Preface

This volume contains the papers presented at the workshop entitled: Building Educational Applications Using Natural Language Processing. The workshop was held on May 31, 2003, and sponsored by the Human Language Technology and North American Chapter of the Association for Computational Linguistics.

There is an increased use of NLP-based educational applications for both large-scale assessment and classroom instruction. This has occurred for two primary reasons. First, there has been a significant increase in the availability of computers in schools, from elementary school to the university. Second, there has been notable development in computer-based educational applications that incorporate advanced methods in NLP that can be used to evaluate students' work.

Educational applications have been developed across a variety of subject domains in automated evaluation of free-responses and intelligent tutoring. To date, these two research areas have remained autonomous. We hope that this workshop will facilitate communication between researchers who work on all types of instructional applications, for K-12, undergraduate, and graduate school. The workshop is intended give the research community an opportunity to exchange their ideas with the hope that they may see novel opportunities for use of NLP tools in educational applications.

This volume contains papers from a variety of diverse applications – both speech and text based. In many cases, the application is embedded within a larger, complex tutoring system. Three papers deal with automated evaluation of essay-length texts. An additional two papers describe methods for classifying brief queries or explanations that are typed into the tutoring system by a student. The value of using a grammar checker within another text-based second language-learning environment is explored. In another domain, speech recognition techniques are used to evaluate pronunciation of a second language. Another speech recognition group compares speech-based to text-based tutoring systems. Finally, a method for automatically generating test questions is described.

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Jill Burstein and Claudia Leacock, *Educational Testing Service*

Program Committee: