Children vs. Adult Users

- **Kids and adults are different**, and kids need a design style that follows different usability guidelines.

The following table summarizes some of the main similarities and differences we've observed in user behavior between children (in this study) and adults (across many other studies).

	Children	Adults
Goal in visiting websites	Entertainment	Getting things done Communication/community
First reactions	Quick to judge site (and to leave if no good)	Quick to judge site (and to leave if no good)
Willingness to wait	Want instant gratification	Limited patience
Following UI conventions	Preferred	Preferred
User control	Preferred	Preferred
Exploratory behavior	Like to try many options Mine-sweeping the screen	Stick to main path
Multiple/redundant navigation	Very confusing	Slightly confusing
Back button	Not used (young kids) Relied on (older kids)	Relied on
Reading	Not at all (youngest kids) Tentative (young kids) Scanning (older kids)	Scanning
Readability level	Each user's grade level	8th to 10th grade text for broad consumer audiences
Real-life metaphors e.g., spatial navigation	Very helpful for pre-readers	Often distracting or too clunky for online UI
Font size	16 point (young kids) 12-14 point (older)	12-14 point
Physical limitations	Slow typists Poor mouse control	None (unless disabled)

Animation and sound	Liked	Usually disliked
Advertising and promotions	Can't distinguish from real content	Ads avoided (banner blindness); promos viewed skeptically
Disclosing private info	Usually aware of issues: hesitant to enter info	Often recklessly willing to give out personal info
Age-targeted design	Crucial, with very fine-grained distinctions between age groups	Unimportant for most sites (except to accommodate seniors)
Search	Bigger reliance on bookmarks than search, but older kids do search	Main entry point to the Web

Many of the basic rules for usable Web design are the same for children and adults, though often with differences in degree.

For example, we've had a long-standing guideline to avoid redundant navigation schemes for adult users. People get annoyed when they have to look for navigation in several different places. And it's confusing when pages have multiple links to the same destination, because users don't know whether the various links actually point to the same place or have slightly different meanings. This often forces adult users to waste time clicking on the "same" link several times, causing navigational disorientation.

Although too much navigation is annoying and confusing for adults, it can be devastating for children.

Kids suffer from a **learned path bias**: they tend to **reuse the same method they've used before** to initiate an action. In our studies, we often saw kids who had been successful with a certain approach to a site stick determinedly to that approach over and over again, even as it failed them during subsequent tasks that required them to use a different navigation scheme.

Age-Appropriate Design

The biggest finding in both the new and old research is the need to **target very narrow age groups** when designing for children. Indeed, there's no such thing as "designing for children," defined as everybody aged 3–12. At a minimum, you must **distinguish between young (3–5), mid-range (6–8), and older (9–12) children**. Each group has different behaviors, and the users get substantially more web-savvy as they get older. And, those different needs range far beyond the obvious imperative to design differently for pre-readers, beginning readers, and moderately skilled readers.

We found that young users reacted negatively to content designed for kids that were even one school grade below or above their own level. Children are **acutely aware of age differences**: at one website, a 6-year-old said, *"This website is for babies, maybe 4 or 5 years old. You can tell because of the cartoons and trains."* (Although you might view both 5- and 6-year olds as "little kids," in the mind of a 6-year-old, the difference between them is vast.)

Finally, it's important to **retain a consistent user experience** rather than bounce users among pages targeting different age groups. More specifically, through understanding what attracts children's attention, you can "bury" the links to service content for parents in places that kids are unlikely to click. Text-only footers worked well for this purpose.

Advice for Parents and Educators

We conducted this research to generate usability guidelines for companies, government agencies, and major non-profit organizations that want to design websites for children. Even so, some of our findings have personal **implications for parents, teachers, and others** who want to help individual children succeed on the Internet:

- The main predictor of children's ability to use websites is **their amount of prior experience**. We also found that kids as young as 3 can use websites, if they're designed according to the guidelines for this very young audience. Together, these two findings lead to the advice to start your children on the Internet at an early age (while also setting limits; too much computer time isn't good for kids).
- Campaigns to sensitize children to **the Internet's potential dangers** and to teach them to be wary of submitting personal information are meeting with success. Keep up this good work.
- On a more negative note, kids still don't understand the Web's commercial nature and **lack the skills needed to identify advertising** and treat it differently than real content. We need much stronger efforts to teach children about these facts of new media.