#### **2017** IST CONFERENCE PRESENTATION

## Animated Pedagogical Agent: College Students' Preferences and Rationales on ESL Perspectives

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# Research Background

- Computer-based ESL learning module
  - Learning resources
  - Flexible accessibility
  - Boring and retention issue
  - To engaged
  - Meta-cognitive strategies

# Animated Pedagogical Agent (APA)

- human-like animated on-screen character appearing in a computer-based instructional module (Johnson, Ozogul, Moreno, & Reisslein, 2013; Moreno & Flowerday, 2006).
- APA is widely recognized to enhance students' perceptions of task relevance and meta-cognitive strategies. (Johnson, Ozogul, Moreno, & Reisslein, 2013;, van der Meij, & Harmsen, 2015)
- The effects has been tested in improving learning in science, mathematics and engineering.(Johnson et al., 2013)
- Language learning
- Limited number of studies about the APA in ESL learning.

# Research questions

- What are students' preferences for an animated ESL agent?
- What are the rationales for their preferences of Chinese college students for specific attributes of an ESL animated agent?
- What are the differences of learning outcomes in using specific APA?

### Methods

- Participants :
- 200 undergraduate students in same vocabulary and reading level
- Design
- survey
- Experiment 1
- Experiment 2
- Experiment 3

# survey

### 英语在线学习园地



#### 英语在线学习园地

It was on at and the smell of on the Franklin's up the sleeves of the love of song.

I have often the love in our fi Jordan es my mo





Hi, My name is Emily. I come from America. Nice to excet you'

Hars, I will study English with you.

First, we will read a test together:

Then, I will point out some keywords and help you to understand the

finally, you need to mewer some questions.

OK, let's begin.



Hi, My same is limity. I come from America. Nice to meet your

Here, I will study English with you.

First, we will send a test together,

Then, I will point out some keyworks and help you to understand the moveing of text.

Finally, you need to answer some questions.

OK, let's begin.

#### 图3-3 "英语在线学习园地" APA组人物动作对比图









# Experiment 2

Two conditions:

• unmatched APA (old Chinese male) & matched APA(young foreign

lady)



# Experiment 3

 we repeated the experiment 1 after two weeks to examine the long learning outcomes with the time goes.

### Results:

- In the process of Chinese college students' English online reading, the posttest of APA group and Arrow group out performed the control group. Compared with the control group condition, the participants of APA group and Arrow group show higher comments. The degree of matching APA and learners have no significant effect on performance.
- Students preferred to select and learn from an APA that is similar to themselves as a learning partner, this result is in line with Abstract III Similarity Attraction Theory.
- No significant changes were found regarding students' performance over time.

### Discussion

• In this study, the authors designed three experiments to examine the effectiveness of APA on ESL online learning. Generally, APA can help the online ESL learning through the attract the attention of learner during reading. However, compared the scores between APA group and arrow group, the authors did not find significant different on scores of learning, which has also been supported by the result of experiment 2. So we suggest that the learning result of ESL in online learning would not be affected by the styles of APA (matched, unmatched or arrow). But from the result of the survey about the attitude towards APA, we can see that learners showed more interested when the APA is what they like, which would have the effectiveness on their emotion while learning.

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# Thank you.