

TEACHING LINGUISTICS

High school linguistics: A secondary school elective course

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This article details a high school English teacher's experiences teaching a semester-long elective course on linguistics to tenth, eleventh, and twelfth grade students in Milwaukee, Wisconsin. Students explore units covering an introduction to linguistics, phonetics, morphology, language acquisition, sociolinguistics, and the history of English. The article reviews related primary and secondary school projects that have been done in the United States and abroad, the curriculum of this specific survey course, successes and challenges encountered while teaching, and recommended resources relevant to secondary school students and their teachers.*

Keywords: high school, elective, linguistics, secondary education, K–12 curriculum

1. INTRODUCTION. I have been teaching high school English at the Milwaukee School of Languages since I started teaching in 2003. Milwaukee School of Languages (MSL) is an urban sixth through twelfth grade language immersion school within Milwaukee Public Schools (MPS) in Milwaukee, Wisconsin. MSL has 1,200 students and an ethnically and linguistically diverse student body. In 2009, I designed an elective course called 'Linguistics', and in the 2010–11 school year, I taught the course to a group of twenty-four MSL sophomores, juniors, and seniors, in addition to my normal course load of eleventh grade American Literature and twelfth grade Advanced Placement English Literature and Composition. I taught Linguistics for the second time in the 2012–13 school year and again in the 2013–14 school year. The course is being offered for the fourth time in 2014–15. As someone who was not exposed to linguistics until my sophomore year of college, I firmly believe in presenting linguistics as a field of study to students in high school. Students benefit from developing their abilities to discuss language as a topic of study. I take a facilitative approach to teaching the class, presenting information and then assigning activities, writing, and research assignments that require students to interact with new terms, concepts, and skills, and ultimately to make connections to what they already know about language and to challenge beliefs they have long held about language.

In this article, I discuss the process of creating a high school-level linguistics class, the motivation I had to do so, the curriculum of the class, successes and challenges I have experienced in the classroom, direct feedback from students, and resources useful for high school students and teachers.

1.1. COURSE CREATION. I designed the course as the final thesis project for my master's degree in English with a focus on Language and Linguistics at the University of Wisconsin-Milwaukee. I applied to create Linguistics as a new course in MPS and worked with the district curriculum specialist to demonstrate how the course aligned with state standards in English. I submitted the course application in December of 2009, and the course was approved by the Milwaukee School Board a few months later. Linguistics is a semester-long elective course in English worth one-half credit.

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The course provides many ways for students to practice the five strands that comprise the English language arts: reading, writing, listening, speaking, and the study of language itself as a topic. Recently, the Common Core State Standards have provided a push within the teaching of all subjects to further incorporate the reading of 'informational texts', and linguistics provides a perfect avenue through which to do so. There are numerous relevant articles and resources on language available in textbooks and online that engage students, require them to follow and dissect an argument, and evaluate and synthesize sources. There are ample opportunities to practice research skills when studying any of the units in the context of a linguistics course.

1.2. MOTIVATION. The idea for the course stemmed from my own experiences as a student. Before college I had heard of linguistics, but I was not aware of what the field entailed. During my second year of college, I enrolled in 'Syntax', a mandatory course for English majors. The course was misnamed for reasons I do not know; it was actually an introductory linguistics course. In this class, I knew that I had found a life-long interest, a field that sought to answer questions I had always wondered about. I questioned why I had been previously unaware that I could study these language-related topics as a career. I went to a small liberal arts college with no other linguistics classes offered, but after I had taught high school English for five years and it was time to think about graduate school, I decided to pursue linguistics.

I continued teaching high school while attending graduate school classes in the evening. I shared tidbits with my high school students of what I was learning in my classes about the history of English, articulatory phonetics, and the race to record threatened languages. My students repeatedly asked why they couldn't take a class on the topics that I was studying in graduate school. I agreed with their question: Why couldn't they also study linguistics? Talking about language is interesting and significant for people of all ages, perhaps especially for high school students who are growing into their adult identities and who are exposed to many new social situations.

Language is fascinating to study as its own phenomenon, and it, in many ways, marries the Humanities and the Sciences. Battistella (2010:13) asserts that students should study linguistics because it offers 'perspectives on grammar and writing instruction, history, multiculturalism and diversity, critical thinking, and science instruction'. One of my own students, Fernando R., appreciates linguistics because of its 'mixture of history, culture, and human interactions'.¹ If you visit my class and ask students what linguistics is, they will reply enthusiastically: 'Linguistics is the scientific study of language!'. My students tell stories about how frequently they explain what linguistics is to their family members and friends.

The school where I teach is a language immersion school where over half of the students have studied French, German, or Spanish since they were in four-year-old kindergarten. Some students begin their language immersion experience in the sixth grade with Mandarin or in the partial-immersion Spanish program, and all students have the opportunity to study Japanese as an elective. The school's language focus provided a perfect test location to offer a linguistics course with so many students having wrestled with questions about language differences between two (or three) languages since they

¹ All former students quoted in this article are eighteen years of age or older and have given permission for their comments to be shared. Current students quoted have also given their permission for their comments to be shared; in the case of students who are under eighteen years of age, I have confirmed permission with their parents/guardians.

started school. Linguistics provides them with a metalanguage for discussing their observations and questions more specifically.

1.3. ARTICLE OVERVIEW. I first review related projects that linguists have undertaken to present linguistics to K–12 students (§2), before reviewing my pedagogical approach to teaching my linguistics class and presenting some of the highlights of the curriculum (§3). I then discuss research projects, class projects I assign, and guest speakers I invite (§4). In the next two sections (§§5–6), I discuss the successes I have had teaching this class and the challenges. Finally, I provide direct feedback from students who have taken the course (§7), and list relevant books, websites, and films for high school students and their teachers in the appendix.

2. LITERATURE REVIEW. In 2008, I started researching other projects where professors or teachers presented linguistics to K–12 students. I could not find an example of a class that had been taught solely on linguistics to high school students in the United States, but I learned that since 1983 A-level students in England could enroll in an ‘English Language’ course that included many linguistics-related lessons. Richard Hudson at University College London is a leading proponent of teaching linguistics as early as possible. Hudson (2010:35) describes how ‘education needs us’, with the ‘us’ referring to linguists, as a call to encourage academics to collaborate with K–12 teachers. Hudson credits Randolph Quirk as one of the fathers of this movement, with his publication of a collection of essays he coedited in the late 1950s showing how different topics within linguistics might be incorporated into the teaching of English. Hudson worked with linguist Michael Halliday’s government-funded project called ‘Programme in Linguistics and English Teaching’ from 1964–1971, working with two linguists and ten teachers. Hudson believes a major contribution that a study of linguistics can make to a student’s overall education is ‘knowledge about language’ (KAL), where ‘language teaching [is] explicit and should therefore impart some knowledge about the structure of language and a metalanguage for talking about it’ (2010:42). The major lessons that Hudson (2010:48) describes in the effort to make linguistics available to young students are the following. (i) Change will take time. (ii) There need to be linguists ‘willing and able to communicate with teachers’. (iii) Individuals are the ones who ‘mould official policy’. Hudson notes that it only takes a few officials on board to be able to change policies. (iv) While ‘teacher-training is a challenge’, it is not a problem that cannot be overcome. Hudson concludes hopefully with (v): ‘Linguistics can be taught successfully at school’.

In the United States, linguists Maya Honda of Wheelock College and Wayne O’Neil of MIT partnered with primary school teacher David Pippin after Pippin asked Steven Pinker at a book signing for advice on how to present linguistics to younger students. Pinker connected Pippin to O’Neil, his colleague at MIT. O’Neil was eager to connect with a schoolteacher, feeling that ‘[p]eople should not have to come to linguistics, this remarkable window on the workings of the human mind, in graduate school, as I did, or not at all’ (2010:25–26). The partnership among O’Neil, Honda, and Pippin has continued for over a decade. O’Neil and Honda spend a week every spring with Pippin’s students working through problem sets. In their essay ‘On promoting linguistics literacy’ (Honda et al. 2010:187), the three conclude that ‘[i]n English classes, we think of students as writers and readers. Why not as linguists?’, and they have demonstrated much success in presenting students with data sets and working with them to construct and test hypotheses. By giving students data such as a list of nouns in English and then asking them to form plurals and figure out the rules governing what happens, they have the students engage in real scientific inquiry. In an earlier presentation, Honda and colleagues (2004:1) ex-

plain that '[t]hese problems ask students to think in a descriptive way, with the primary goal not to make them better readers or writers, but to give students another, scientific way, to think about language—a means of expression that some students require'. Incorporating linguistics can give students who may not always have a lot of success in an English classroom a new lens through which they can see language.

Kristin Denham and Anne Lobeck at Western Washington University have National Science Foundation funding for their work preparing elementary and secondary school teachers to incorporate linguistics into their curricula. Their textbook *Linguistics for everyone: An introduction* (2010b) has the goal of making the field of linguistics accessible for everyone interested. In 2011, Texas high school teacher Ian Connolly taught a linguistics course of his own design using *Linguistics for everyone* as his main textbook.

In their introduction to *Linguistics at school* (2010a), Denham and Lobeck note that 'the advances of linguistic science have remained largely confined to the academy, and many of us who teach linguistics still find that our students know very little about language'. Importantly, they go on to note that there is 'no "right" way to integrate linguistics into K–12 education' but that linguists need to 'collaborate with practicing teachers and work in partnership toward the common goal of improving language education'. Collaboration is the key idea driving Denham and Lobeck as they work to prepare preservice teachers and actively go into classrooms to help teach language-related curricula.

The most recent development in the movement to offer linguistics to younger students is that, in the spring semester of 2013, six MIT graduate students taught two different linguistics courses in Boston, one a general course on linguistics and one on syntax. Iain Giblin (p.c., 8/9/2013) reported that they are hoping to make the connection with local high school students a program that becomes an MIT legacy, with new graduate students taking over the helm each semester. Hadas Kotek (p.c., 8/14/2013) added that in the summer of 2013 they started a program for middle school students as well and regularly have twenty to twenty-five students in attendance each week.

Additionally, the North American Computational Linguistics Olympiad (NACLO) is a way for every high school to introduce the study of linguistics to its students even if it does not offer a course on the subject. In NACLO, students rely on their skills in logic and analysis to evaluate data sets in a variety of languages. A competition in which students work individually to solve eight to ten language-related puzzles is held every January on university campuses. The highest-scoring students go on to represent North America in a worldwide competition. The competition began in 2007, and participation has increased every year. Approximately 1,700 students competed in the United States and Canada in 2014. These numbers represent a start, but with over fourteen million high school students in the United States, there are literally millions of students with limited or no exposure to linguistics before the age of eighteen, and many students who will never go on to encounter linguistics in college.

In Milwaukee, Joyce Tang Boyland from Alverno College was instrumental in setting up a partnership between Dr. Steve Hartman Keiser and his students at Marquette University and my high school students who are interested in linguistics to help prepare for the NACLO competition. This partnership serves as a potential model for university departments to collaborate with secondary schools. Dr. Hartman Keiser brings Marquette University students to practice NACLO problems with my students after school in my classroom. I provide milk and cookies. The college students do meaningful service work, and the high schoolers get to network with mentor students and a linguist as everyone works together to decipher sentences in Tagalog and Ulwa. In Milwaukee, our NACLO participation has expanded so much that we have two sites open for the competition: Marquette University and the University of Wisconsin-Milwaukee. Before stu-

dents compete, they learn more about the field of linguistics from a linguist who volunteers to share his or her time.

A movement has been growing with projects such as these that have long-term sustainability. Dozens of linguists are actively working to deliver topics within the field to younger students, while many linguists acknowledge the need to challenge themselves and others to develop skills in logic and data analysis in younger students and to share the rewards that can come from studying linguistics.

3. PEDAGOGY. My approach to teaching the class is facilitative and experiential. I start each unit by tapping into what students already know, presenting material through lecture and discussion, exemplifying concepts through video clips and data sets, and having students work together in partner and small-group settings to explore topics. I invite guest speakers to share their expertise. In many ways, I approach the teaching of my class as a fellow student of linguistics. I am a more experienced student of linguistics, certainly, but still a student. There is freedom in this admission because I have an incredible opportunity to learn along with my students. When I do not know the answer to some of the excellent questions they ask, we can hypothesize and do research together. This process models essential skills for students. We can ask questions, we can be okay with not immediately knowing the answer, we can look for patterns, we can hypothesize, we can do research, and we can make sense of the research together and brainstorm relevant examples—important skills for anyone going into a career in the sciences. I believe that my enthusiasm along with the natural engagement of the subjects we study hooks students, causing them to reflect on topics they have been superficially aware of before but now dive into, reading textbook descriptions and relevant articles, connecting to personal experience, debating with peers, and ultimately taking ownership of new material. In terms of experiential learning, if we can literally get up and do something, we do it. We feel our vocal cords vibrating, we take turns coming to the board to separate words into morphemes, and we survey people in our neighborhoods about their use of slang. The best education is active and engaging.

I start each class by asking ‘What have you observed recently about language?’ and allowing about five to ten minutes of our sixty-one-minute classes to be time for students to share insights about what they have noticed while listening to their friends, family, acquaintances, teachers, strangers, and the media. Students need time to explore, interact with, and internalize material. Sometimes I start class with a question I have for them about the connotation of a word, a quick survey, or a link to the material we covered in our last class. More often, students come up with topics or questions that spark our discussion. Students buy in when they feel that what they are learning is relevant to their lives. Our ‘daily language observations’ are the threads that weave our classes together.

Student Daniel B. from my first class described the value of daily language observations, saying:

I originally had no clue how to ‘observe language.’ When my instructor initially explained it, I thought, ‘Wow, this is the most tedious thing in the world.’ But I was wrong! When I was going home that day, I overheard this phone conversation. This girl was saying that she was ‘on the bus’ and that she had been ‘in the car’ that morning. I thought to myself, ‘Oh my gosh! Language Observation!’ Why ‘on’? Why ‘in’? With that I hurried and wrote it down. The next day I explained to the class what I had observed and the response that I got was ‘Wow, that’s interesting’ and we talked about why that might be. Since then I’ve been not only observing how people talk and what words people use, but I feel like I’ve been taught to ask ‘Why?’ and this alone is probably the most valuable thing that I’ve learned in this course.

Daily language observations emphasize some of the most important skills that I want students to develop: I want them to pay attention to the world around them, knowing

that what they observe and analyze within the context of their own lives has academic value. The metacognition inherent in these daily observations is an important skill for students to develop. Students keep lists of the language observations that they and their classmates have made in the backs of their notebooks, and one of these observations or questions later becomes the topic of a major research project that students undertake at the end of the semester.

3.1. COURSE CURRICULUM. I provide in this section an overview of the topics within linguistics in the course I teach and give specific examples of lessons and activities, in addition to a description of the three research projects that students complete. Each unit begins with direct instruction and discussion based on the PowerPoint slides (available through the Cengage website) that accompany our textbook—Fromkin, Rodman, and Hyams’s *An introduction to language*, 8th edition (2007). I prefer to work with the PowerPoint rather than the textbook itself because I am able to manipulate material to make it more age-appropriate for high school students. Typically, I have about half of my class reading at the college level, but the other half is reading either at or below grade level (with several significantly below grade level). I make use of many of the exercises from the *Introduction to language* text as well as from Denham and Lobeck’s *Linguistics for everyone* (2010b), usually selecting about four to eight exercises per unit and putting students into small groups to complete the activities together. I also supplement units with selected essays from Eschholz, Rosa, and Clark’s *Language awareness: Readings for college writers* (2009) text.

Originally, the scope of what I thought I would be able to accomplish in the course was more broad. I anticipated being able to cover much of our textbook, but once I started teaching the class, trying to make it through a textbook made the pacing required feel too fast. There are so many relevant texts, exercises, film clips, blogs, and activities that I now go into the teaching of the class with an outline. I use the textbook as a guide, knowing the major units we will cover, activities we will do, and research projects we will complete, but I also have an openness to use what the students report in their daily language observations to tailor some lessons based on what they find interesting in the language they are hearing spoken. Because the students are in high school, getting them excited about the field of linguistics is an important part of what I do, and I want to show them as many possibilities within the field as possible.

The major units we cover are (1) an introduction to the field of linguistics, (2) phonetics, (3) morphology, (4) language acquisition, (5) sociolinguistics, and (6) the history of English.

3.2. INTRODUCING LINGUISTICS. My first task is to teach students what sorts of topics are studied within linguistics and the types of questions that linguists seek to answer. I have students copy down the steps of the scientific method from the board, and we talk about how we will be working as scientists in an English classroom. I use the International Phonetic Alphabet (IPA) as a hook at the beginning to get kids excited about linguistics, and getting to learn a ‘secret code’-type alphabet helps to do this. I put the word *ghoti* on the board and explain how George Bernard Shaw said that English spelling is so absurd that we could spell the word *fish* as ‘ghoti’. The students make name tags for themselves using IPA, and we practice IPA multiple times throughout the first few weeks, with students eventually writing a note to a neighboring student in IPA, to which the other must respond in IPA.

² Additional information about this website and other resources discussed throughout this article can be found in the appendix.

Early on, I introduce the concepts of descriptivism versus prescriptivism. PBS's *Do you speak American?* website has a useful article for introducing the terms.² I also have students write a journal in response to the prompt 'How is language like a living organism?'. We have a class debate about whether English is decaying and dying or vibrant and strong. We discuss myths that people commonly believe about linguistics: for example, that some languages are superior to other languages. We talk about how all languages have slang and taboo words and how the languages we speak are a product of where in the world we are born and who is talking to us. We work our way through the 'Chapter 1: What is language?' PowerPoint, stopping to discuss questions and related examples. We discuss grammaticality versus ungrammaticality. We talk about the infinite number of sentences that we can potentially make with our language. We learn to finger-spell and spend time examining sign language. We do a dictionary activity on how to estimate how many words each student has in their lexicon after we read Malcolm X's essay 'Discovering the power of language', where Malcolm X describes the passion he found for words by copying dictionary pages while imprisoned.

In this introductory unit, students are surprised to learn that there are thousands of languages spoken in the world, not just the big world languages they think of when they consider other languages they may want to study. We watch the documentary film *The linguists* (2008), and then students spend a day summarizing a threatened language spoken on each continent by visiting *National Geographic's Enduring voices* website. Studying languages that are endangered sparks the discussion of the value of linguistic diversity. Someone inevitably asks why everyone in the world does not just agree to speak the same language, which triggers heated debate.

3.3. PHONETICS. For our phonetics unit, we complete various IPA exercises from the textbook. We study the drawings of the vocal anatomy in the textbook, and students spend time on laptops visiting the University of Iowa's phonetics website. The site offers activities where students can click on different phonemes in English, Spanish, and German and watch how the sound is produced in an interactive diagram. Students learn about the difference between producing vowels and consonants, aspirating sounds, and voicing sounds. Students are consistently shocked by how complex the act of speaking is, of the many opportunities we have to make mistakes when we are talking, and how impressive it seems that we usually do not. It is important to study phonetics early on because of the groundwork it lays for topics in our language acquisition and sociolinguistics units.

3.4. MORPHOLOGY. Our morphology unit involves looking at different data sets to try to find patterns in units of meaning. We start by looking at words like *cats* and *tree-houses* and *disestablishmentarianism* to count morphemes. I then give students magazines with instructions to cut out words that stand out to them. They then have to cut the words apart into their morphemes and paste the pieces onto construction paper and present several of their examples. We study Latin and Greek roots to talk about which morphemes are common today in Modern English. Small groups look at data sets in Zulu, Swedish, and Italian, and they then teach the class about the hypotheses they have created and conclusions they have drawn about the languages from studying the data. During the morphology unit, I begin to introduce different problems from the NACLO competition. There are dozens of data sets available at the NACLO website that are perfect for a study of morphology. Students look at data to analyze how to form possessives in Vanuatu or to determine what the diminutive markers are in Plains Cree.

3.5. LANGUAGE ACQUISITION. The key concept that I emphasize in this unit is that babies are brilliant. Many of my students enter the class believing that it is not worth a lot

of time to talk to babies since they cannot talk back yet and that electronic devices are excellent babysitters. Many students find it very positive when a one-year-old can manipulate a smartphone. It is important for my students to learn that the way for children to acquire language best is to interact with the people around them. Many of my students have younger siblings and will eventually be parents themselves, so this unit in particular offers tangible benefits for the children around my students. At my school, we offer no child development courses, so for many students, our linguistics class is where they get some important parenting advice relating to language acquisition.

I show students Patricia Kuhl's TED talk, 'The linguistic genius of babies', in which Kuhl focuses on the concept of babies 'taking statistics' in the first year of their lives on the data they are exposed to from the people speaking around them. We talk about how babies start learning their native languages in utero. We also watch Deb Roy's TED talk, 'The birth of a word', which shows how Roy filmed his son's young life all day every day to record the evolution of his speech through the formation of his first word. I assign Tina Rosenberg's article 'The power of talking to your baby' from the April 2013 *New York Times*, and students write a response.

Also in this unit, all students reflect on their experiences learning a second language at school (some started at age four, some at age eleven or twelve) and on teaching strategies that their teachers use to encourage second language progress. The students all conduct a research project with a young child that I discuss further in §4.

3.6. SOCIOLINGUISTICS. We begin our study of sociolinguistics by learning about William Labov's study of the pronunciation of /r/s by sales clerks in New York City department stores in the 1960s, talking about Labov's methodology and what he was able to learn about social stratification from studying the presence or absence of /r/.

Next we move on to lessons on dialect. For homework, students interview five people of various ages to ask them questions about their dialects. They ask each person five questions: (1) What language(s) do you speak? (2) Do you speak a dialect of that language? (3) Where is the best dialect of your language spoken? (4) What is your native language? (5) Do you speak your language with an accent? If so, which one? Students report their findings and talk about how people perceive their own dialects and accents. During the unit, students enjoy learning about regional dialects and looking at dialect maps to see which words, expressions, and pronunciations are most common in different areas of the United States. As Milwaukeeans, we take pride in our use of the word *bubbler* (*drinking fountain*, to most of you), we only drink *soda* not *pop*, and we know that when someone says they need to visit a *TYME machine*, they are looking for an ATM, not a trip back to 1957. Students take online dialect quizzes and spend time exploring and taking notes on PBS's *Do you speak American?* website. Recently, we hosted Joseph Salmons and Kelly Abrams from the University of Wisconsin-Madison, who gave a talk on the dialects of English spoken in Wisconsin, and later Joan Hall and Trini Stickle, who visited to discuss the *Dictionary of American Regional English*.

Approximately half of my students speak African American Vernacular English (AAVE) as a native dialect and all of us in my classroom have regular exposure to the dialect, so AAVE gives us an interesting topic of conversation, one where many of the students are already experts but sometimes consider their own or others' use of AAVE as 'lazy' or 'ghetto'. Learning that the dialect is rule-governed is eye-opening for most of the class. Student Cecilia E. explains the benefits of studying sociolinguistics in particular as being that the subject 'gives students the opportunity to see that all dialects people use are equal and have a reason for being used. A lot of times certain dialects are looked down upon and cause tension and frustration. Linguistics shows how these language differences should not have to be justified and occur for reasons'.

We talk about the relationship between language and identity, a topic that teenagers love to consider. We watch an online video of British poet Tony Harrison reading his poem 'Them and [uz]', which demonstrates Harrison's pride in and ownership of his native Yorkshire dialect. Students learn about style and register by acting out skits in which they pretend to talk about last night's basketball game to an NBA player as opposed to their English teacher or explain why they were late to school to their best friend and then to their parents. We cover terms like speech community, genderlect, jargon, taboo, and euphemism. We discuss the latest slang and have a 'Word of the year' debate modeled on the American Dialect Society's annual vote.

3.7. HISTORY OF ENGLISH. Studying the history of English brings alive the concept that all living languages change. This concept pushes students to see that language is in constant flux. We discuss the Great Vowel Shift and lexical, morphological, and syntactic changes over time. When we begin our unit on the history of English, we listen to a recording of the 'Our Father' in Old English as well as an excerpt from *Beowulf*. I give students a copy of the opening of *The Canterbury tales*, and we look at how similar the spelling of the words is to Modern English but how different the pronunciation written in IPA is.

I want students to understand that every word has a history. We watch several TED-Ed cartoons in the 'Mysteries of the vernacular' series that give animated histories of different words. We spend a day making a bulletin board in our hallway on etymology. Students select five words they are interested in to research and then create a poster to hang in the hallway with the etymology of the most interesting word they studied.

4. RESEARCH PROJECTS. Students complete three research projects in the class, two minor and one major. In the first project, students work with a partner. I put a list of diverse languages on the board (Xhosa, Hungarian, Cherokee, Basque, Icelandic, Gaelic, etc.), and students pick one to study. They do background research on the language, create a map to show where the language is spoken, find sound clips so that the class can hear the language, and project whether the language will still be alive in 100 years.

The second research project is part of the unit on language acquisition. Students are required to spend at least thirty minutes with a child between the ages of six months and four years, making notes on the phonemes, words, phrases, or sentences the child produces. Students then write a two-to-four-page paper about their experience and present it to the class. I time this unit to take place over a break from school when students are more likely to have contact with younger children in their extended families. 'I felt like a real linguist', said one twelfth grader, with something specific to look for, analyze, and present.

The final research project comes toward the end of the semester. Students choose one of their daily language observations and design a research project relating to the topic. Some topics that students have researched include awkward elevator silences, possible connections between bilingualism and GPA, how magazines targeted at women differ in their use of adjectives from magazines targeted at men, euphemisms for death used in the obituaries of the *Milwaukee Journal Sentinel*, which curse words people find most offensive, and judgments that people make about others based on their first names.

This final research project gives students the opportunity to attempt to answer a question they are interested in through real scientific inquiry. They pose their question, write a hypothesis, design a survey or observation, go out into the field to test their hypotheses, evaluate data, and ultimately synthesize what they have learned in a paper and oral presentation for their peers.

4.1. CLASSROOM EVENTS. At the high school level, the fun and interest level inherent in the material is the hook that connects students to the class, making them excited to come back the next time to learn something new. Pedagogically, I believe that the more events—activities a bit out of the normal routine that pull students out of their comfort zones—that a teacher can create in his or her classroom, the better the learning experience for students. Students like to look forward to an event and to tell their friends about what they are doing in Linguistics that day (which serves as excellent marketing for the class).

The activity that students have said they enjoyed most in our class is the Pidgin Dinner Party. First, we spend a day studying the topics of pidgins and creoles. Five students who speak different languages from each other come to the front of the room with the challenge of figuring out how to evenly share three granola bars, figuring out how to communicate with each other without speaking English at all. The next week, for our Pidgin Dinner Party, students come to class dressed up and with food to share. I seat students next to people who do not speak the same second language they do (in our classes, we have had speakers of Spanish, French, German, Mandarin, Cantonese, Japanese, Wolof, Hmong, Igbo, Turkish, and Twi), and they have to figure out how to share a meal with each other without using any English. I speak the play-language of Abbish to help ease overall communication. Students realize how important body language and facial expressions are to communication by doing this activity, and everyone ends up well fed and smiling by the end of the hour—with a clear understanding of the concept of a pidgin language.

For our study on the differences between American and British English, we designate one Friday ‘Scones in Wisconsin’ Day. We drink tea, eat biscuits, and work with partners on a matching activity between the two dialects of English. We watch Amy Walker’s YouTube videos that give advice on speaking with different accents, and students are encouraged to use their best British English accents. I put students into small groups with lists of different words and phrases that relate to different parts of daily life (transportation, education, fashion, etc.) and students come up with a sentence in British English using as many of the words as possible, and then the rest of us attempt an American English translation: for example, translating *My mate met a lollypop man and the lad turned out to be a nutter and wouldn’t let my chum cross the lane even after a bobby came by* or *Let’s go to the fishmonger’s caff, then to the wine merchant, then we need to hit the ironmonger and then return to the bungalow*. While the students are having fun playing with language, they are also learning about lexical differences and that their way of speaking English is not the only nor the best way to speak it.

4.2. GUEST SPEAKERS. Guest speakers add dimension to the class. I have found that people are very willing to come in to share their expertise. I think many linguists are interested in helping spread the word and their excitement about what they do, and coming to speak to high school students can be a great way to share the field. Linguists such as David Crystal make a point to speak to as many young people as they can. There are also many people besides linguists who are experts in what they do and can add interesting perspectives on the importance of language to their careers.

The first time I taught Linguistics, a local disc jockey came in to talk about censorship and language use on the radio, a former student from our school came in to teach us what he had learned in college about the languages of Mandarin and Arabic, our assistant principal came in to teach us about sign language, and a local art professor came in to give a lecture on semiotics. The second time I taught the class, a local history pro-

fessor came in to talk about Korea and the Korean language. A friend of mine from grad school who specializes in sound symbolism came in to talk to the students about his work naming new products, companies, and films coming out. A local newspaper columnist came in to talk about the language issues he thinks about as a writer. The third time I taught the class, one of the host-mothers of one of my exchange students came in to talk about sign language and her experience raising a son who was deaf (she signed the story of 'Goldilocks and the three bears' and students had to guess what story she was telling), a professor of Ojibwe came in to talk about the Ojibwe language and the value of preserving languages that are threatened, an administrator in our district with a degree in linguistics came in to give a lecture on 'Vowel Day' within our phonetics unit, and several linguists came in to talk about dialects. In January 2014, I attended the Linguistic Society of America's annual meeting in Minneapolis and made connections with members of the Language in the School Curriculum Committee, some of whom offered to speak to my class the following semester.

Having experts come in to talk to students is a great way to show how language-related topics are woven into different occupations, and these visits also serve as mini-Career Day opportunities for students. I encourage all linguists to share their work with K-12 students and invite all readers of this article to visit my classroom if/when you are passing through Milwaukee.

5. SUCCESSES. One of the many positives I see coming out of the high school linguistics course is that students of three grade levels work together to learn new material. Students are brought together by an interest in and curiosity about language rather than because they are all in the eleventh grade, for example. I have found students to be very willing to ask questions, to share examples about their use of language, and to become more apt observers of language over the course of the class. My students know that they are some of the few high school students in the United States who are studying linguistics in an elective course, and they are proud of their experience. Many express dismay that more high schools do not offer the class. As a teacher I informally measure success through my perception of student engagement. Our linguistics class is generally quite enthusiastic with hands up and eyes alert.

After the Coca-Cola commercial featuring people singing 'America the Beautiful' in many different languages aired during the 2014 Super Bowl broadcast, we watched it in class and talked about the reactions of some people on Twitter who wanted to boycott Coke because they believed that speaking other languages was 'un-American'. I had multiple students come back to our next class talking about what their parents had to say when they brought it up at home. When I know that students are continuing the conversations that start in our classroom with friends at their lunch table and with their parents at home, I know that something very positive is coming out of our experiences in the classroom. When I saw a status update from a former student, who is now studying linguistics in college, writing that she was excited to start her phonetics homework that night, I felt success. Sometimes I know the class is successful when the students I have twice a day come into our AP English class fourth hour excited because they have had a language observation in the hallway since I last saw them in Linguistics second hour. Once in a while, other teachers come to follow up on a topic that one of my students brought up in their Spanish or History or Psychology classes that started as a conversation in our Linguistics class.

The highlight of my experiences teaching high school students linguistics came in 2011 when the University of Wisconsin-Milwaukee hosted a symposium on endan-

gered languages. A few days before the conference, I learned that K. David Harrison would be giving the keynote address. All of my students had learned about Harrison's work in *The linguists* documentary, so I organized a field trip so that we could listen to Harrison's talk. The symposium organizers allowed the students to attend at no cost. Upon arriving, the students were flattered to be introduced to the whole symposium as the 'youngest linguists in the room', and the conference attendees were supportive of having these young people there representing the future of the field. The students were treated as scholars by scholars. Dr. Harrison addressed his talk directly to the students, asking them questions in the course of his lecture. While we were at the symposium, we also met Daniel Everett, who has spent his professional life studying the Pirahã language spoken in the Amazon River basin. Several students had read his book *Don't speak, there are snakes* and were excited to meet Dr. Everett himself.

As far as successes go, student Laura S. noted at the end of the first linguistics class in 2011 that '[o]ur Linguistics class became somewhat of a city of language, a metaphor created by Ralph Waldo Emerson. Every student brought their own brick'.

6. CHALLENGES. One of the major challenges that I face is that I am an English teacher, not a linguist. This course requires a lot of studying, reviewing, and researching on my part. My continuing goal is to add depth to the course. One of the things I am currently working on is reaching out to linguists for support. My graduate school advisor passed away suddenly while I was in the final stages of the program in 2009, and so I lost my key support system and personal connection to the professional field.

I also face a challenge in recruiting students to take the class. When students sign up for an elective course in creative writing or drama, they know what to expect. When students hear that they can take linguistics, they do not know what to expect. The pressure is on for my current group of students and me to promote what we are doing in class to interest another group of students to want to do the same. I talk about linguistics whenever possible in all of the English classes I teach, and I ask the other teachers in my department to do the same. Our classes have designed T-shirts to serve both as a marker of our linguistic class identity and as a tool to spark conversation between students and those asking questions about their T-shirts. Our marketing efforts have been effective: the first time I taught a class of twenty-four, the second time I had twenty-nine, and the third class had thirty-two students. There are two sections of the class each semester in the 2014–15 school year.

Further, I face the challenge of working in an urban school where 60 percent of my students qualify for federal free and reduced-price lunch benefits. Many schools in MPS have over 90 percent of students who qualify for free and reduced-price lunch. In my classes, reading test scores vary from elementary school to college levels, and meeting the needs of such a diverse group of learners is obviously challenging. As a teacher, I must tailor what I do to fit the needs and interests of the children I have in front of me. I need to meet students where they are, and that can be quite difficult when selecting and teaching linguistics-related materials. There is no budget provided by my school district to purchase materials for my class, so I face the additional challenge of meeting my students' needs with materials I purchase on my own or access online.

There are hundreds of ways to approach bringing linguistics to high school students, and I present here what has been engaging for my students. I do not claim to know the 'one' way to teach linguistics to young students. The course I teach will continue to evolve based on my experiences teaching it, as well as based on the students in front of me. I think there are as many ways to introduce linguistics to young students as there

are people who would like to attempt it. All I know for sure is that it is an undertaking worth doing.

7. STUDENT FEEDBACK. For the final exam in the course, I require students to write an essay about a very broad topic: ‘What did you learn in Linguistics class? What are the Big Ideas and Concepts that you will take away from the course?’. Because it is ultimately a survey course, this topic has worked well as a way for students to collect their thoughts about the class, give specific examples of what exactly they learned, and reflect on the past year. I originally hesitated to give this prompt because it seemed too simplistic, but I have ended up impressed with the complexity of thought that has gone into writing the final exam essay. Being a teacher of fifteen-to-eighteen-year-olds for the past eleven years has taught me to take seriously the perspectives and insights of young students.

The following comments are excerpted from students’ final exams.

James W.: ‘Linguistics is one course like no other I ever had a chance to take. Most courses have a decent amount of information to cover but it does always have its limits; however, linguistics touches everything and is involved in any and every possible topic. As long as information can be said, written, or expressed by a person, it is a linguistics subject. This makes this one the class where really the questions or points of interest are limitless as to what people can do. ... That kind of connection to humanity was what I learned from linguistics, all things people have ever learned depended on language to be kept and that all ways of speaking have little quirks and individualities that make them as different but similar as any two people.’

Zoe B.: ‘I learned so much more about what I had been exposed to my entire life without noticing it was there.’

Cory K.: ‘You can honestly find out more about people than you thought. I surely won’t be able to just have a conversation without thinking of a possible language observation coming to mind. It made me appreciate the ability my mouth and body have to express who I am and what I am feeling.’

Tess D.: ‘In my year in Linguistics, I learned so many new things I can’t even begin to count them, but the main concepts or ideas that I will never forget from this class are that everything anybody says can be an indication to who they are and where they are from, language isn’t limited to what we hear, and there are an enormous amount of concepts and ideas that I never thought I would even think about.’

Pachia C.: ‘I love when everyone in the class is participating and in Linguistics class, we were able to do that. There will be some agreeing and disagreeing but at the end of the day, language rocks! What I will take from class debates are that it’s okay to present your own opinion, someone will end up disagreeing with you no matter what you say and you have to respect others and their opinions. ... I learned to take time out of every day to see something new about language.’

Kylie D.: ‘Not only have the things I learned expanded my knowledge of the study of languages, but they’ve opened my eyes to ways the world works, and the way people of all different tongues can experience things with their language.’

Janney D.: ‘The way babies are born with the ability to just absorb language without needing to be taught is amazing to me. Reading about the stages of language acquisition was fun because I have a lot of little cousins, and when I’m with them now I can notice them going through them. I also tested some of the facts we learned.’

Brad R.: ‘It was very interesting to learn how society and culture affect language and how people communicate. Depending on your social class or role, your dialect will be different from someone else. It’s also affected by your race or background as well; all people in every part of the world have different dialects and idiolects even if they speak the same language.’

The following comments are from my group of students in the 2013–14 school year, who responded to a reflective question on the value of studying linguistics midway through their semester.

Kenedy D.: ‘Linguistics is a subject that allows you to explore languages in a whole different dimension. I have learned more about word formation/morphology and observed the structure of words in different languages like Xhosa and Arabic, and I also got to teach a bit about my native language, which is Twi.’

Danielle P.: 'I never understood prior to taking this class just how important language is, and how much of an impact it can have on the identity of an individual or many people collectively. I now understand that there are so many unique languages in the world, but many of them are dying, taking with them entire cultures. ... I feel like I appreciate my ability to speak a second language fluently much more than I did before, too, and I find myself picking up little differences in how people say things in French.'

Eric I.: 'I have learned a lot of new things that I would have never even thought about learning. I never knew that there were so many languages in the world and that a lot of them aren't even written. I also found it fascinating that there are so many different sounds in other languages that aren't in English or Spanish such as the clicking sounds in some languages in Africa. Now I am also very interested in studying another language, preferably Ojibwe or another endangered language since I find it really interesting how your perception of the world changes after you know a different language. It does come as a surprise to me that this is not a mandatory class or even that most people aren't even offered a chance to take linguistics. I believe it is a very beneficial class as it can help with our English classes or make us notice speech in an entirely new way.'

Valentin G.: 'Linguistics has made me more interested in learning new languages and has also made it easier than before. Language is so important because it's like a key to the world. Everybody should know about linguistics, and I for myself, cannot get enough of it.'

Gianna D.: 'I believe studying Linguistics is important because unlike the traditional subjects of math or history, it is something completely foreign that most of us lack any knowledge of. It introduces us to a whole new perception of language itself and gives us an appreciation of the complexity that language is. Every day there is something new to learn; the pacing never stops. I remember being fascinated by the amount of linguistic observations that occur overnight or in a discussion, and then being even more fascinated by trying to discover patterns in how and why we do what was observed. That's one of my favorite parts of linguistics—being able to apply it to real life. ... I think it's safe to say everyone should study linguistics. It's a humbling experience because you never realize how ignorant you might've been in such a crucial subject.'

8. CONCLUSION. It is my hope that for the rest of their lives, my students will consciously reflect on their use of language. This reflection can help them with conflict resolution and critical thinking. It can make them less judgmental, more sensitive, more inquisitive. Most of my students will not go on to become linguists, but they will go on to communicate with people every day for the rest of their lives. A student from my first class said, 'This class opened my ears'. I am pleased with that reaction. One of the skills we are supposed to teach in a high school English classroom is how to become a better listener, which is difficult to teach and to measure. Studying linguistics and language encourages students to fine-tune their skills as observers and teaches them that their linguistic observations have academic value.

To conclude, linguistics as a course of study provides students with a myriad of benefits. As the audience of this article already knows, studying language as a phenomenon is fascinating and worthwhile. Ultimately, my students leave high school having challenged many assumptions that people commonly make about language. They are more aware of the diversity of the world's languages, they become more reflective of their own use of language, and they are curious to learn more about language in the future.

APPENDIX: RESOURCES

I have found the books, websites, and DVDs listed and described here to be useful as reference materials and as materials for my students.

BOOKS

Don't sleep, there are snakes: Life and language in the Amazonian jungle, by Daniel Everett. New York: Pantheon, 2008. This first-hand account describes what it is like to conduct linguistic research among the Pirahã in Brazil.

An introduction to language, by Victoria Fromkin, Robert Rodman, and Nina M. Hyams. 8th edn. Boston: Wadsworth Cengage Learning, 2007. This is my main classroom textbook; I find the accompanying PowerPoint particularly useful for breaking down materials for high school students.

- Language awareness: Readings for college writers*, by Paul A. Eschholz, Alfred F. Rosa, and Virginia P. Clark. 10th edn. New York: St. Martin's, 2009. My students read essays in this text by Helen Keller, Malcolm X, Andi Ziesler, Deborah Tannen, Paul Roberts, and Steven Pinker.
- Linguistics at school: Language awareness in primary and secondary education*, by Kristin E. Denham and Anne C. Lobeck. Cambridge: Cambridge University Press, 2010. This book features essays written by linguists who work on presenting linguistics-related curricula to K–12 students.
- Linguistics for everyone: An introduction*, by Kristin E. Denham and Anne C. Lobeck. Boston: Wadsworth Cengage Learning, 2010. This textbook is useful for anyone interested in learning more about the field of linguistics. Engaging activities follow each chapter.
- Thinking linguistically: A scientific approach to language*, by Wayne O'Neil and Maya Honda. New York: Wiley, 2007. O'Neil and Honda present twenty problem sets for students to work through to improve the way students observe and analyze data.
- Wisconsin talk: Linguistic diversity in the Badger State*, ed. by Thomas Purnell, Eric Raimy, and Joseph Salmons. Madison: University of Wisconsin Press, 2013. This book presents essays exploring topics in linguistically diverse Wisconsin.

WEB LINKS

- '21 accents.' Video by Amy Walker, 2008. URL: <http://www.youtube.com/watch?v=3UgpfSp2t6k>. Actress Amy Walker speaks with twenty-one different accents in this video. She has additional video tutorials that give advice on how to adopt various accents, also available on YouTube.
- 'The birth of a word.' Video and transcript of TED talk by Deb Roy, March 2011. URL: http://www.ted.com/talks/deb_roy_the_birth_of_a_word. Roy's TED talk describes his experience filming his son's language acquisition from birth through the production of his first word.
- Enduring voices: Documenting the planet's endangered languages*. Website by National Geographic. URL: <http://travel.nationalgeographic.com/travel/enduring-voices/>. This website is useful for researching the world's endangered languages.
- High school linguistics*. Blog by Suzanne Loosen. URL: <http://highschoollinguistics.blogspot.com>. I post lesson plans, projects, links, and photographs from my high school linguistics classes.
- 'How y'all, youse, and you guys talk.' Dialect survey by Josh Katz and Wilson Andrews. *New York Times*, December 21, 2013. URL: http://www.nytimes.com/interactive/2013/12/20/sunday-review/dialect-quiz-map.html?_r=0. This dialect survey features twenty-five questions and heat map graphics to show who else in the United States speaks like you do.
- 'The linguistic genius of babies.' Video and transcript of TED talk by Patricia Kuhl, October 2010. URL: http://www.ted.com/talks/patricia_kuhl_the_linguistic_genius_of_babies. Kuhl's TED talk focuses on the concept of babies 'taking statistics' on the linguistic data to which they are exposed.
- 'LOL isn't funny anymore.' Article by John McWhorter. *CNN Opinion*, April 30, 2013. URL: <http://www.cnn.com/2013/04/30/opinion/mcwhorter-lol/>. This article by McWhorter talks about the change of LOL from 'laughing out loud' to a grammatical structure, which is an interesting subject for teenagers.
- Middle school linguistics*. Blog by Kristin Denham. URL: <http://middleschooling.blogspot.com>. Denham's blog is an excellent resource on linguistics and grammar-related topics for all K–12 English teachers.
- NACLO: North American Computational Linguistics Olympiad*. Website. URL: <http://www.nacloweb.org/>. Students can register to compete in NACLO at this site, as well as find practice problem sets and answer keys.
- Online etymology dictionary*. Website by Douglas Harper. URL: <http://www.etymonline.com/>. This website is a good resource during a unit on the history of English.
- Phonetics: The sounds of English, Spanish, and German*. Website by the University of Iowa, Departments of Spanish and Portuguese, German, Communication Sciences and Disorders, and Information Technology Services. URL: <http://www.uiowa.edu/~acadtech/phonetics/>. This website features interactive diagrams of the anatomy of the vocal tract.
- Playing with language*. TED-Ed series of videos. URL: <http://ed.ted.com/series/playing-with-language>. TED-Ed videos are three-to-five-minute cartoons geared toward fourteen-to-twenty-year-olds that explore various educational topics. The videos are accompanied by short quizzes and discussion prompts.
- 'The power of talking to your baby.' Article by Tina Rosenberg. *New York Times*, April 10, 2013. URL: <http://opinionator.blogs.nytimes.com/2013/04/10/the-power-of-talking-to-your-baby/>. Rosenberg's article provides an excellent conversation starter during a language acquisition unit.
- 'Them and [uz].' Video by Tony Harrison. URL: <http://poetrystation.org.uk/poems/them-and-uz>. British poet Harrison performs his poem 'Them and [uz]', providing an excellent springboard for discussion on the connection between language and identity.

Voices of North Carolina dialect awareness curriculum. By Jeffrey Reaser and Walt Wolfram, 2007. URL: http://ncsu.edu/linguistics/research_dialecteducation.php. The Voices of North Carolina project presents materials aligned to social studies standards ready for use by teachers without linguistics backgrounds.

DVDs

Do you speak American? With Robert MacNeil. A MacNeil/Lehrer & Paladin InVision Production, with Thirteen/WNET New York, in association with KLRU Austin, Texas, 2005. Companion website URL: <http://www.pbs.org/speak/>. These three hour-long DVDs exploring the state of English in America have an accompanying website with phenomenal lesson plans, articles, and activities for secondary school students.

The human language, parts 1–3. By Gene Searchinger. New York: Equinox Films/Ways of Knowing, 1995. This series comprises three hour-long films analyzing human language through interviews with respected linguists.

The linguists. With K. David Harrison and Gregory D. S. Anderson. Directed by Seth Kramer, Daniel A. Miller, and Jeremy Newberger. Ironbound Films, 2008. This documentary can be shown in an English or Science class to get students interested in linguistic fieldwork and in learning about languages that are threatened.

The secrets of body language. By James Millar. Granada Television International, ITV Productions, 2008. This DVD demonstrates how significant body language is in human communication.

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