Pedagogical Interface Agent for KSL

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Abstract: This paper proposes a pedagogical Interface Agent (PIA) for Kenya Sign language (KSL). The PIA is designed as a font for Kenya sign language that will assist new learners, as well as people with interest to learn Kenyan sign language alphabet. The PIA is also designed in order to train participants who will be involved in KSL dataset creation. The PIA translates the alphabets typed on the keyboard to the equivalent KSL alphabets. This is not only important to learning but it can also be used to create learning materials for the deaf where fingerspelling is deemed important. The PIA was designed following the Design Science Research (DSR) methodology. The PIA agent was developed using several software applications. It was packaged as a font and runs well on the Microsoft office suite packages. All the alphabets of the front were typed in Microsoft word and Microsoft PowerPoint and found to be responding 100%. Therefore, the PIA agent is recommended as a font to be used by both the deaf and hearing people in learning the KSL alphabets.

Keywords: Animated pedagogical agents, animated conversational agents, intelligent agents, instructional agents, Font, Kenya Sign language KSL, virtual agents, computerised agents.