### THE CHINESE UNIVERSITY OF HONG KONG Micro-Module Courseware Development Grant Scheme 3: eLearning Pedagogy Research

### Interim Report (2016-17)

# <u>PART I</u>

Project title: Examining the effectiveness of audio-visual teaching materials for second language Cantonese learners Principal supervisor: LEE Siu Lun Co-investigator: CHAN Chi Leung Department / Unit: Yale-China Chinese Language Centre Project duration: From Apr 2017 to Apr 2018 Date report submitted: 30 Oct 2017

# 1. Project objectives

#### Is the project on track to meet its objectives?

The objectives remain unchanged. This project will use experimental research to examine how the arrangement of linguistic knowledge teaching and language skills practice affect the effectiveness of learning Cantonese as a second language.

# Have the objectives been changed as a result of the experience of working on your MMCDG project?

The evaluation objectives have been refined and became more specific. For 'Accuracy' model, the comparison of audio-visual input and audio input only is one of the key areas to explore. For 'Grammar knowledge and vocabulary' model, multiple-view group, double-view group, and single-view group is one of the important between-group variable to explore. For 'Fluency', learner disfluency representations is the focus.

### 2. Progress on process, outcomes or deliverables

- 1. Student helper is recruited to conduct literature review and key lines of background have been identified in the field of computer assisted pronunciation training such as talker's face, spectrographic analysis to pitch visualization, etc. These categories have been organized in Nvivo nodes.
- 2. The assessment of 'Fluency model' would use over 400 anonymized tokens produced by elementary Cantonese learners as an identification of 'disfluency patterns' representations.
- 3. Data collection consent form for subjects have been approved by Survey and Behavioral Research Ethics Committee (SBREC).
- 4. Initial contact have been made with international undergraduate subjects regarding experiments and learning sessions as a pilot study for 'Accuracy' model and 'Grammar knowledge and Vocab' model.

#### **3. Evaluation Plan**

For 'Accuracy' model, we follow traditional computer assisted pronunciation training models to use rater judgement as an indicator. Besides, measurement of formant values or formant trajectories through PRAAT are also planned. For 'Grammar Knowledge and Vocab' model, we plan to use grammaticality judgement pre and post test to track ability change. Both models are planned to either have 'generalization to new stimuli' or 'retention after post test' as further indicators as an evaluation.

#### 4. Dissemination Activities (reports, websites, video links, products, etc.)

We plan to disseminate the results in various forms, such as departmental newsletters, departmental teacher training workshops, CUHK Expo-2017, international and local conferences etc.