



Notes from the Field: Course Design and Instruction Strategies in Environmental Studies classes for Bilingual Students

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For the last eighteen months, I have helped design the curriculum and teach a three-course sequence of environmental studies courses created specifically for the Kansas University Academic Accelerator Program. The Academic Accelerator Program (AAP) is an intensive three-term program for first-year international students. Students simultaneously enroll in English-language courses and courses for academic credit. This article describes teaching strategies and assignments that have been effective in the environmental studies course sequence. First, I describe a key component of the environmental studies courses, the field trips, and then I outline strategies that have worked well in and outside the classroom. Next, I identify KU campus resources that have proved helpful in our course design and teaching. Then, I describe a key assignment in the first term course that highlights the course goals and learning outcomes. Finally, I suggest ideas for future course (re)design and additional strategies that we plan to implement in the course sequence.

Field Trips

The environmental studies courses have been designed to provide students hands-on experiences with different Kansas landscapes. Experiential learning and the ability to “bank” experiences for the future have been extremely important. For example, during the first term course, Introduction to Kansas Landscapes, students visit the KU Field Station, a local farm, Checkers grocery store, and the KU Natural History Museum. Students take photographs during the field trips and their homework assignments are tied to what they have seen and done. The field trip photographs have proven great writing and speaking tools. Students have something to return to in order to remind them of their experience, and this provides a readily available writing and speaking prompt. For example, during the second term course, Understanding Kansas Landscapes, students are able to connect an assignment about Kansas farmers to a field trip they took to a local farm during the first term.

In the Classroom

Based on coordination with the Applied English Center at KU and my experience teaching AAP students, I have identified some effective strategies for teaching bilingual students who are continuing to learn the English language. When delivering content, I have found it is best to lecture for no more than twenty minutes. While lecturing, I pause to point out places where students should take notes. For example, I emphasize that students should not copy everything from a PowerPoint slide. Instead, they need to begin to recognize when a concept is being defined or when an example is being used to illustrate a particular process. To this end, I have developed note-taking guides for specific lectures that assist students with identifying when they need to write down a definition or example. As I mentioned previously, AAP students take three environmental studies courses, so the note-taking guides are more prescriptive during the first and second term courses. By the third course, students are expected to take notes but are given less guidance with the idea that by the third term, they should be developing independent note-taking skills.

Very quickly I recognized that it helped students to hear and *see* the words or vocabulary terms used in class. While talking during class—either lecturing, explaining an assignment, having a reading discussion, or repeating student responses to questions—I write key terms and new or confusing words on the board. For

example, when completing in-class writing assignments, students often ask about specific plants or landscape features that we encountered during a field trip. I write those words on the board and say them out loud a few times, so everyone can see the written forms and hear the correct pronunciations.

Students speak and write during most class periods. Especially during the first-term course, students respond to in-class writing prompts. In-class writing helps gauge students' abilities when they are limited on time and must write without the aid of support materials like spelling and grammar check. Students can use the translator on their phones or their instructor and classmates who may provide vocabulary assistance. These responses also serve as comprehension checks; I see what students retained from the lecture or field trip experience and what may need further explanation or clarification. In addition to writing activities, students give mini presentations to the class after every field trip. The final project for Introduction to Kansas Landscapes includes an essay and formal presentation. The short "practice" presentations have greatly improved the quality of the final presentations as well as the comfort level that students display when formally presenting at the end of the term. Partner and group work have been effective ways to organize in-class activities. Students may feel more comfortable speaking with one or two classmates compared to the entire class. Moreover, students who have better listening skills are able to help further explain instructions for the activity to their group mates. For various pedagogical reasons, sometimes I let students choose their own groups and other times I assign them.

Outside of Class

In addition to strategies that have helped during class sessions, there are practices that have been helpful in between class meetings. Office hours have provided some of the more productive opportunities for student-instructor interaction and learning. While sometimes it can be difficult to convince students to attend office hours, in general, I have found that students in the AAP are more likely to stop by my office hours or request a time to meet one-on-one. Students reap the benefits of additional clarification about assignments and course content. They often seek assistance on their writing assignments and oral presentations. As the instructor, I learn what parts of an assignment remain unclear or confusing and can address these issues for the class at large. As part of the course curriculum, students meet with instructors during conferences about their final papers or in groups to check the progress of their research projects. Online course tools are used, too. Blackboard has been an extremely useful tool for the courses. I post videos, lectures, and note-taking guides, so students can return to the materials after class for further clarification or to listen to the course content again. Students submit all written assignments through SafeAssign, a plagiarism detection program. Cultural differences about what constitutes academic honesty and integrity make SafeAssign a useful learning tool in the AAP courses. Students can see what their papers look like after they have been checked for outside sources, and it is a good way to start the conversation about proper citation and attribution in U.S. university settings.

Campus Resources

Numerous campus resources exist that have been invaluable in the designing and teaching of the AAP courses. We coordinate with the Applied English Center on sister grammar courses for the first two environmental studies courses in the sequence. Students practice grammar usage specifically tailored to the interdisciplinary approach of the environmental studies course content. The AEC instructors have been a wealth of knowledge and assistance about what we can expect based on students' language levels. This partnership has the added benefit of reinforcing connections among courses. For example, students know they will need their notes for their environmental studies classes and their grammar classes.

The resources available on campus have helped supplement our course instruction and have allowed us to introduce students to the variety of assistance they have access to as KU students. The KU Writing Center has wonderful online resources for students and instructors. We advise students to make appointments with Writing Center tutors. For the third term course, Kansas Landscapes Projects, I have invited a Writing Center instructor to teach a class session about how to put together a poster presentation. We have coordinated activities with the Spencer Museum of Art into two of the courses, and the opportunity to tie visual material with course content has been extremely effective for our classes. The University Archives at the Spencer Research Museum and online learning modules through Watson Library have also been important course materials. The third course in the sequence culminates with a project where students conduct their own primary research, and the Office of Undergraduate Research has provided useful materials and brainstorming sessions for the design and execution of this course.

Assignments

In order to assess the learning outcomes for the Introduction to Kansas Landscapes course, I designed a scaffolded-assignment sequence that combines photographs, written assignments, and presentations. The content originates from the students' experiences during field trips, their interactions with KU campus, and their reflections on their hometowns. Students practice descriptive and reflective writing, and they present photographs to the class. In their writing and presentations, students must demonstrate the ability to apply course concepts and terms to the landscape images they have taken.



These assignments prepare students for the final project in the course: a place-based essay and presentation. Students choose a place on campus to photograph, and then they return to that place each week and photograph it again. They write about their observations of this place and reflect on their experience revisiting it each week and noticing the changes in the place and themselves. Finally, they compare the place on campus and the landscape of Lawrence, Kansas to their home city or country. This encourages students to apply the concepts from the course to the campus landscape and, ideally, any landscape in the world.

Future Course Design

After a year of teaching these new courses for the AAP, we have decided to implement a hybrid-classroom style to encourage student learning and to make the most effective use of limited classroom time. We have begun to record lectures, and for homework, students listen to instructors deliver recorded content and view PowerPoint presentations. Students take notes and bring those to class. During class, we gauge the level of understanding of the lecture and use class-time for activities that ask students to apply the terms, ideas, or concepts to specific situations or examples. The advantages of the recorded lectures are: students can pause, rewind, and/or listen to the whole lecture again. We can use class time to assess student understanding and to engage students in active learning and experiences.

[Back to Table of Contents](#)