Helping fifth graders understand the relationship between saving rainforests and language

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Like many of his Indiana University faculty colleagues, David Stringer has had a lot of final papers to read lately, by the 66 students in his class "Language Hotspots and Biodiversity."

However, unlike many of his peers, Stringer has had something else to read: letters from another group of people impacted by his course — 8- to 10-year-olds at local elementary schools.

Many of the children wrote to thank Stringer and his students for coming to their schools to talk about destruction of the world's tropical rainforests and how it affects the people living there, their cultures and their languages.

"I really got affected when you showed us places that had a lot trees cut down and it made me think I want to stop people cutting down the rainforest," wrote one fifth-grader. "Maybe we could fund a project for replanting so many trees and eventually grow a forest."

Another student told them, "I never really thought about this, but humans are endangering humans."

Students at University Elementary and six other schools saw a vivid slide show of people and wildlife affected by rainforest deforestation.

In November and December, Stringer, an associate professor of second language studies in the IU College of Arts and Sciences, took his students to seven Bloomington elementary schools. These included Binford, Childs, Fairview, Templeton and University schools in the Monroe County Community School Corp., The Project School and St. Charles Boromeo School.

His students showed a vivid and colorful slide show of people – particularly children – and some of the wildlife now being impacted, such as birds of paradise, tree kangaroos, Pinocchio frogs and the newly discovered Yoda bat. Classroom discussions with the kids, mostly fifth graders, followed.

Developing a sense of awareness of biocultural diversity

Stringer first became acutely aware of the issues involved when he spent a year studying in South America, including several months in the Peruvian Amazon.

Creating a project where IU students had to explain ideas of biocultural diversity to children helped them better understanding the concepts.

"While I used to see the questions of endangered languages and endangered species as separate, I've become convinced that language revitalization in traditional cultures needs to be tied to ecosystem conservation," he said. "If we are going to stem the current tide of mass extinction, we need to develop awareness of biocultural diversity as a unifying concept."

He believes it's important that people at a young age develop a sense of wonder about the beauty and diversity of life on Earth – both linguistic and biological. It's also crucial that they are aware of the fragility of nature.

"I have kids of my own, and I wanted to leave them with a message of hope," he said. "In a really fundamental way, the future of bicultural diversity is in the hands of people younger than you and me … What really got me was how intelligent some of the responses were and how advanced they were in the grasp of these concepts.

Over the fall semester, Stringer's students examined linguistic diversity and biodiversity in the context of the current global mass extinction of languages and cultures, and how language revitalization can be tied to ecosystem conservation.

"When the College of Arts and Sciences announced a call for proposals for more interdisciplinary courses for freshmen, I saw this as a great opportunity to develop what I believe may be the first course at a U.S. university to examine biocultural diversity from a linguistic perspective," he said.

"I also wanted to raise awareness of cultural and biological sustainability among freshmen, before they choose a major, so that some of them might later consider taking advantage of more specialized courses in related area such as linguistics, anthropology, ethnobotany and environmental studies."

Benefits of the course to IU and elementary students

One language disappears every two weeks, he said, adding that this "is like a library of traditional knowledge going up in flames." Over the next 50 years, nearly half of the 7,000 languages spoken today will vanish and within 100 years that figure is expected to grow to more than 90 percent.

"There are multiple pressures on indigenous cultures. Some of it is social, acculturation policies by governments, but our focus has been on one of the main offenders, which is rainforest destruction," Stringer said.

Every minute, about 55 acres of rainforest around the world are cut down.

Many organizations in the last decade have tied together biodiversity conservation with the maintenance of language and culture. During the semester, Stringer's students interviewed Luisa Maffi, co-founder and director of Terralingua; and Regina Harlig, a Bloomington native who today is a senior manager at Conservation International.

This semester, Stringer's students examined 45 grassroots projects in the Amazon, the Congo and New Guinea and discussed what made some of them successful and others less so.

Stringer, fourth from the left, and his students visit Fairview Elementary School.

Lucy Fischman, principal of Binford Elementary, said the student presentations enhanced her school's efforts around science and social studies.

"I think elementary students respond very well to college-age students. They are young, friendly faces, and our students look up to them. We love taking advantage of having IU right down the street," Fischman said. "This project has the potential to grow into a deeper collaboration, between our students and Dr. Stringer's students, with extension activities after students view the presentation."

Stringer, one of about 100 IU faculty members in IU's Integrated Program in the Environment, said the benefits of the project for his IU students are obvious.

"If you can explain these ideas to a 10-year-old child, it means that you've understood them yourself," Stringer said. "I think creating a project where students had to explain ideas of biocultural diversity to children really helped their own understanding of these concepts for their studies at IU. It worked both ways."

When the course is taught again next fall, Stringer expects to partner with NGOs to create an essay and poster competition for the elementary school students. The IU Office of Sustainability awarded him a $5,000 grant to help create the course, and he hopes to continue to develop the outreach initiative for children in the local community.

Read the story in its original location here: IU Newsroom