

## Preparation for discussion — Scientific research articles

- Use these preparation questions to help you work through parts of Treiman, Kessler, & Bick (2002), a research article on English spelling, and prepare for class discussion.

Treiman, Rebecca, Brett Kessler, & Suzanne Bick. 2002. Context sensitivity in the spelling of English vowels. *Journal of Memory and Language* 47(3): 448–468.

- Some of these questions are addressed in the Canvas **prep questions for 02.08**

- (1) What is your **level of familiarity** with reading scientific research articles? For example, have you read them in high school courses? Have you read them in another college-level course? Are you new to reading them?
- (2) How **comfortable** do you feel with reading scientific research articles?
- (3) What are the major **sections** of a scientific research article?
- (4) State one **research question** from Treiman, Kessler, & Bick (2002). Is this a **big-picture** research question or a **measurable** research question?
- (5) What do Treiman, Kessler, & Bick (2002) mean by their term **critical spelling**?
- (6) Choose one of the four experiments discussed in the article. For the experiment you have chosen, answer the following questions.
  - (a) State a **measurable research question** (which may or may not be stated explicitly in the article!). Remember that this must be numerical/quantitative: what categories are being compared, and what is being measured or counted?
  - (b) State the **null hypothesis** associated with this measurable research question.
  - (c) Were there any **statistically significant** results? What **answer(s)** does this provide to the measurable research question?
- (7) Explain how the **results** for the experiment you have chosen do or do not provide an **answer** to the **big-picture research question**.
- (8) Does the big-picture research question have any potential **implications** for the use of **phonics methods** in reading instruction?