in the course-embedded research process included faculty/staff-to-student and peer-to-peer mentoring to build communities of scholars and normalize the revision process. For example, during the brainstorming sessions, students were encouraged to share readings, videos, podcasts, and other pertinent material that may have come from classes or their own research to help each other strengthen their proposals. They also suggested potential mentors to each other as they built their own networks across campus. As the students moved from the brainstorming to writing phase, they began a highly structured peer review process. According to Lockhard and Ng (1994), students often endorsed peer drafts with limited engagement. For many of them, giving (and receiving) useful feedback was a new skill. Some students were highly critical, mistakenly believing that was the primary purpose of peer review, while others were extremely uncomfortable sharing tips for improvement for fear of hurting their partner's feelings. After reviewing Min's findings (2005), I provided students with a formalized process:

1. Talk to the author. Find out if they want you to focus on any specific area.
2. Review the rubric for the type of writing the author has chosen (letter or op-ed).
3. Provide feedback using the peer review guidelines below.
4. Return the draft to the peer and have a verbal conversation about the draft and your comments.

The review guidelines were equally deliberate. Students were instructed to:

- <u>Underline</u> the thesis sentence. Where does the author get to the point? Note if it is all the way at the end of the paper and identify where they might put it if you think it should be moved.
- Put a star (*) beside each piece of evidence the author uses. In the side margins or end of the paper, share opinions about the evidence – Good? Weak or ineffective for the argument? Are they using the same source too often?
- Highlight or **bold** a couple of sentences or ideas that seem strong.
- Draw an arrow towards or put a squiggly line under any sentence or idea that is unclear or underdeveloped. In the side margin or end of the paper, explain why it caught your attention.

The structured process was intended to help students understand the purpose of peer review and diffuse some of the fear and anger that can come with giving and receiving feedback on written work. When possible, I shared drafts of my own writing with students and the comments I have received from anonymous peer reviewers. Furthermore, I openly discussed how I process the emotional toll of writing and revising, and I highlighted the role of my own writing group as an emotional and academic support network.

I incorporated faculty-student and peer mentorship through a standardized revise and resubmit process that applied to every assignment in the course. The revise and resubmit process further highlighted writing as a skill and normalized the revision process. After receiving feedback, students were required to wait 24 hours before contacting me to discuss the grade or beginning the revision process. During that time, students were advised to review the assignment, rubric, and my notes. We set up a virtual or in-person meeting to discuss any specific questions about the assignment or my comments. Once the student felt confident in how to address my feedback, they began the revision process. First, they revised their assignment incorporating my comments. Second, they took that draft to the Writing Center, a peer, or another reader capable of reviewing for content and clarity, not just grammar. As we had practiced in class, they were encouraged to speak with the reviewer to ensure the feedback provided was clear and met their needs. Finally, the students wrote a new final draft that they turned in to me for reassessment along with the first draft (with my comments) and a reflection paragraph on the revision process.

Mentee: Delyla Makki
Peer reviewing was intimidating. We did not want to hurt one another's feelings, were unsure if we were providing correct feedback. Peer reviewing is something that I have always struggled with. Prior to college, most of my peer-reviewing consisted mainly of grammar edits. Offering opinionated feedback was new to me and my classmates. I often questioned whether my opinion was wrong and expressed to the author that they did not have to take my advice. In high school, I learned structured writing for all types of papers. However, those structures from my AP English classes in high school turned out to be irrelevant in my college classes. As a result, I was not very confident in my writing and reviewing.

Since it was our first semester of classes as first-years, a lot of us were using the peer review strategies that we learned in high school. Dr. Johnson's peer review guide helped us provide better feedback by focusing our attention on specific tasks. None of us had taken ENG 1100 yet, thus making our writing and editing process stressful. I had discussed this issue with some of my classmates, and they agreed. Writing became an intimidating task. Through this process I learned how to advise other students without feeling like my comments were invalid. I became confident in the advice I shared and encouraged my peers to view their work from my perspective. This encouraged them to make sure that their main ideas were effectively being explained.

I also relied on my classmates as reviewers. This prospectus was my first thorough research project in college, so I was nervous while finalizing it. I had multiple classmates run through my paper for any last-minute advice. For instance, I asked them if my proposed research topic was clear and to help me organize my outline. When it came time to submit our drafts to Dr. Johnson, I had been to the Writing Center twice. Thus, I received a few comments and feedback from her. I was able to quickly make my revisions.

The Writing Center helped me restructure my writing to be both more sophisticated and more versatile. These changes made me more confident in my writing and set me up for success in my future classes. With the feedback provided by the Writing Center, I was able to complete my draft with confidence. In addition, with help from the Writing Center, I was able to provide the author of my peer review with critiques that would benefit their writing on top of the review guidelines provided by Dr. Johnson. This made the peer review process more engaging for me and my partner. I no longer felt the need to question the quality of my feedback for my peers.

The Final Product

Mentor: Dr. Amy Johnson
The final product for the COR 1100 class was an undergraduate research prospectus and an email (Figure 3) that students could send to their potential research mentor. The prospectus included a description of their project (crafted from the "Finding a topic and mentor" module), a broad outline of the paper, and a discussion of the methodologies they might utilize and the questions they hoped to address (adapted from the annotated bibliography). I encouraged them to clearly express their passion for the topic, outline the status of their research, and explain why they hoped to work with the faculty member they contacted. Although I did not require it, I nudged each student to review

their documents over the winter break and send the material to a potential mentor in the spring or early fall of their sophomore year.

Mentee: Delyla Makki
I was very proud of my final prospectus. The course-embedded research model helped me develop a prospectus that has prepared me to begin my undergraduate research project. As a Public Health major, a lot of the information I found resonated deeply with course material and was beneficial to

my learning experience. In addition, through this project, I expanded on my personal goals of racial equity in healthcare. Due to the preparation done in COR 1100 with Dr. Johnson, I understand the importance and underrepresentation evident in undergraduate research at Elon University. My peers and I are encouraged to begin our journeys in research because of all the prep work we were able to complete as first-year students. Creating the prospectus in COR 1100 allotted me an opportunity for research that I might have otherwise never undertaken. As a sophomore, I am ready to present my prospectus to Dr. B. and begin more extensive undergraduate research.

Figure 3. *Email and Prospectus*

I.EMAIL

Dear Dr. [redacted]

I am very interested in studying racial disparities in healthcare and I am hoping to find a mentor to work with me on an undergraduate research project. I attended your presentation on racial disparities for the [redacted] Pre-health Society and have looked at your website and curriculum vitae. I would be interested in speaking with you more about your research, especially on the topic of cancer care and treatments, and your availability to mentor my work.

I am particularly interested in prostate cancer in African American men. I have had the opportunity to begin researching the topic in my Global class. I have attached a draft prospectus and outline for my research.

Thank you for your time and consideration,

II.PROSPECTUS INTRODUCTION

Prostate cancer specifically is more common in African American men compared than any other race. African American men experience the highest prostate carcinogenesis rates in the world. This suggests that there may be a biological component to prostate carcinogenesis in African American men. However, the African American to white American disparity gap increases significantly in detected disease and mortality. This suggests that there may be other factors beyond biology for why African American men are more prone to prostate cancer. Factors such as exposure, behavior, and access to healthcare are significant factors that determine increasing prostate carcinogenesis in the African American community.

Final Reflections

The process of designing, implementing, and experiencing the preparation for undergraduate research in the first-year course with the African Diaspora LLC was a significant learning opportunity for both mentor and mentee. From my perspective as the mentor, I incorporated best practices in mentoring undergraduate research and used a course-embedded model to meet the needs of first-year and vulnerable students. This included validating topic choices, inviting faculty and staff experts

into our spaces, and intentionally building intellectual communities that would extend beyond our classroom. It is especially gratifying to reflect with Delyla Makki on the impact these decisions had on her interest in and comfort with pursuing undergraduate research.

We also experienced our own growth and awakening as Black identified women in academia. When I began teaching the African Diaspora LLC students, I became more acutely aware of how deeply micro- and macroaggressions were affecting my teaching. While I knew that my racial identity and course content affected students' perceptions of my class, I was astounded to reflect on how almost everything I did in the classroom, from how I spoke to the way I structured my assignments, was done in anticipation of student resistance. I was also surprised and disappointed to realize how thoroughly I was failing some students, especially my marginalized and underrepresented students, by operating through this lens. I have benefited from mentoring students like Delyla Makki through the foundations of undergraduate research. I have been rejuvenated by her excitement, intellectual and personal development, and her increased confidence.

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