Universiti Teknologi MARA

Learning Sign Language Using
3D Images

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ABSTRACT

This paper introduces a new framework on teaching normal adult learn sign language gestures using 3D images. The signed of finger-spelling created using 3D technique looks like a movie of a hand signing. In sign language, hand positions and finger-spelling represent meaning words. Hence I have been developing teaching material that let people learn how to using sign language. There are 25 images that represent alphabet A to Z with animated images as well. In this research project, the courseware development is using andragogy theory and cognitive theory. During this development of this courseware, I have conducted learnability testing where respondent are people randomly selected to test this courseware. As a result, about 93% of the respondents are satisfied of this courseware. From the result we can conclude that the sign language is one of important thing that people should learn. In addition learning sign language is interesting experience beside people can communicate with disable people.

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CHAPTER 1

INTRODUCTION

1.0   Research Background

As the countries getting forward, people communicate each others in many areas of everyday life, includes between normal person and deaf person. Since hearing person and deaf person communicate each others, they usually need support to communicate effectively each other.   Since there are many tools to teach hearing impaired people children or adult, hence this research project will focusing on normal adult people to learning sign language using computing educational courseware.   The courseware should be differing than courseware to learning sign language for hearing impaired people.

Sign languages of hearing-impaired people are fully formed natural languages linked to cultural values and social behaviours of deaf communities.   Sign languages differ from the majority spoken languages, hearing communities in obvious ways, i.e. their modality of production where gestural vs. oral and awareness which is the visual vs. aural.   By sign language interface, means the ways of representing hearing impaired sign languages for computer storage and display in order to permit input, retrieval, and manipulation by people (Frishberg, 93). Computer technology offers the opportunity to create tools that