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INT 100: Critical Research and Information Studies

Summary Findings
Fall 2021

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I. Introduction

This report summarizes the design, implementation, and assessment of a credit-bearing information literacy course offered at UCSB for undergraduates in the Winter 2021 quarter. This course was developed as a capstone project for my term as the Evolving Workforce Residency Librarian at UCSB Library. The EWR role was initially established by UCSB to support early career librarians in developing innovative programs and approaches to librarianship during a two-year term, with a possible third year extension.

For my term as the EWR Librarian, I worked within the newly formed Teaching & Learning department within UCSB Library to support undergraduate instruction, identify research skill and information literacy outcomes, and the creation of digital learning objects. Since the residency was designed to focus on information literacy and instruction, I chose to develop a 2-unit, credit bearing information literacy course for undergraduates focused on research skills, information literacy, and social justice for my capstone project. This course, INT 100CR: Critical Research and Information Studies was approved for development in the Summer of 2020, and was offered for enrollment in the Winter of 2021.

INT 100 was not the first information literacy course offered by UCSB library, and in fact was preceded by a long-standing, one-unit information literacy course (INT 1) taught and co-taught by librarians. Although INT 1 was deemed unsustainable in the long term for librarians and library staff to support, INT 100 builds on the value of direct, librarian-facilitated research and information literacy instruction while allowing a greater engagement with research.

The course was publicized through multiple outlets, including outreach to student and academic services, and targeted promotion to first-generation and non-traditional students. This was intentional as these communities are not well-represented in academic research communities across disciplines. Although students were not asked to self-disclose their transfer or first-gen status, enrollees represented students in their second through fifth years of undergraduate study and from a wide variety of Social Science and STEM majors. Due to the pandemic, students zoomed into the class from all across the state and country, including 4 students based in mainland China. The variety of research disciplines represented via majors also provided interesting opportunities and challenges for facilitating the course.

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Course Catalog Description:

The practice of research is fundamental to being a critical user, producer, and consumer of information. Research often involves navigating information institutions and systems, such as libraries, archives, and data repositories. This course will provide students with core skills in developing research projects (professional, academic, and personal) with a lens of equity and justice to aid in effectively navigating information institutions. Students will be introduced to major concepts in critical information literacy, research justice, and scholarly communication. By examining their own research processes and experiences, students will have the opportunity to rediscover research as a tool for individual and collective empowerment.

II. Frameworks Informing Scope and Content of INT 100

The concepts defined in this section serve as a framework for the learning outcomes, assignments, and pedagogical techniques adopted in this class.

- **Research Justice as achievable and desirable**

Research Justice is a framework for research literacy that was developed by activists in Oakland, California at the Data Center. This framework identifies three types of knowledge: Social/Spiritual knowledge (knowledge that we share and learn in our communities); Experiential knowledge (knowledge gained through our own experiences as complex and intersectional beings); and mainstream knowledge (knowledge created by institutional experts, such as academics, corporate news, government sources, etc.).

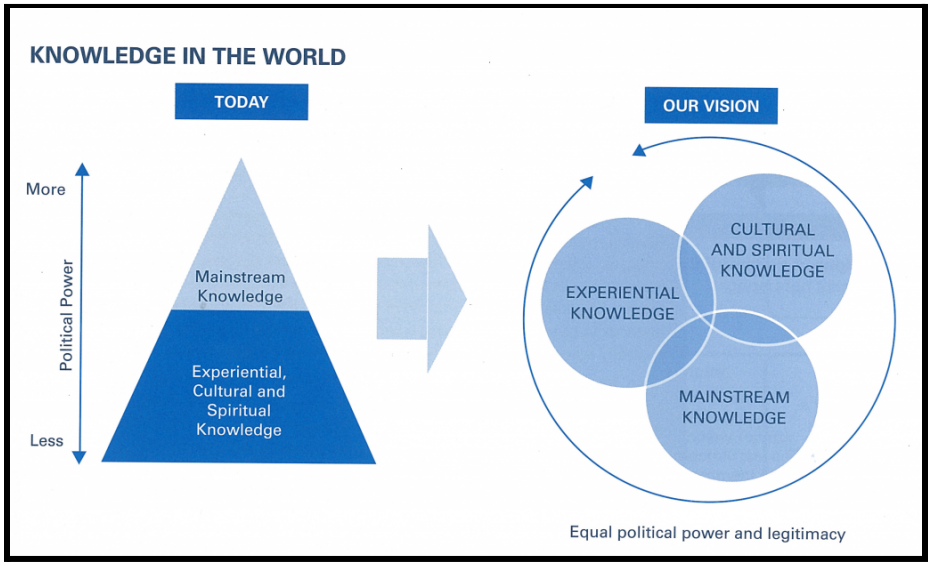

Image created by Data Center

This framework acknowledges the different forms of knowledge present, as well as the existing inequality in how these types of knowledge are valued by those in positions of power to amplify and disseminate them. Data Center was an organization committed to providing community members with the research tools and resources to be able to conduct research on local air and water conditions and eventually change policies. Both this framework, and its use by Data Center, highlight an explicitly justice-centered approach to research, and one that maps well to the information literacy skills and dispositions outlined in ACRL's Framework for Information Literacy.

- **Information Literacy and Critical Information Literacy**

Critical Information Literacy builds upon the Frameworks for Information Literacy for Higher Education developed and revised by the Association for College and Research Libraries (ACRL) to guide information literacy instruction by librarians.[2] The six frames included are:

- ★ Authority Is Constructed and Contextual
- ★ Information Creation as a Process
- ★ Information Has Value
- ★ Research as Inquiry
- ★ Scholarship as Conversation
- ★ Searching as Strategic Exploration

This framework is intended to be flexible and interlocking, rather than providing specific learning outcomes for instructors. One early and ongoing critique of these frameworks is the lack of explicit connection to social justice, for example including "information as a human right" as a central frame for recognizing the systems of power which govern information access and use.[3] Library and information science researchers and practitioners have sought to incorporate more explicit connections between social justice, research, and librarianship alongside professional organization like ACRL, and in the process have developed a body of work around *critical information literacy* practices that seek to establish these connections as central to library work.

Critical information literacy is an approach to information that "aims to understand how libraries participate in systems of oppression and find ways for librarians and students to intervene upon these systems."[4] Eamon Tewell notes that the application of critical information literacy has wide implications within and outside of specific instructional contexts. This connection to the material realities of our students and ourselves and recognition of how the environment in the classroom does not have to mirror the power systems outside of them is a critical insight offered to us by bringing critical info lit analyses in our work as librarians and educators. Critical information literacy can reveal new ways of thinking about the role of research and information-seeking as taking place within specific contexts and shaped by multiple forms of power and privilege.

- **Anti-Racist Pedagogy**

Kyoko Kishimoto describes three components of anti-racist pedagogy: "(1) incorporating the topics of race and inequality into course content, (2) teaching from an anti-racist pedagogical approach, and (3) anti-racist organizing within the campus and linking our efforts to the surrounding community."[5] While tracing the development of anti-racist pedagogy through the development of critical race and critical feminist pedagogies, the framework provided by Kishimoto offers important context into the actual environments in which we as

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[2] "Framework for Information Literacy for Higher Education", American Library Association, February 9, 2015. http://www.ala.org/acrl/standards/ilframework (Accessed November 15, 2021)

[3] Battista, A., Ellenwood, D., Gregory, L., Higgins, S., Lilburn, J., Harker, Y. S., & Sweet, C. (2015). Seeking Social Justice in the ACRL Framework. *Communications in Information Literacy, 9* (2), 111-125. https://doi.org/10.15760/comminfolit.2015.9.2.188

[4] Tewell, E. (2018). The Practice and Promise of Critical Information Literacy: Academic Librarians' Involvement in Critical Library Instruction. *College & Research Libraries, 79*(1), 10. doi:https://doi.org/10.5860/crl.79.1.10

[5] Kishimoto, K. (2018). Anti-racist pedagogy: from faculty's self-reflection to organizing within and beyond the classroom. *Race, Ethnicity and Education*, *21*(4), 540–554. https://doi.org/10.1080/13613324.2016.1248824

instructors and laborers conduct our lives, and the impact has on instruction, especially in remote environments. Anti-racist approaches to teaching may seem similar to those knowledgeable about feminist library instruction and pedagogy[6]; however, the development of anti-racist teaching has very specifically originated in communities of color and provide intersectional insights not addressed in the majority white-feminist origins of feminist pedagogy and later library instruction. Kishimoto provides five specific avenues for engaging in anti-racist teaching:

- challenge assumptions and foster students' critical analytical skills
- develop students' awareness of their social positions
- decenter authority in the classrooms and have students take responsibility for learning
- empower students and apply theory to practice
- create a sense of community in class through collaborative learning

The above points ask much of us as educators, and particularly as information workers. We are challenged to both acknowledge how much space and authority we occupy, while working to decentralize that authority and facilitate rather than direct individual engagement in instructional content.

Core Concepts in Designing INT 100 Course Structure

Contract grading

Contract grading can be implemented in a variety of ways, and is essentially "a system in which students determine and specify at the beginning of a class the grade they would like to earn, from a set of instructor-defined parameters."[7]. In INT 100, I asked students to contract for a specific grade in the class, which was based on the work completed or submitted. First, this system of grading provided total transparency on what expectations were for course assignments, and allowed students to easily track their progress through the course. Assignments submitted were given full credit as long as the submissions met the minimum requirements outlined in the grading rubric.. Grading in this way supported my goal of having students meaningfully engage in the content and assignments given, rather than attempting to "write for a grade." As an instructor, this grading system allowed me to focus on students' engagement and the development of their ideas over the course of the quarter, rather than grading based on a subjective evaluation of their work. This approach was also complimented with the class collaborations with assignment templates. Enabling students to directly shape these assignments facilitated their engagement with the assignments and created pathways for them to clarify and sh their individual projects (more on this in the next section). By making this process transparent to students, this form of grading also promotes engagement and growth in group conversations and individual reflections on engagement in the research process.

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[6]Accardi, M. (2013). Feminist pedagogy for library instruction / by Maria T. Accardi. Library Juice Press.

[7] Lindemann, D. F., & Harbke, C. R. (2011). Use of Contract Grading to Improve Grades Among College Freshmen in Introductory Psychology. SAGE Open. https://doi.org/10.1177/2158244011434103;
Danielewicz, & Elbow, P. (2009). A Unilateral Grading Contract to Improve Learning and Teaching. College Composition and Communication, 61(2), 244–268.

The grading table is included below:

	Process Assignments	Reflection Assignments	Participation + Engagement
A	Meets all minimum requirements for process assignment (A,B,C) and "A" grade requirements for final project	Completes all weekly assignments; completes all self assessments and final reflection, and group evaluations	Miss no more than 2 classes*; meets with Des three times; Contributes 3 or more complete sources and annotations to class bibliography
B	Meets all minimum requirements for process assignments (A,B,C); final work includes at least six sources	Completes 9 weekly assignments; Completes all self assessments and final project reflection; completes majority of group evaluations (3 / 4)	Miss no more than 3 classes*; meets with Des twice; Contributes 2 complete resources and annotations to class bibliography
C	Meets all minimum requirements for all process assignments (A,B,C); final work includes less than six sources	Completes 8 or less weekly assignments; Completes all self assessments and final project reflection; completes majority of group evaluations (3 /4)	Miss 4 classes*; Meets with Des twice; Contributes 2 resources and annotations to class bibliography

**One absence will be excused without prior approval*

Table 1- Table indicating contract grade distinctions and requirements

Collaborative Assignment Building

As part of my commitment to fostering class collaboration and learner empowerment, I also chose to create templates for each of the process assignments. I asked the class to both individually, and in small groups, discuss each template and assignment, and add suggestions to the template or guidelines for how to complete the assignment. Involving students in the creation of the assignment led to insightful discussions and contributions where students ultimately created an assignment everyone understood how to complete, and importantly *why* the assignment would be helpful for informing their research projects. I also found that students took greater responsibility and investment in using their assignments as tools for organizing and orienting themselves to their own research process.

Peer-to-Peer Evaluation and Feedback

As students began to focus more on their final projects in the second half of the quarter (week 6 forwards), students were asked to collaboratively create peer feedback forms to assist students in peer reviewing specific, project based assignments in the course (See Process assignments at the adapted syllabus). Prior to this first activity, we also spent time as a class reflecting on helpful feedback received prior to starting this course, what made that feedback helpful, and areas where students identified their own skills as reviewers. Students provided feedback on course *project* assignments, which directly connected to the development of their own ideas about their research projects. Students did not peer-review each other's *course reflection* assignments. These peer reflection activities were in addition to weekly reflection activities (which were not peer-reviewed in the course), as well as a student self-assessment completed at the beginning and end of the quarter.

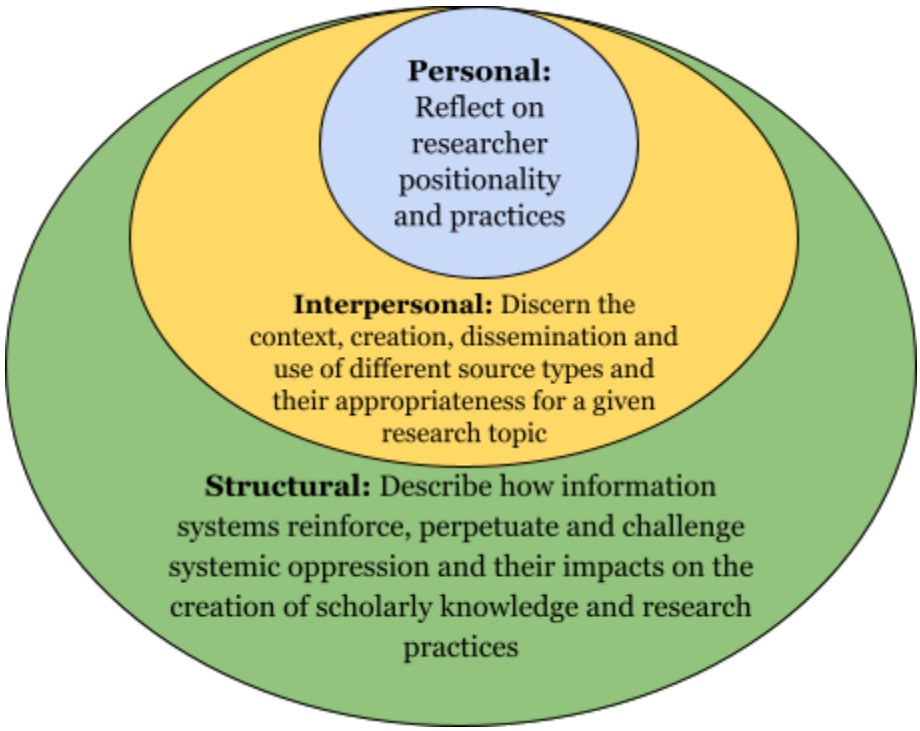
Course Organization

The core project of the course was the development of an original research project, and the creation of a public facing deliverable summarizing key findings. To support this objective, assignments were organized into three types:

- *Participation & Attendance* work was demonstrated through attendance in synchronous zoom sessions, meetings with the instructor, contributions to a class annotated bibliography, and completion of exit tickets and guest speaker feedback questionnaires.
- *Reflection Assignment* work was completed weekly, and asked students to respond to a specific prompt or question reflecting on the week's topic and how it connected to their chosen research area.
- *Process Assignment* work were scaffolded assignments specifically focused on developing each student's research topic and project over the course of the quarter.

All assignment directions are linked in Appendix II

III. Course Learning Outcomes



Before describing the specific assignments and structure of the course used to support these learning outcomes, it is important to understand that these three course level outcomes are structured to encourage meta-cognitive thinking and support reflection on three levels:

- personal (thinking about your own researcher positionality and practices; or put another way, how do you know what you know?);
- interpersonal (thinking about how sources are created, how different disciplines structure information and research, and how an individual's research is connected to larger disciplinary conversations);
- structural (thinking about how information systems are structured and the implications for knowledge creation and access).

All three learning outcomes were supported by multiple assignments throughout the course, as described in the following sections. Due to the structure of the course and the flow of assignments, learning outcomes will be discussed from the structural to the interpersonal and finally the personal.

Structural Goal: Thinking Critically About Information Systems and How We Use Them

GOAL: Describe how information systems reinforce, perpetuate and challenge systemic oppression and their impacts on the creation of scholarly knowledge and research practices

This course goal speaks specifically to encouraging learners to contextualize their own research within the wider domain knowledge created about the student's research topic. This goal is also important in supporting student's critical thinking. This was demonstrated through three specific areas of focus:

- ★ the creation of research questions related to information access and social justice topics
- ★ evaluating the roles and responsibilities of information organizations broadly defined
- ★ and identifying specific gaps in existing research and barriers to accessing information on specific topics

To satisfy this learning goal, reflection assignments were scaffolded throughout the course to promote reflection and engagement with the information universe of individual student topics, as well as application of major concepts in research justice introduced in the course.

Week 2: Reflection Assignment on Topic Genealogies

What: Students were asked to select a topic of interest to them, and reflect on how that topic has been studied, and from what perspectives. The goal of this assignment was to engage students in their own research topic and have folx consider the larger factors that have influenced knowledge about the topic. In their completed assignments, several students identified gaps in the research and noted different inequities in how knowledge was produced. The assignment prompt can be viewed here.

Findings: Students met this learning objective through several insightful questions and ideas in this assignment. Prior to finalizing their topics for the course, this assignment asked students to identify 1-2 topics of interest, and complete background "googlepedia-ing" about their topic to understand how knowledge has shaped that topic. In their final assignments, students identified several components of critical information literacy in practice:

- Identifying gender and racial disparities in publishing and the groups studied in humanities, social science and STEM fields and distinguishing between different disciplinary approaches to their topic
- Interrogating the authority of platforms for information sharing and wider motivations such as advertising revenue, political affiliation, and explicitly activist perspectives
- Identifying gaps in the available literature on their topics, and how their projects address and/or are impacted by those gaps in knowledge about their topics
- Acknowledging that, in the words of one student "academic research is a historically privileged space with differential access avenues for different groups" and the impact of this on the knowledge produced about their topics
- Evaluating how information institutions impact historical memory through access, collection, and description practices

This assignment also played an important role in preparing students for the longer process assignments, including the *Project Sketch* and *Project Plan*.

Week 5: Language Power Activity (In Class) & Keyword Strategies Reflection Assignment

What: The purpose of this activity and the accompanying assignment were to provide a framework for students to critically think about the role of language in describing their research topics, and in structuring access and establishing legitimacy for specific vocabularies within academic and scholarly research spaces. In class, we reviewed an article discussing the politics of citation, and the choices made by individual scholars to, in the words of the author, "cite awful people." Students in INT 100CR discussed the practice of citation, and how and whether to cite the works of scholars who have been disgraced or lost legitimacy through their personal actions. For example, how do scholars handle resources that were impactful within a discipline but found to be later falsified, or found to be created by people who acted unethically or abusively in their personal or professional lives? Following this conversation, students were asked to complete a keyword strategies assignment in which they identified specific keywords for their topics and briefly describe their research process while using these keywords to find resources about their topics.

Findings:

Related to language and vocabulary

- Language played an important role in all projects. Students whose projects adopted historical perspectives described how their searches involved "a matter of searching with a mix of historical and modern language," a strategy further complicated by shifting historical terminology around race, gender, and other identities, communities and experiences. Several students focused their project on linguistic and media framing of contemporary Black Lives Matter activism, and one student engaged in a literary analysis of language used by three specific Black women poets during the Harlem Renaissance.
- Students also recognized how finding and evaluating primary sources involved different linguistic and research strategies to identify relevance to topics, because of this historical and cultural context. Two students researching specific student experiences at UCSB (one examining international student experience during the coronavirus pandemic; the second centered on undergraduate student mental health at UCSB during the pandemic) ended up focusing on both individual student testimonies as well as secondary sources about the topic. Narratives about these projects and others indicated that students at times found the desire - if not the time - to collect additional data through surveys, oral histories, and interviews.
- Particularly for those students whose topics directly addressed racism and racial injustice, terminology on these topics proved to be particularly challenging, and several students mentioned how the use of more mainstream terminology (such as "environmental justice") instead of more direct terminology (such as "environmental racism," a system of oppression which drives environmental injustice) had wider impacts in how many audiences access that information. Students also found how different types of sources will utilize different terminology on topics, and more than one mentioned how the wealth of sources available only in English in and of itself could present a barrier to access.

On using and adjusting keywords while using information systems

- Several students noted how natural language and formal, disciplinary specific language about their topics varied greatly and created specific controlling images of their topic.[8] One example was the

[8] Term originated by Patricia Hill Collins to describe negative stereotypes of Black women specifically and how these culturally dominant images are used to justify racial and sexual segregation and hierarchy. In the research context of INT 100, students found that certain images, framing, and keywords related to their topics had a similar impact of creating a falsely unified range of voices on their specific topics which functioned to exclude other perspectives and knowledges about their topics. Hill Collins. P. (2000). Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment. Routledge. https://doi.org/10.4324/9780203900055

frequent association of "international students" topics with economic and systemic factors, rather than the psychological and social impacts of international students.

- In the narrative portion of this assignment, many students identified adopting iterative strategies for searching, including using and discovering disciplinary specific keywords and terminology, utilizing subject headings, and the use of Boolean operators.
- Students spoke to the differences in resource types that they found when using UCSB Library search compared to more general search engines, including Google Scholar results. Several students remarked on the ways in which their expectations for what library resources would include, with several noting surprise at the range of resource types available. Many students were familiar with accessing academic articles through the library for example, but were surprised to find out that UCSB Library also provides paid access to contemporary issues of the Los Angeles times, as well as access to historic newspapers.

Week 3: Project Sketch Assignment

What: This assignment was the first of three process assignments focused on the quarter-long research project, and asked students to create a concept map and/or narrative discussing at least two potential topics and their anticipated final format for the work. This assignment allowed me as the instructor to see the scope of potential projects, how students were interested in approaching their topics, and their basic approach to research and understanding of research as a dynamic process. This assignment also provided students the opportunity to articulate any possible challenges in researching their topic and receive feedback from the instructor to address these concerns. I was also able to elaborate on other considerations for their project not mentioned by the student so they could fully discern the feasibility of their final project.

Findings:

- Majority of the students articulated specific ways in which social justice, information access, and media informed their topic and ability to find resources on their topic. In some cases, there were plenty of mainstream articles and resource about their topic (such as the well-documented environmental and economic impacts of California wildfires), and in other cases students struggled initially to find sources that addressed their topics directly (such as the emotional and mental health of international students as distinct from psychological or economic analyses).
- Students also identified specific ways in which elitism in knowledge production within academic spaces has excluded many communities most impacted by research on social inequities. One student described this white, paternalistic gaze as WEIRD (Western, Educated, Industrialized, Rich and Democratic) Research, and mentioned how this production of knowledge in academia further stratifies the education system for students, instructors, and the public communities whom public research universities are intended to be accountable to. One outcome of this observation was that many students desired to make zines, posters, or infographics to be able to incorporate visual information into their final works, with the specific purpose of breaking down complex concepts into more easily illustrated concepts accessible to non-academic audiences.
- Students also identified topics that they were personally knowledgeable about but wanted to explore more in depth, particularly because they found a gap in more established research on their topics and experiences. Many students also identified a desire to educate themselves about their topics to be better able to disrupt and identify inequity in their studies and future professions.

Interpersonal Goal: Identifying and Understanding the Creation, Circulation and Context for Information Use

Goal: Discern the context, creation, dissemination and use of different source types and their appropriateness for a given research topic

This goal provides the most direct connection to key concepts in information literacy and research skills as defined through the ACRL'S framework for information literacy. This goal focuses on the **sources** side of research, and supporting students' skills as they learn how to evaluate, find, and use sources for a given topic. For INT 100, this extends to projects outside the scope of typical "scholarly" projects. To demonstrate skill in this area, learners were asked to critically evaluate the sources as well as their process for finding them.

This course goal specifically addresses aspects of research as a process and integrates what librarians more commonly think of as information literacy skills. Success in achieving this goal was evaluated over the course of the class, particularly through the process assignments which structured students' final project output. The final projects developed by individual students consisted of creating a public-facing resource on a research topic of personal interest. In the process of developing this project, students were asked to think critically about what makes a good research project, what the individual steps are in the research and writing creation process, and how to navigate information systems. Students also were tasked with selecting a final format for their research project, with the resulting project formats represented in table 2.

Ongoing: Annotated Bibliography Entries

What: As part of students' participation in the course, each student was asked to contribute at least two entries to a class annotated bibliography. Criteria for resources to be added to the bibliography included relevance to folx' individual research topics as well as relevance to larger class themes. Entries were submitted into one of six areas or themes: Academic Research & Libraries; Scholarly Publishing & Source Evaluation; Archives & Cultural Memory Work; Data, Information & Research; Language and Controlled Vocabulary; and Research, Justice & Methods. Students were required to submit one entry approximately every three weeks, including a brief summary of the article, and a separate annotation explaining the relevance of the resource to class themes.

Findings:

- Overall, students submitted entries that went well beyond the minimum requirements of the assignment in description and analysis of their resource. Folx identified creative connections between their topics, equity and justice, and information access and/or source evaluation. A range of sources were selected by students for inclusion in the bibliography, including peer-reviewed academic articles from a variety of disciplines, news articles, self-published works, and government reports.
- In the annotations section of the bibliography entries, students articulated concrete examples of the structural inequities contextual to research on their topic. For example, one student who was studying inequities in undergraduate research funding found a resource specifically about the impact of anti-Black bias in the publishing industry and how this impacted wider Black media representation. This student connected the resource to the scholarly publishing cycle as we discussed in class, and later brought those insights to their own project at the end of the quarter.
- Students also contributed resources that identified, documented, and critiqued different aspects of bias and inequity in research. For example, one student who contributed a resource on "predatory scholarly publishing" discussed how this article changed their perception of

academic research on their topic (California forest fires) by giving them an appreciation for the many conflicting incentives on academic researchers and scholars to publish copiously rather than thoughtfully. The inclusion of these resources indicated students' engagements with the core concepts and questions of the course, and the application of those ideas to their own individual research projects.

Project Plan Assignment

What: This assignment was created in collaboration with the students as a template for their research project and process. Building on the initial project sketch assignment, the project plan was designed to identify core areas of research process and outlining for students, while also providing an opportunity for students to work through how their ideas progressed since the previous process assignment. In collaboratively designing this project template, students first worked in small groups during synchronous course sessions to discuss the assignment, clarify questions, and develop suggestions for questions or sections to be included in the template. As students adjusted to this level of input on the assignment, it became clear that students in their groups and individually were taking responsibility for their research and the format in which they were asked to communicate their findings at this mid-way point in the quarter.

Findings:

- Many students utilized the positionality statement section to reflect on their understanding of research and their relationship to their evolving topics. Folx described how their process of selecting and evaluating sources had changed throughout the course, particularly as students explored their own positionalities as related to source selection, evaluation, and interpretation.
- Students identified a range of audiences for their projects, from those who were directly impacted by specific topics, to those who may lack a background in the research topic but could benefit from the findings. For example, several students chose to create infographics in the form of Instagram slides, and these researchers articulated their choice of format as being the most likely to be accessible and seen by their identified target audience of peers.
- In the class as a whole, students identified the challenges and limitations of conducting research remotely during the COVID-19 pandemic. This came up in folx' positionality statements (limitations of doing research while living at home with family or with multiple roommates), in the scope and limitations sections (not being able to access UCSB Library special research collections or conduct interviews with subjects, for example) and general stress, fatigue, and burnout from attempting to carry a normal load during a global-pandemic.

Personal: Reflecting on Individual Research Practices and Process

GOAL: Identify students' own existing research practices and develop further strategies to engage in research using scholarly and non-scholarly resources

A central learning goal of this course was to foster student self-reflection, awareness, and self-confidence in planning and developing research projects of all types. This individual learning outcome is both highly specific and individual to each student and is difficult to quantitatively measure. This learning goal is rooted in the idea that students' abilities to evolve their research practices are rooted in their metacognitive awareness of their research praxis. By being able to identify their own strengths and areas for growth while navigating a specific research process, students will be able to distinguish what research skills and tools will be

of use throughout different stages of the research process. This learning goal, focused on students' metacognitive awareness of their research process, was also supported by activities and assignments designed to support transforming the consciousness of learners, ideally with additional benefits outside of the classroom setting.[9] This learning outcome was met through a combination of assignments, self-assessments, and ongoing 1 on 1's with the instructor.

Student Self-Assessments

Student self-assessments were administered during weeks two and ten of the quarter. Both assessments contained a mix of scaled and open answer questions. The list of questions for each survey are available in appendix III, along with survey results. Responses were anonymous; however, results show an increase across the board in student's confidence in their research skills, with more students identifying as confident or very confident in several areas.

Reflection #4: Researcher Positionality Statements

What: This assignment asked students to reflect on their experiences and identities in terms of their positionality and intersectionality, and to describe how living at their own intersections has influenced their topic selection or approach to research. Students were also asked to define and share their conceptualization of research, and how this definition shapes their scope on their topic. This assignment also builds on ideas that were previously explored in the Road to Research assignment, with an emphasis on evaluating one's individual pathway and associations with research.

Findings:

- Students addressed the complexity of research within large-scale research institutions, with one student noting specifically that researcher "authenticity often takes a backseat to political, financial, and institutional interests." This student, whose project centered on the publication cycle in academia, identified how their own experiences as a STEM major impacted their background knowledge on the topic, and provided a personal narrative on how their experiences guided their interest in their topic.
- Students also addressed how different communities may interact with/understand their topic given additional social and historical factors. For example, one student, whose project focused on vaccine hesitancy, particularly around the COVID-19 vaccine and BIPOC communities, emphasized that although they initially lacked historical perspective on the impacts and history of vaccines, part of their research involved looking into what they described as "how vaccine research was conducted in the past and how it was distributed to these communities."
- Students also identified the larger impacts of their research, particularly students whose topics were about systemic exclusions of racially, sexually, and class marginalized groups. Folx selected topics related to representations of identity, gender roles, and race in many different mediums, including video games, community archives, academic research and others as both researchers and subjects of research. One student, who was researching video games, described this process well: "By using my experiences of playing video games, I believe that I'm able to understand the sources more effectively by incorporating the resources with my experience and ideas."
- Examples of student definitions of research include:
    - "a very individual yet community-based effort that seeks to better understand the world we live in."

[9] See: hooks, b. (1994). T*eaching to transgress : education as the practice of freedom* / Bell Hooks. Routledge; Freire. P. (2000). *Pedagogy of the oppressed* / Paulo Freire ; translated by Myra Bergman Ramos ; with an introduction by Donaldo Macedo. (30th anniversary ed.). Continuum.

- "research is for people to share their message or information that they want their chosen audience to understand"
- "I understand research as a process that investigates sources and materials in a field or for a topic that aims at reaching a conclusion, crafting an argument, or organizing facts"
- “Research to me is a controlled exploration of a relatively narrow topic using a guiding question”
- “I view research as a tool to understand our world better, but also as the leveraging the skills and capacities of research as a strategy to move to a more socially just world’ In choosing what research to pursue and how to pursue that research, I can continue a social justice agenda”

Reflection #8: Documenting Your Process

What: This reflection assignment included two sections (template here) asking students to identify tools, processes, and strategies they have learned and used in their research so far, and at least three potential places to share or donate their works to upon completion. This assignment intended to engage students in thinking about the larger application and relevance of their research findings to wider communities, including UCSB Library’s own community archives projects. This assignment also sought to encourage student reflection on the specific tools that had aided and organized their research, ranging from citation managers to study research hacks.

Findings:

- Students discussed the types of resources that they found about their topics, and how these resources shaped their own guiding research questions in the process. One student studying Black women poets who were part of the Harlem Renaissance mentioned their struggle in both identifying a research question that could be answered with available resources, and their need to move back and forth between their ideas for their topic and the resources they evaluated. These kinds of narratives were common across the course, and indicated precisely the kind of critical engagement with the research process intended by the wider course.
- One student reflected a sentiment echoed elsewhere in the class in identifying their previous reliance on electronically published materials over “going into libraries, talking with others, attending events, and other types of sources” as being applicable and relevant to research more broadly, and how this caused the student to reflect on how limited her previous research practices were prior to the course. Many other students shared this perspective that the universe of resources available for any given research project seemed to open substantially through their work throughout the course.
- Students reflected on their research (and procrastination!) styles and patterns more broadly, with some folx describing very specific cycles of intense research, followed by days where they would set their project aside. Folx also commented on how they utilized different organizational tools (such as annotating their resources for their own notes) and found themselves coming back to and revising earlier exercises and assignments from the course as they continued to develop their ideas.
- Students also demonstrated creativity and passion in their identification of open access journals, digital and physical archives, blogs, independent news outlets, social media accounts, activist organizations, and even specific student organizations and projects on campus to share their completed works with, well beyond the required community archive submissions for the course. Several students identified specific potential collaborators for their campus-related topics, and their desire to connect their research to concrete changes on campus.

Reflection #10: Final Project Reflection

What: The final reflection assignment in this course was a retrospective on the student's relationship to research generally, their topic, and how those ideas may have changed over the course of the class. Students were asked to complete two sections for this assignment. The first section included a section for students to add their final version of their researcher positionality statement. The second section asked students to reflect on their experiences working on their project. Specific prompts included "what did you learn about your research process?" "Are there next steps you would like to explore?" "What surprised you?" "What strategies can you use for future research projects?" Reflection #10 Template

Findings:

- Researcher positionality proved to be a salient point for students, as many mentioned this directly in their reflections section. Several researchers used the positionality statement section to directly address their personal investment in a topic, or as one student put it, "being a member of my research subject community."
- The required positionality statements also revealed how students were connected to their topic (if at all), and what their working assumptions and background on the topic were. Several students used this statement to articulate specific goals for their project. For example, one student, whose research focused on race, gender, and body type in video games included their own experiential knowledge as a video game player in their conceptualization of their topic. Elsewhere in this assignment, students mentioned this ongoing self-reflection about research and their topic as one of their key takeaways from the course.
- Several students also mentioned growing their confidence in their own research projects throughout the quarter, specifically mentioning source evaluation, project outlining, and use of UCSB Library resources in their responses. Several students mentioned that the concept mapping activities (see project sketch) helped them to visualize their topics and identify linkages to related but ultimately out of scope topics.
- One especially encouraging finding from students' responses was how many students described being exposed to and utilizing a wider array of resources for their research than in previous research projects. Multiple students mentioned archives and special collections and oral histories as specific source types they had not had opportunity to explore prior.
- Students gave careful consideration to their selection of the final project format, and described their decisions, both strategic and aesthetic, in selecting their format. Many folx specifically mentioned the intended audience for their project as a driver for their selection of a format, and described doing research on their format of choice to better understand the challenges and conventions associated with zines, podcasts, infographics, etc.
- Another recurring theme in students' reflection responses was the responsibility of the researcher to be transparent, reflective, and critical in their research process. This ran counter to many of the assumptions students described holding at the start of the course about research as a neutral, objective process primarily enacted by 'professional' researchers.
- Significantly, many students also articulated one of the core themes of the course, that their specific research was also connected to advocacy and documentation of their topics for future scholars, whether through the wider distribution of their work, or through the donation of their completed works to UCSB Library's COVID-19 and Black Lives Matter Community Archives. Students also discussed using their projects to inform campus policy, such as a student who described developing their research on student mental health and illness during COVID-19 to collaborate with student services and student organizations to develop a mental health app modeled after a successful project at a university in Colorado.

- Finally, multiple students mentioned how the assignments leading up to the final project, (and especially the project plan assignment) were helpful in both keeping folx on their topic, and to help build their ideas throughout the quarter.

IV. Final Projects, Reflections and Recommendations

Final Projects

Ultimately 21 students produced a variety of works in several different formats and on a variety of inter- and trans-disciplinary topics. In alignment with the structural goal for the course, students who contracted for an 'A' grade in the course were also required to submit their completed works to one or both of the COVID-19 or Black Lives Community Archives at UCSB Library. Contributions to these archives projects were also incorporated into a physical and digital exhibit, with the works created by INT 100 students available at the Spotlight instance here.

format	# of works
E-zines	4
Audio-visual (podcasts, videos)	3
posters/infographics	13
articles	3

Table 2-Student final work format

Opportunities for Growth

Given the restraints of remote teaching and the intricacies and complications of living, learning, and teaching during a global pandemic, reflecting on the class both during and after Winter 2021 has unveiled several areas for adaptation and growth from how the course was originally designed and delivered. I have organized these considerations and opportunities in two areas: *content* and *structure*.

Opportunities for course *content*

- In student evaluations and reflections, several students mentioned that they had hoped to learn more directly about STEM-specific research challenges and structural inequities. Although this course was intended and advertised for all majors, ultimately, we were not able to address the specificities of STEM (and particularly biomedical research, which several students voiced academic and research interest in) research within the wider academic research community context. Research ethics with human subjects for example, is a narrower issue within research ethics more generally, and was not initially included within the scope of research concepts in the course.
    - Future developments of this course would benefit from co-teaching with an instructor with experience in these areas, or additional opportunities for students researching and studying in these fields to contribute their perspectives to discussions in the course
- Students struggled to interpret several reflection assignment prompts. I speculate that this was due to several factors, including the fact that student feedback and ideas were incorporated into assignment templates for process assignments (related to their final projects) and not for *reflection* assignments,

where I saw the most widely varying interpretations of assignment prompts. For example, Reflection #8 asked students to reflect on the tools, frameworks, and processes that they engaged in during their research process in the class. While many students articulated self-reflection in their process, several students misinterpreted the prompt ask asking about specific citation tools, databases, and software they used in their research process

    - Future developments of this course would benefit from further discussion and simplification of assignment prompts. Overall, students described enjoying and benefitting from the use of assignment templates in the course, however clear and consistent guidelines across those templates would tighten the expectations for these assignments and the ability for students to directly reflect and respond to them.

Opportunities for course *structure*

- **Tighter organization of synchronous sessions, pre- and post-work.** Particularly as the quarter wore on, I found it necessary to change the planned curriculum during weeks 4 and 5 to allow students greater flexibility and time to engage with their research process as the assignments for the course intended. Particularly as students faced their own personal challenges and crises during the pandemic, maintaining an adaptable and flexible approach to the course was beneficial.
    - Future offerings of this course would benefit greatly from tighter organization between pre-work and lectures to support continuous learning and scaffolded instruction outside of formal assignments. Consistent pre-work and post-work (whether in the form of exit tickets or something else) contributes to the steady rhythm and regular expectations for students.
- **Strengthening the role of group work and group projects and more thorough integration of groups into coursework.** While designing the course, including some kind of group work component was important to me. Students were organized into one of five groups consisting of 4-5 people, and worked together in synchronous sessions as well as peer-editing and reviewing each other's works. I organized students into groups based on their planned final project format, however there were several students who decided to change their formats while still staying in their groups. Students voiced that the groups themselves were beneficial and that they felt supported in their “class squads,” which met one of the goals of supporting student peer-to-peer learning and support. However, while group cohesion was strong, they were primarily used for in-class group activities. This I believe contributed to an environment where students were ultimately more invested in their own research projects than learning from each other’s projects.
    - Future offerings of this course would benefit from greater integration of group activities into the course, and may consider the creation of group research works, instead of individual research works. This may lead to more cohesion between and across projects pursued, and the ability to better integrate projects into local campus contexts (See below).
- **Wider campus engagement & connection between local and campus contexts with individual research projects and outcomes.** Connection to local campus topics and contexts was encouraged by me, but not required as part of the course. Particularly given the focus of this course on research afterlives and creating new knowledge for diverse audiences, a greater engagement with contemporary issues on campus (for example, the COLA strikes and student housing) and narrower scope for research projects within the course will support greater engagement with local resources and topics, and more possible outlets for their research works.
    - Future offerings of this course would benefit from a narrower scope for research topics, and in directly supporting existing projects and student engagement with organizations and departments on campus. Examples could include requiring students to identify research topics related to campus life and contexts, such as student housing, student labor, etc.

- **More intentional and consistent integration of library collections and expertise.** Students were not required to use a specific type or number of sources, and were provided with multiple resources and sessions on navigating UCSB library resources online. Given the widely varying topics and disciplines represented in student topics, students were encouraged to use a variety of resources. Although multiple guest speakers from UCSB Library were invited to the course, I did not choose to amplify or focus on specific collections within the library during our synchronous sessions, instead encouraging students to explore on their own and following up with students during individual meetings. While I had initially hoped that students' individual topics would end up introducing them to multiple source types, I did not prioritize course space for providing an overview of UCSB Library's specific collection areas beyond EGSC.
    - Future offerings of this course would benefit from tighter scoping of research projects and by highlighting available resources and collections in the library, even if through a simple presentation embedded in the course GauchoSpace.
    - Future offerings of this course could also benefit from having guest instructors earlier in the quarter, instead of towards the end. This would allow students to get a sense for the many resources and collections available prior to scoping their topic.

Challenges Experienced

- **Limitations of remote instruction in building class cohesion and rapport**
    - INT 100 was initially intended to be delivered in person, and like many other courses was offered online during the COVID-19 pandemic. While this allowed for a full class with students tuning in each week from the comfort of their homes, it was challenging to develop a cohesive learning community throughout the course. For example, one small group was organized together because they shared a time zone 12 hours off from UCSB. Most were not able to consistently come to synchronous lectures, and most often viewed the lecture recordings. While my ongoing check-ins with students and review of assignments led me to believe that this group of folx were understanding course content and meeting course goals, I was unable to provide the same kind of shared working space during synchronous sessions for the folx in this group.
- **Long-term Library department limitations around course-based undergraduate instruction**
    - This course was developed as part of my residency position, and immediately prior to my arrival at UCSB, the Library had decided to suspend the existing credit-bearing course, INT 1. This course was previously offered as a one unit, pass/no pass course, taught or co-taught by Librarians. Since the offering of INT 100, there has not been resources, staffing, or policies to support offering formal information literacy courses led by librarians, and the continuation of the curriculum of this course will require adaptation to stand-alone modules or workshops (see section below)

Recommendations

- **Standalone Workshops and Digital Learning Objects**
    - Although this curriculum was developed as a ten-week course, with some adjustments each week's curriculum can be adapted to a workshop model. Especially when combined with promoting specific library collections or partnerships with campus groups, dedicated workshops for Storytelling with Data or Research Planning (each were covered in the course) would support undergraduate research goals. Particularly though tighter collaboration with URCA or CITRAL, the course topics covered in INT 100 could easily be adapted for graduate students and faculty interested in integrating information literacy instruction into their courses.

    - Facilitating this course also underscored where students frequently are challenged in their research, and where particularly Teaching & Learning can be supporting student research through the creation of digital learning objects (DLO's). Examples of concepts that would be beneficial for students are annotated bibliographies, peer review, and accessing Special Research Collections materials. While not all of the above are in scope for Teaching & Learning at UCSB Library, this is a sampling of some of the concepts that would have greater relevance for general student audiences of all majors.
- **Course-Integrated Information Literacy Instruction**
    - Information literacy skills are crucial to student success in higher education, and this course demonstrated the value of applying information literacy concepts and curriculum to beginning researchers across majors. The curriculum for INT 100 was built upon several frameworks for research, teaching, and how information literacy supports social justice and researcher empowerment. These concepts strongly resonated with students, and several students mentioned the act of teasing through these concepts as one of the primary takeaways from the course. Future information literacy instruction at UCSB Library would benefit from adopting a progressive and emancipatory framework for research that promotes the full variance and value of research projects in and outside of the classroom.

Comments from Students

About the class:
"*This class offered me my first opportunity to actually conduct my own research and create as well as publish information. This was an enlightening experience, as it really showed me how many resources I have available to me to conduct research that will help me not just in this class, but in my other classes as well as my future research ventures.*"

"It was easy to become overwhelmed by everything and I was glad to have guiding questions from the project plan to center my focus from time to time. I think I'll carry this on with me to future research projects along with keeping my eye on positionality on a subject. As a researcher, I think I've become more critical of myself and of the sources that I use. [...] At the same time, this project has taught me to have confidence in my skills as a researcher. "

"This course taught me so much about the research process and helped me step out of my comfort zone when it came to talking about controversial topics."

IV. Appendices

Appendix I: **INT 100 Final Syllabus** and **Adapted Course Overview**

Appendix II: **INT 100 Assignments Overview**

Appendix III - Student Self-Assessment Survey Questions

Assessment #1 administered in Week 2: (and results)

- Likert Scale questions (1-5 scale; 5 being very confident)

    - I feel confident in my ability to plan research projects
    - I feel confident in my ability to use library resources
    - I feel confident in my ability to evaluate sources for a given project
    - I feel confident in my research process
    - I think of myself as a researcher
    - I take notes as I looks for sources
    - I frequently consider how power and inequity play a role in research
- Open Response Questions
    - When I think of research, I think of...
    - Something that is usually easy for me when I do research is...
    - Something that is usually difficult for me when I do research is...
    - One goal I am setting for myself in this class is....
    - When I am burned out, I will...

Assessment #2 administered in Week 10: (and results)

- Likert Scale questions (1-5 scale; 5 being very confident)
    - I feel confident in my ability to plan research projects
    - I feel confident in my ability to find the resources I need
    - I feel confident in my ability to evaluate sources for a given project
    - I feel confident in my research process
    - I take notes as I look for sources
    - I feel confident analyzing the social and historical aspects of different research topics.
- Open Response Questions
    - When I think of research, I think of...
    - Something that I have gotten better at this quarter is...
    - Something that I can improve about my research process is...
    - My favorite thing about my project in this class is...