



TO: Dr. Yanan Wu, Visiting Assistant Professor, Graduate School of Geography

FROM: Dr. Lynn Murray-Chandler, Assistant Provost and Ex. Director of CETAL

RE: Observation

DATE: October 24, 2024

Class Summary:

I had the privilege of attending Dr. Wu's "SSJ Web Mapping and Open Source GIS" course on Monday, October 21, 2024. The class was held in BP310 from 9:00 a.m. to 10:00 a.m. The room was arranged in rows with monitors to ensure all students could use a computer effectively, though most students brought their own device. Dr. Wu presented from the front of the room, utilizing a variety of accessible materials that were easy to read from the back, and the furniture layout did not obstruct visibility. On this occasion, students primarily engaged with the new Leafmap software, which Dr. Wu described as "a powerful Python package for creating, analyzing, and visualizing geospatial data." The class was relatively small, with about nine students present.

Classroom Climate, Interactions, and Engagement:

The predominant pedagogical model in the class was an interactive lecture. Dr. Wu introduced the software and its creator from the University of Tennessee, then she modeled a task for students to try using the new tool. Some students initially struggled to open the document, prompting Dr. Wu to ask for raised hands to check for understanding and assist where necessary. She frequently left the lectern to provide individualized support, fostering a relaxed atmosphere that encouraged student interaction. Throughout the session, students were engaged, often collaborating with peers for assistance. I observed that students remained focused on the software and class materials, with no evidence of distractions. Dr. Wu's proactive approach to checking in on learners was effective, using her proximity as a teaching strategy to maintain high levels of engagement.

Activities:

I entered the classroom ten minutes early, where Dr. Wu was already set up, though only two students had arrived at that time. By 9:00 a.m., most students were present, with only one arriving more than five minutes late. Before class, Dr. Wu engaged with students, inquiring about their weekends and loosely connecting those conversations to course content. She began by revisiting topics from previous sessions, discussing how the recent midterm exam informed students' upcoming projects, particularly the enhancement of their personal websites to include data visualizations.

Dr. Wu utilized Canvas to access individual notebooks prepared for each student. She reviewed previously covered skills and instructed students to open their notebooks in Google Codelabs, explaining the necessity of this platform for efficient handling of their project files. Students started by installing Leafmap. By 9:13 a.m., Dr. Wu demonstrated how to locate the U.S. and input code for zooming in. Around 9:20, she progressed to visualizing data and removing layers on the map, guiding students to the USGS website to begin with a new base map. Students generated keywords to facilitate their exploration of different layers, and by 9:32, they began constructing a legend dictionary, which she supplemented with an introduction to the National Land Cover database. By 9:43, she introduced Cloud-Optimized GEOTIFF, allowing students to utilize Maxam for mapping locations and tracking hurricanes.

Reflections and Recommendations:

Organization:

While observing Dr. Wu's teaching, I recognized that the content and tools were outside my primary discipline. However, it was evident that Dr. Wu has established an environment with a well-established classroom dynamic. Students appeared comfortable with the course structure, and any minor confusions were resolved swiftly. Dr. Wu's use of individual notebooks with clear codes and instructions facilitated student navigation through the material. Although the seamless transition between various tools might challenge novice GIS students, it seemed appropriate for this course level.

Questions, Modeling, and Independent Practice:

Dr. Wu typically modeled each process before students attempted it, which made me consider whether additional practice on each task could enhance retention and transfer of skills. For example, could students independently navigate to France after a guided zoom into the U.S.? This could help gauge their understanding of the tool's functionalities when

not directly supervised. Additionally, while Dr. Wu invited questions, there were moments when she moved on without checking for deeper understanding. Employing more specific, targeted questions could further assess student comprehension.

Summary:

In conclusion, I observed a highly organized and skilled professor who effectively engages her students and cultivates a supportive learning environment. While I have suggested a few minor adjustments, my overall impression is of a dedicated educator with a strong command of the technologies employed in her teaching. Thank you for the opportunity to attend your course.

Respectfully,

A handwritten signature in black ink, appearing to read 'L. Murray-Chandler', with a stylized, cursive script.

Dr. Lynn Murray-Chandler
Assistant Provost and Executive Director of CETAL
Clark University