Ethnicity has been defined primarily by the physical appearance of pedagogical agents. Research has shown that shared ethnicity between the agent and the user reflects in a positive perception of the agent's capabilities and provides motivation for learning tasks for students of color (Baylor, 2005; Nass et al., 2000). However, research has failed to examine what kinds of implementations of pedagogical agents are the most authentic representations. As designers of educational technology, pedagogical agents should be designed to reflect authentic portrayals of ethnic groups. I argue that ethnicity includes more than physical appearance but encompasses verbal and nonverbal behaviors as well. I observe verbal and nonverbal behaviors of African American preschool children as they participate in storytelling. I have adapted Cassell’s (2000) methodology to the construction of ethnically authentic pedagogical agents. My research goal is to design culturally authentic agents that bridge the gap between language skills practiced outside the classroom setting and those language skills required in the classroom.

I examined the behavior of seven African American children between the ages of 5 and 7 years old telling stories while playing with toys in a wooden castle. The children told stories for fifteen to twenty minutes; the storytelling sessions were videotaped and transcribed. To analyze the content of speech, the collected stories were evaluated for presence of AAVE discourse features (Green, 2001). I found more than twelve verbal features of AAVE and grouped them into four categories: phonology (e.g. deletion of word-final single consonant after a vowel), syntax (e.g. absence of copula for present tense), lexicon (e.g. use of finna to mark the immediate future) and narrative style (e.g. raised pitch for impersonation of characters). In addition, I observed and identified ethnic nonverbal communication including gestures, rolling eyes, rocking head and neck movement and body position. Based upon the observations, I selected a subset of AAVE discourse features to be implemented in the pedagogical agent named Alex. The implementation follows our previous Flash implementations of the virtual peer.

In conclusion, I have attempted to create a prototype of an authentic virtual representation of an African American child. Future research efforts raise the following question: Will children perceive Alex as a being African American based upon verbal and nonverbal behaviors? Further research is planned to evaluate the affects of culturally authentic pedagogical agents on African American children's early language acquisition skills. This brings us one step closer to designing and implementing culturally authentic pedagogical agents.