

**UNIVERSITI TEKNOLOGI MARA**

**SEMIOTIC STUDY ON SCHOOL  
CHILDREN CROSSING SIGN IN  
KLANG VALLEY**

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## ABSTRACT

Although semiotic are common in visual communication, the questions still arose on whether or not the message can be successfully and correctly interpreted by using the word to visual method and measuring the level of understanding amongst road users especially school children. This study has investigated the theory of visual language and analysed how word - 'children crossing' (concept) were interpreted to visual images (signified). Saussure and Peirce models were used and establish the connection on how word or concept - 'Children Crossing' was transformed into icons and symbols. Samples from thirty-six (36) countries were collected and discussed and As a result, this study has established that a numerous number of characteristics were used in visual images. This research continued to study and investigates the design application applied onto the road sign at the school zones. Apart from that, it also scrutinizes the sequence and installation at fourteen (14) selected primary schools in the Klang Valley. The Traffic Control Devices (Arahan Teknik (Jalan) 2A/85) (JKR, 1985) manual guideline was used as a guideline to evaluate the level of compliance on the design application and sign installations. The results had shown that none of the schools complied with the standard installation guidelines. The significance of this study lies in its demonstration the communication in relation to theories developed by both Saussure and Peirce, and the intricate connection to the road sign system. The semiotic study on road sign has developed visual communication relation between the road user (drivers and pedestrian) and the road sign system. The most important finding in this study illustrated was the illustration of functions behind the visual signs (icon, symbol and index) and that it was not merely remembering the meaning of each road sign, that is important, but in learning and understand their meanings in relation to communicating or interpreting road sign in sequential order. Each different road signs has a specific function and is categorised differently. In this research study, I have discovered the important of sequences in communication behind the installation and the arrangement of the road signs and how it affects both the motorists (users) and pedestrians (School children). Each road sign has a specific meaning and categorised differently, be it a warning sign, prohibitive sign or an information sign. There were also new findings on the level of understanding towards road visual sign language in term of symbol, colour meaning and arrangement at the school zone. This study disclosed the outcomes from respondents of different age group on their level of understanding of the visual sign language in their interpreting of symbols, colours, signs arrangement (sequential communication) and meaning of road signs installed in the school area. Evidences in this research study has disclosed the level of knowledge and understanding on how visual sign language was applied onto the road sign application, installation or the arrangement of the road signs at school zone. It also disclosed the level of knowledge and understanding of the motorist or road users toward visual sign language that is applied onto the road signs.

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## Chapter 1

### Introduction: Subject Area

This research analyze the connection between the semiotic model or visual language theories described by Saussure and Peirce and traffic signs, and focuses on the icons and symbols of children crossing signs in the Klang Valley. Thorough studies will be conducted on how the icons and symbols is successfully communicated, and its relation to the school crossing design. Concurrently, it will measure the level of design standardization of the children crossing sign, in hopes of establishing proof of the increasing rate of accidents in the Klang Valley. The result of this analysis on design standardization is then examined to find the relation to visual language theories established by Saussure and Peirce.

Rozmi Ismail (Utusan, 2000) has conducted a survey measuring the level of understanding amongst school children on how they perceive and react in relation to the warning signs. His survey (Rozmi Ismail) was conducted at selected schools within the densely populated urban areas in the Klang Valley. As a result, his research results disclosed that students between the ages of seven (7) and nine (9) had a low level of understanding on warning signs, in comparison to students between the ages of ten (10) and twelve (12). Rozmi Ismail's survey has established that at least 500 cases of road accidents a year involved school children (Rozmi, 2000). Police statistics (PDRM, 2004) has reported that the highest rate of accidents occur in Selangor, at 87,8791 cases, followed by Wilayah Persekutuan in second place at 44,240 and Johor, in third, at 41,854 cases.