Teaching and Learning Online Foundational Badge Artifact
Namrata Chatterjee
Department of Geography & the Environment

Artifact or Course Description
Sustainability with GIS

Artifact
The artifact I created—a course assignment that integrates GIS software—became the centerpiece of this transformative learning journey. The assignment invites students to engage deeply with geospatial analysis, helping them visualize and interpret complex geographical data in interactive ways. This hands-on engagement with GIS allows students to apply theoretical knowledge to real-world issues, such as **urban sustainability and environmental planning**, which are central to both my teaching and research.
Through this experience, I came to understand technology not just as a teaching tool, but as a collaborative partner in education. This shift in perspective has enriched my understanding of my own positionality as an educator, particularly in my commitment to fostering inclusivity and accessibility. By integrating GIS and other technologies into my courses, I can cater to diverse learning styles and ensure that students from various backgrounds feel empowered and engaged.

Looking forward, I plan to deepen my integration of educational technology into my teaching practice. Beyond GIS, I am eager to explore additional tools like virtual labs and collaborative platforms that promote student interaction and real-time feedback. My ultimate aim is to create learning experiences that are not only engaging and interactive, but also deeply relevant to students' academic and professional trajectorie

Artifact Reflection

The Teaching and Learning Online Program was an enriching experience that significantly impacted my approach to teaching and learning. As a graduate student and teacher deeply committed to fostering inclusive and effective learning environments, this course challenged my positionality and expanded my thinking on how technology can be used to enhance educational experiences. The artifact that particularly resonated with me was the integration of GIS software into course assignments. Initially, I approached this with a traditional mindset, seeing technology as a supplementary tool rather than a core component of pedagogy. However, the course pushed me to reconsider this stance, recognizing that technology, when thoughtfully integrated, can be a transformative force in online education.
My teaching goals have always centered on creating engaging, student-centered learning experiences that are relevant to real-world issues. I aim to equip students with the skills and

knowledge they need to analyze complex problems and develop sustainable solutions, particularly in the context of geography and urban sustainability. The artifact from this course aligns perfectly with these goals. By incorporating GIS software into assignments, I can help students visualize and analyze geographical data in ways that are both interactive and deeply informative. This not only aligns with my goal of making learning more engaging but also with my broader objective of preparing students for careers in sustainability and geospatial analysis. Through this experience, I have learned the importance of embracing technology not just as a tool, but as a partner in the teaching process. It has shown me that technology can be leveraged to create learning experiences that are more dynamic, accessible, and tailored to the diverse needs of students. This realization has also expanded my understanding of my own positionality as an educator, highlighting the need to continuously adapt and innovate in response to the evolving landscape of education.

Moving forward, I plan to apply what I have learned by further integrating technology into my teaching practice, especially in the courses I will design in the future. I intend to develop more assignments that utilize GIS software and other technological tools to enhance students' learning experiences. Additionally, I plan to explore other educational technologies that can help achieve my teaching goals, such as virtual labs or collaborative platforms that foster student interaction and engagement.

What's next for me is a continued commitment to professional development in educational technology. I am eager to stay abreast of the latest advancements and best practices in this area, ensuring that my teaching methods remain relevant and effective. My ultimate goal is to create a learning environment where technology and pedagogy work hand in hand to empower students and enrich their educational journeys.