Sakumon: An assistance system for English cloze test

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Abstract: We present an internet-based system that helps teachers to make a cloze test on an online news article. The current system supports question making of grammar and vocabulary of English. The system works as an assistant to the teacher. It helps the user to choose an article, highlights grammar targets, suggests possible choices for the wrong alternatives and formats the questions in a printer-friendly way. The demo will include tryout of the latest version of the system, hands-on instruction of question making and discussion on open questions.

Topic and Scope

In many countries where English is not a common language, teaching grammar and vocabulary of English language is done by non-native teachers. They normally use a fixed textbook with limited number of exercise, while repetitive reviewing is needed to achieve better learning and assessing. In current situation, it is difficult to use fresh materials such as latest news taken from World Wide Web in the classroom, because turning a raw text into language teaching materials requires too much hard work.

Recent approaches to automatic question generation in the field of NLP (Natural Language Processing) offers one possible solution that provides the user with repetitive exercises each time in a different context. The technology is proved to be useful for self-taught learners, but would not be acceptable for teachers who want more control on questions that are produced. To address this issue, we built a system that produces questions semi-automatically.

How it works

The system, Sakumon, is detailed in (Hoshino 2007). Rather than automatically generating questions, the system works as an assistant to the teacher. The main feature is the system presents the user (teacher) suggestions for alternatives, helping the user with inflection and thus making it possible to produce questions just by clicking on the screen. Figure 1 shows a screenshot.
For example, when the user wants to make a question on one of the grammar targets “SVO structure”, the system helps the user to decide where to place a blank by highlighting phrases that contain the grammar target in the text. The phrase “he recorded whales in Alaska” is selected in the above case. When the user clicks on the word “recorded”, the system presents three suggestions for grammar alternatives that are “he whales recorded in Alaska”, “recorded he whales in Alaska” and “whales recorded in Alaska he”. At the same time the system presents seven vocabulary items which are inflected in the same form as the word clicked. When the user chooses one from grammar alternatives(say, “recorded he whales in Alaska”) and one from vocabulary alternatives (say, “went”), the system automatically combines the two to fill in the fourth alternatives; “went he whales in Alaska”.

In the demo session, we will present the whole process of question making including article selection and confirming and viewing the resulting questions in a printer-friendly layout.

Open questions

The prototype system is evaluated to be very useful, but is not actually employed in a classroom yet. There are some open questions:

- Is the system acceptable for teachers, enough for regular use for a classroom?
- Is the system easy to use for uninstructed users?
- What kind of features can be added to improve the system?

References