The Use of Chatterbots
in the Language Classroom

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This paper explores the use of chatterbots, a computerized form of artificial intelligence designed to simulate conversation, in the EFL classroom as an alternative method of promoting technological and communicative literacy. Traditional online chat, while providing a motivating way to develop real world communication skills, can potentially be dangerous, frustrating, and difficult to implement in the classroom. Recognizing the benefits, but striving for a safer replacement tool, this paper proposes the introduction of chatterbots into the EFL classroom, discussing both benefits and weaknesses. Krashen’s language acquisition theories as they correlate to the use of chatterbots are defined and discussed. A classroom interview activity utilizing a chatterbot and its correlation to Krashen’s hypotheses is also explored.

1. INTRODUCTION

In today’s technologically advanced society, educators are often teaming up with technology in order to provide learners with enhanced learning options. In addition to increasingly popular online chatting activities, artificial intelligence chatterbots are another tool which may offer a type of learning enhancements in the EFL classroom.
Chatterbots are a type of computer program designed to simulate conversation with a human being, including elements of small talk and chatter. Chatterbots interact with their users following a protocol modeled on natural language-based conversation. This model uses knowledge based upon a collection of rules, triggered by text patterns entered by the user (L’Abbate, Thiel, & Kamps, 2005). Chatterbots are currently most commonly found on computer screens in the virtual world, but they can also be found in physical form—often in toys, dolls, and robots, and can also be found in holographic forms which can be projected (VanLun, 2009). Research has been done on chatterbots from the computer science perspective (Maudlin, 1994; Tung, 2008; Weizenbaum, 1966), along with general studies conducted on using online chatting and chatrooms for EFL students (Almeida d’Eca, 2003; Gonzalez, 2003; Mynard, 2002; Tudini, 2003), but very little has been done in terms of specifically exploring the use of chatterbots in the EFL classroom. This paper focuses on the possibility of using chatterbots in the EFL classroom, attempting to answer and explain the following questions:

1. What is the nature of the usage of CMC synchronous chatting tools in the EFL classroom?
2. Specifically, how are chatterbots used in the EFL classroom?

This paper begins with a discussion of online chat and the benefits for EFL/ESL students, continuing to disadvantages of using chat applications in the classroom. A new alternative, the use of artificial intelligence chatterbots designed to simulate conversation with students is proposed. Chatterbots are evaluated as they correlate to second language acquisition theories, specifically Krashen (1981)’s second language learning hypotheses. In the final section, an activity is presented illustrating how to implement chatterbots into the ESL/EFL classroom and how the specific activity is connected to each of Krashen’s hypotheses.