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## Evidence-based Learning for Students of Linguistics and Language Technology

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### **Abstract:**

Students of linguistics and language technology analyze sentences by making annotations: labeling, linking and aligning words, and drawing parse trees to show their syntactic and semantic structures. Typically, these annotations are treated as one-time exercises: they are discarded as soon as marks are assigned.

These linguistic annotations, however, can be turned into valuable resources for students, instructors and researchers. For students, they support data-driven and evidence-based education. Students can learn empirically from these real examples constructed by their peers, supplementing the textbook. For instructors, these annotations reveal areas with which students experience difficulties. Instructors can search for common annotation errors, and adjust their lesson plans to optimize the learning outcome. For researchers, these annotations serve as a source of data.

The re-use of student annotations has been difficult because there is little computing support to make annotations easily stored, searchable and sharable. The proposed project addresses this need by developing a language-processing software tool with two components:

An annotation interface for students to annotate linguistic phenomena of interest, either individually at home, or collaboratively in the classroom.

A retrieval interface for students, instructors and researchers to query the database, in order to find and visualize existing annotations.