



## **Chapter VI**

# **Gender Issues in HCI Design for Web Access**

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## **Abstract**

*We consider the design and provision of Web sites, with respect to gender issues, from various perspectives. A general view of the field is given, and educational issues are specifically considered in relation to gender differences in the use of IT as an effective educational aid, especially by children. Human-computer interaction (HCI) models at different levels of abstraction are presented, together with how gender issues could impinge at each of these levels. A number of examples, both from the commercial and cultural fields, are discussed as design case studies of home pages for Web sites that exhibit gender-related orientation. Finally, look-*

*ing to the future, online gaming is discussed in the context of usage. It is hoped that the guidance provided here will help minimize any gender discrimination on Web sites with respect to their interfaces, increasing general accessibility in the process.*

## Introduction

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*Everyone has his style when designing a site. There is no such a thing as a 'feminine design' or a 'male design.' The most important thing here is to seek inspiration to create something different each time. (Mark, male Web designer, <http://www.redpolka.org>)*

Even if half the potential users of the Web are female, it is still a rather male-oriented environment. A study of UK university Web sites has shown 94% of them to have a masculine orientation, compared with only 2% having a female bias, with 74% of them designed by male-dominated teams and only 7% by female teams (Harden, 2005; Moss & Gunn, 2005; Tysome, 2005). This is despite the fact that there are more female than male students. It was found that men preferred regular, unfussy, formal content and layout in straight lines, whereas women preferred more colour and rounded forms with less conventional design, formality, and linearity. Both men and women seem to prefer Web sites produced by designers of the same sex. In general, the specific area of human-computer interaction (HCI) and gender issues is not well studied in the research literature. However, Balka (1996) briefly discusses HCI skills with respect to gender and Cassell (2002) discusses HCI for video games, commenting on how it is often gender biased.

In this chapter we first consider the background to Web interface design with respect to gender issues. In particular, we look at some educational differences. We then consider some HCI models at different levels of abstraction, and how consideration of gender preferences could impact on these. A number of Web sites, both commercial and, by way of contrast, cultural as well (Baiget, Bernal, Black, Blinova, Boiano, Borda, et al., 2005; Gunn et al., 2006), are used to consider various design issues with respect to gender differences. Looking to the future as the Web becomes more interactive, we also consider the issues in online gaming design. In conclusion, we briefly summarize the current situation, and what could be done to help rectify it.

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