Linking Research Articles to Abstracts

Levels
Intermediate +

Aims
Help students understand and recognize the four main sections of an experimental research article
Help students get the most out of research article abstracts no matter how they are constructed

Class Time
One or more class periods

Preparation Time
No set time

Resources
At least three authentic and unadapted abstracts
Overhead projector, transparencies, pens

Intermediate and advanced students at the university level may not know how to read a professional research article abstract effectively enough to use it as a summary and preview of the full article. For students in the social, biological, and physical sciences, familiarity with the four main sections of an experimental research article—Introduction, Methods and Materials, Results, and Discussion (IMRD)—can aid understanding of the information in any abstract and how it is organized. This activity sensitizes students to the way language creates internal textual boundaries.

Procedure

1. Select and prepare at least three abstracts of experimental research articles. Separate the abstracts from the articles, but retain the titles. One abstract should be organized in the complete IMRD structure. One other abstract should have a nonstandard organization of the four parts, and one should have a missing element or two. Copy these texts onto overhead transparencies, enlarging the text size if you have access to the technology.
2. Introduce or review the four sections of an experimental research article with the class. Have the students (in pairs or groups) brainstorm and pool what sorts of activities they would expect to find in each of the four sections. Write their ideas on the board. For example, for the Introduction, students might come up with hypotheses, basic definitions, or what previous research has not solved. Fill in whatever they leave out.
3. Pass out the complete abstract. Have the students read the text and try to agree on where the boundaries between the four sections are. If relevant, stress that a boundary may even come somewhere inside

a sentence. Tell students to be prepared to explain what language in the text led them to draw the boundaries where they did.

4. Project the abstract on an overhead projector. Have a volunteer come up and draw the boundary markers with a colored pen, labeling the sections with *I*, *M*, *R*, and *D*. Elicit an explanation for the decision.
5. Ask if any other pair or group drew the boundaries differently. If yes, call up a representative from a dissenting pair or group to draw that group's boundary marks and labels with a pen of a different color.
6. Discuss with the class where the two groups agree and disagree on the boundaries and try to come to an explanation for any discrepancy. See if a case can be made for arriving at a consensus. If the discrepancies are well founded, you can exploit them as evidence for variation in certain aspects of the structural analysis of complex texts.
7. Repeat Steps 2–5 with the other abstracts.

Caveats and Options

1. Each round of this activity can be followed by locating in the full article the information given in a particular abstract and by revising the class-created list of expected activities in each section of the experimental research article, based on the sorts of information found in the abstracts.
2. This procedure can be scheduled concurrently with or right after the main sections of the experimental research article have been introduced and several typical full-length research articles have been skimmed.

Contributor

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