

Engaging Students in the Psychology of Language

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In the preface of his popular book, *The Language Instinct*, Steven Pinker wrote, “I have never met a person who is not interested in language” (Pinker, 1994, p. 7). At one level, this certainly seems to be true. People engage in animated conversations about whether women and men use language in the same way, whether one’s native language influences a person’s thought processes, and whether feral children would ever be able to acquire a language.

Nonetheless, as Pinker acknowledged, most readers of his book have probably thought very little about language in a systematic way. Considering how rapidly most of us acquired our native language (itself an interesting fact about language), and how long ago that was for most students, it is relatively easy for undergraduates to take language for granted. When students enter the first meeting of a class in personality or social psychology or child development, they likely come with some preexisting beliefs that may or may not match what they will learn in the class. When students come to the first session of their psychology of language class, they come with what, exactly? Perhaps they mainly have some curiosity about this relatively neglected topic.

Thus, one of the primary challenges for an instructor in a psychology of language (or psycholinguistics) course is to increase students’ awareness of language. Instructors should provide students opportunities to talk and think about language. One simple activity is to hand out a series of statements about language. For instance, students might discuss the following statements: “Whether or not a person’s speech is grammatically correct is not that important, as long as the person’s basic ideas are communicated;” “We rarely if ever remember the exact words a person uses;” “Slips of the tongue reveal more about a speaker’s mind than the speaker may realize.” Often students will discover examples from their experience that are relevant to the statements. When different students retrieve examples that may lead to different conclusions, some engaging class discussions may emerge.

Another common challenge for teachers of the psychology of language class is the variety in students’ academic background. There will, of

course, be psychology and linguistics students; however, it is not uncommon for many other majors to also be represented: English, sociology, anthropology, education, child development, human services or even an interested biologist. This wide variety in academic interests among students can be daunting for an instructor because students will drift to the aspects of the course most relevant to their training and be disengaged from other aspects of the course. Differences in academic background can also be an opportunity for a more engaging course. In class discussions students can be asked to relate their new knowledge and discuss its implications in their home discipline. These discussions can be insightful for both students and the instructor because of the novel perspective students may bring.

We next present a task that promotes student engagement in a psychology of language class with students representing multiple disciplines. In the final section of the chapter, we present an annotated bibliography of teaching activities that promotes engagement in the psychology of language.

New Activity

In this section, we propose a new activity that is designed to increase student engagement by allowing students a wide degree of control over their final project. Ideally students should be able to choose any topic relating to psycholinguistics and they should be allowed to format their project however they choose. Thus, it is possible that final projects may include a play about speech errors, an APA style paper about neurolinguistics, or a short story about the effects of alcohol and language. This activity will be discussed first as it relates to student engagement. Next we consider the specifics of the task and finally we share some rudimentary assessment guidelines.

Background

As previously mentioned, a psychology of language class is often an academically diverse course. Thus, one challenge for both instructors and students is the varied level of ability and comfort among the students for scientific writing. This challenge can impede an accurate assessment of

students' understanding of the course knowledge if too much of the understanding is assessed via scientific writing. Similarly, even for many science students, writing a scholarly paper is a daunting task from which students derive little enjoyment and may reduce their engagement with the material. This assignment seeks to address these concerns on several different levels. By allowing students to choose their own topic, students can focus on an area of psycholinguistics that is interesting and relevant to them personally and academically. By allowing students wide latitude of freedom in how to express their knowledge about the topic, one overcomes a limitation of other disciplines that tend to think about writing in a very limited, narrow and discipline-specific way. For example, psychologists think about an APA style manuscript. Linguists think about MLA manuscripts. Poets think about poetry. Each writing style has its merit—and a plethora of information can be conveyed in any one of these formats. Our students, however, may be more adept at writing in one format over the other and they may not have yet developed the flexibility necessary to adequately convey their knowledge in multiple formats.

The current assignment offers students the ability to use their writing skills and creativity in an engaging way with the course material. Additionally, this project will allow students to approach the material in a new way that may offer new insights to both students and instructors. Finally, instructors must be willing to look at their course material in a new way; this project will increase student engagement but may also increase instructor engagement by offering new approaches to material highly familiar to the instructor.

Task

This activity is appropriate for an end of term project. When this project was implemented, topics were chosen near midterm, an annotated bibliography was due four weeks before the end of the term, and students peer reviewed the projects in class one week before the project was due.

Because of the nature of the assignment, the directions given to students were open ended and allowed students to focus on a topic in psychology of particular interest in a format of their own choosing. Consequently class time was devoted to discussing the final project and answering questions. Below are the guidelines that were given to students regarding what was required for successful completion of the project.

A total of seven sources were required, one of which could be the course textbook, and two could be primary sources that were read and discussed in class. Students were told that sources should be briefly but clearly explained. The content of the source should

also be clearly related to the main ideas and topics of the paper and fully integrated into the paper. Sources should also be properly cited in APA style.

In formats other than an APA scientific paper, students should still use information from sources and properly cite that information. For example, in a play or short story information from sources could be conveyed as expository dialogue or prose that would then be cited using APA or MLA style. Thus, the informative content of the paper is written in a format that is consistent with the overall tone and style of the paper.

Directions indicated that the overall project should be informative. For instance, a good paper would include a depth of analysis that goes beyond reiterating course content. Specifically, sources should not simply be summarized but should show a degree of synthesis and integration into the overarching theme of the paper. The content should be presented in a way that demonstrates mastery of basic Psycholinguistic principles and make interesting (and novel) inferences, predictions and interpretations. Thus, the content should be fitting for an advanced level undergraduate course.

Assessment

Assessment should be divided into three subcategories. First, consideration should be given to the students' use of sources. An excellent paper includes at least the required number of sources (seven) but should also briefly and clearly explain those sources while seamlessly integrating them into the paper. The sources should all seem to clearly point to the main idea that the author is attempting to convey and the sources should be properly cited. Second, the content of the project should be assessed. An excellent paper includes content that is unique to the project (not repeated from concepts in class). Additionally an excellent paper should do more than simply report the findings of sources—instead the material is considered, evaluated and extended (with novel predictions, interpretations or inferences). The material should be logically organized (or logically plotted). Overall, the project should demonstrate a high level of mastery of the material being discussed. Third, assessment should consider the quality of the writing. These projects should be enjoyable for the instructor and outsider readers to read. An excellent paper will have clear and concise writing that is free from typos and grammatical mistakes.

In summary, this assignment should enhance student engagement with material in a Psychology of Language course. Students should be allowed to interact with the course content that they are particularly interested in using a format they feel best captures their academic strengths. This assignment

allows students that are drawn to Psychology of Language from a variety of backgrounds (Psychology, Linguistics, Communicating Arts, Biology) to put their area of expertise to use in a novel way. Because Psychology of Language often attracts varied students, allowing students freedom to choose their medium for expressing themselves (research paper, short story, play, comic book, etc) will increase engagement in the class and with the material. Additionally, students will relate to the course material in a deep way: integrating their discipline specific knowledge with knowledge about the psychological mechanisms underlying language.

Annotated Bibliography

Demonstrating Patterns in Language

Reisberg (2010) presents some interesting questions, such as “Imagine that a hundred field mice are living in a farm house. Is the house *mouse-infested* or *mice-infested*? The purpose of the questions is not to review the particular linguistic rules closely, but instead to convey to students that there are patterns in language. This demonstration might be a useful activity very early in the semester, and might help students begin to think about language and language patterns rather than taking them for granted.

- Reisberg, D. (2010). Patterns in language. In D. Reisberg (Ed.), *The Cognition Workbook: Essays, Demonstrations, and Explorations* (4th Ed., pp. 94-95). New York: Norton.

Illustrating the Relationship Between Letters and Speech Sounds

Students often confuse letters of the alphabet with phonemes. An exercise (from Matlin, 2005, p. 314) to highlight the difference is to presents students with words that contain the same letters but are pronounced in different ways, such as the “ea” in “beauty,” “create,” “bread,” “bear” and other words. Students can then be encouraged to find other words that have different spellings for the same phoneme, such as the /u/ in “beauty.”

- Matlin, M. (2005). *Cognition*. (6th ed.). Hoboken, NJ: Wiley.

Demonstrating Top-Down Processes in Language Perception

Here is a simple classroom demonstration that requires two student volunteers. One reads a text that includes misspelled words (e.g., “marrow” instead of “narrow”), and a second student shadows (repeats) the text. The rest of the class listens to hear if the shadower reproduces the text exactly (i.e., including errors) or restores the intended words. Typically,

shadowers restore a number of words, and are unaware that they have done so. The activity demonstrates both top-down processes (i.e., guessing correct words based on context) and bottom-up processes (i.e., shadowers are less likely to restore words when the intended and mispronounced version differ in more than two features). This activity takes only a few minutes.

- Volaitis, L. E. (2008). Perception of language. In L. E. Volaitis (Ed.), *Instructor’s Manual with Test Bank for Carroll’s Psychology of language* (5th ed., pp. 30-31). Belmont, CA: Thomson.

Illustrating Frequency Effects in Lexical Decision Tasks

A lexical decision task presents a string of letters on a visual screen and asks individuals to quickly decide whether the letter string is a word or not. Typically, the dependent variable is the time it takes for individuals to indicate their response. Readers make these decisions very rapidly., This effect can be modeled as a classroom activity by presenting individuals with lists of 20 letter strings. Individuals read the list and state aloud whether each string is a word. Both lists consist of a mix of words and nonwords, but one includes high frequency words (such as “effort” and “history”) whereas the other consists of low frequency words (such as “awry” and “cryptic”). Total response time is likely to be shorter for the high frequency list. The exercise can be modified to explore variables other than frequency that influence lexical decision time, such as lexical ambiguity.

- Carroll, D. W. (2008). *Psychology of language*. Belmont, CA: Thomson Wadsworth.

Experiencing Ambiguity

Students find ambiguous sentences engaging, so presenting them with some examples can be both fun and educational. Reisberg (2010) presents examples such as “Grandmother of eight makes hole in one” and “Miners refuse to work after death,” which were taken from newspaper headlines. Instructors may be able to find examples of their own in other sources. Students can be encouraged to identify the multiple meanings of the ambiguous sentences as well as the type of ambiguity (lexical or structural).

- Reisberg, D. (2010). Ambiguity. In D. Reisberg (Ed.), *The Cognition Workbook: Essays, Demonstrations, and Explorations* (4th Ed., pp. 95-96). New York: Norton.

Being a Conversational Pain

A somewhat chancy but interesting exercise (Robinson-Riegler & Robinson-Riegler, 2004, p. 423) that illustrates how conversational rules work is

to ask students to deliberately violate them. That is, deliberately say too much or not enough or fail to cooperate in some other way. Students should be careful to observe how their conversational violations affect their conversational partners. This exercise may effectively illustrate how we tacitly follow various conversational maxims.

- Robinson-Riegler, G., & Robinson-Riegler, B. (2004). *Cognitive psychology: Applying the science of the mind*. Boston: Pearson.

Advancing Student Understanding of the Evolution of Language

One way to increase student interest in the evolution of language is by discussing the concept of a “protolanguage”—that is, a single language from which all other spoken languages might have evolved. Instructors might begin by discussing how some words may be similar across many different languages. Additionally, students can explore this concept by looking at the following website: http://www.exploratorium.edu/exploring/language/related_languages.html, which examines questions such as where languages come from and how languages differ in their expression of numbers:

- Volaitis, L. E. (2008). Biological foundations of language. In L. E. Volaitis (Ed.), *Instructor's Manual with Test Bank for Carroll's Psychology of language* (5th ed., p. 126). Belmont, CA: Thomson.

Demonstrating psycholinguistic concepts

Langston reviews software that illustrates psycholinguistic principles, including reaction time to identify words in discourse, reading time to sentences, and false recognition of sentences.

For example, when testing reading time to sentences, the time to read a sentence depends upon its relatedness to previous sentences. Langston shows that the demonstration results mirror those of the original study, and that students rated the programs favorably. These demonstrations may assist instructors in engaging students in psycholinguistics by requiring them to actively learn the concepts.

- Langston, W. (1998). A demonstration of research methodologies in psycholinguistics. *Teaching of Psychology, 25*, 61-63.

Using the Web to Promote Active Learning and Critical Thinking

This article demonstrates the value of Web-based assignments in demonstrating psycholinguistic concepts. Students complete five assignments on a variety of psycholinguistic topics (e.g., American Sign Language, categorical perception, lexical networks). For each assignment, students compare the information on the Web with the material in the text. Web-based assignments can engage students actively while also helping students evaluate the accuracy of information on the Web.

- Carroll, D. W. (2004). Web-based assignments in the psychology of language class. *Teaching of Psychology, 31*, 204-206.

Reference

- Pinker, S. (1994). *The language instinct: How the mind creates language*. New York: Harper Collins.