

# CMHR Kiosk and Keypad Gap Analysis

## List of Identified Gaps

### Physical Interaction with Kiosk

- non-adjustable kiosk height will limit access of many users of different heights and in differently-sized wheelchairs
- inability to connect to kiosk with remote, personal device means that individual user's pre-set, personal preferences are unexploited
  - users will need to a) physically access kiosk in order to set preferences and b) repeat preference-setting routine at every kiosk
  - limits ability to adapt to individual's needs (a key component of accessibility)
- headphone requirement for listening to audio describe (vs. local speakers) means that user will have to plug in headset at every kiosk

### Physical Interaction with Keypad

- keypad may be difficult for users with limited mobility to comfortably reach
- keypad requires a level of manual dexterity which some users with disabilities do not have
- keypad as sole alternative to touch-screen (vs. personal device or other solution) may limit overall enjoyment/experience of exhibit
- fixed, right-handed keypad limits use by left-handed users and those who cannot physically reach the kiosk
- keypad is easy to locate but due to immediate prominence may be confused for sole kiosk interaction
- use of keypad may be tiresome for extended periods; increasing wrist-rest area may provide one solution
- vertically-oriented keypads on wall-kiosks are awkward to use and will be tiresome for extended periods of use
- fixed keypad button controls limit the level of interactivity with changing kiosk content (eg. content requiring up and down controls in addition to right and left)

### Touch-screen Interface

- on-screen interactables for different levels of navigation are often presented in the same row (e.g. language selection, timeline, view toggles and next/previous buttons) – separating these levels into functional rows will simplify interaction
- nuanced audio description would enrich user experience e.g. for map/globe visual a whirling sound upon swiping, splashing over water bodies, voice over countries
- use of colour-coding as sole identifier for different classes/levels of information will limit cognition of those who are colour-blind; include also a variety of shapes
- need an alternate to touch-screen interaction for See Change Make Change tablets

### gesture diptych

- tactile floor markings to indicate where to stand, audio instructions, alternatives for blind users, alternative for users with limited mobility would improve the interaction here
  - possible solution: mobile touchscreen as an alternative for some users, they would still get the experience of flipping through a book through swiping gestures

### group table

- keypad is distant from kiosk content and appears to limit users to only the side content – provide a keypad at each individual station

### debate table

- provide alternative to touch screen or audio instructions indicating which side of the screen is yes, and which side is no

### Graphic Standard

- ability to set preferences on the touch-screen (font size, contrast, brightness, )
  - these could be portable preferences (on a token or other hand-held device)
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