

advancing
children's learning
in a digital age

Fun Follows Function

Ten Tips for Developing Quality Toys

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sandbox summit[®]

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The Joan Ganz Cooney Center at Sesame Workshop

“We don’t pretend that media or a television show can solve the problems of our world, but we do believe it would be a terrible mistake not to use these most influential tools to contribute to the solutions.”

- Joan Ganz Cooney

Mission

To catalyze and support research, innovation, and investment in digital media technologies to advance children’s learning.



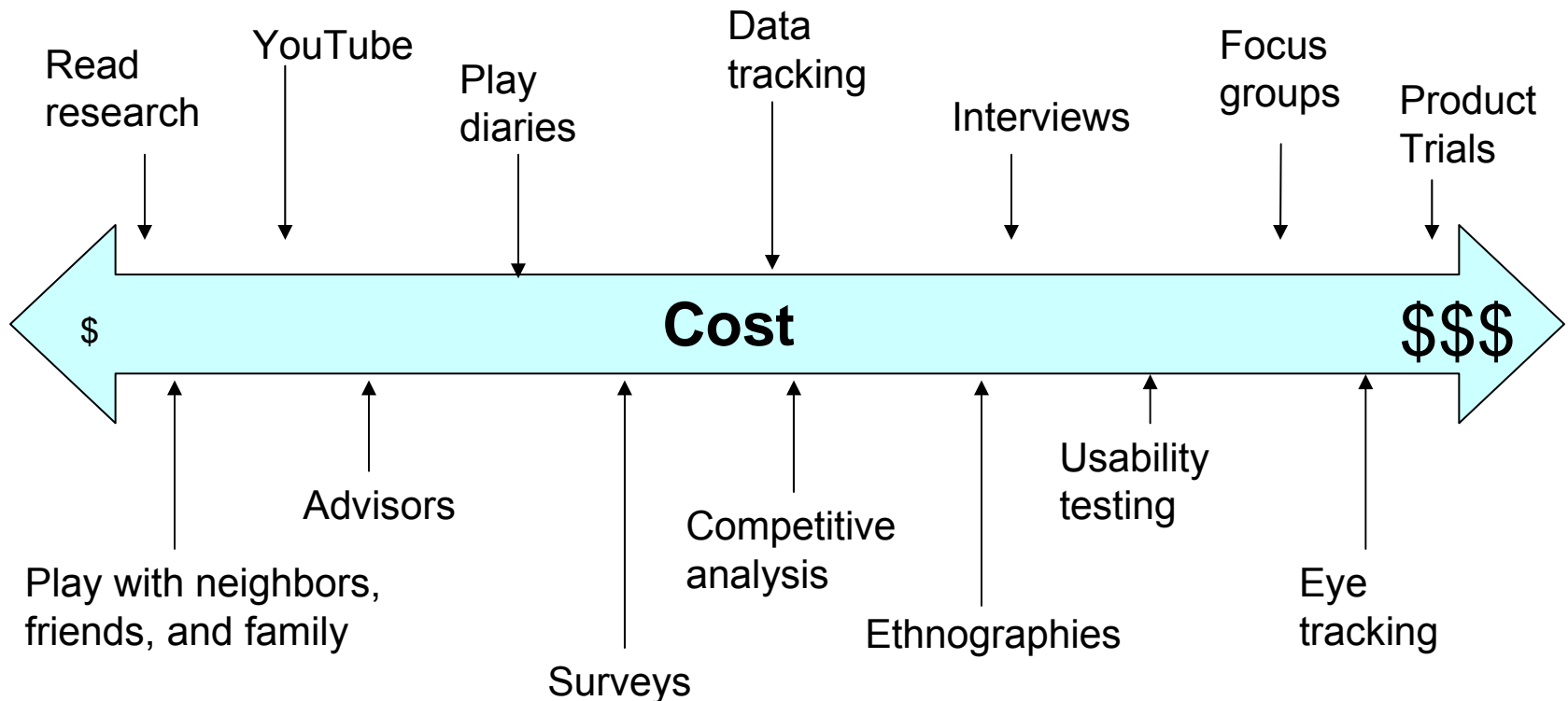
#1: Bridge the gap between industry and academia

- ▶ Convene multi-disciplinary teams
- ▶ Apply knowledge about child development and learning in product design



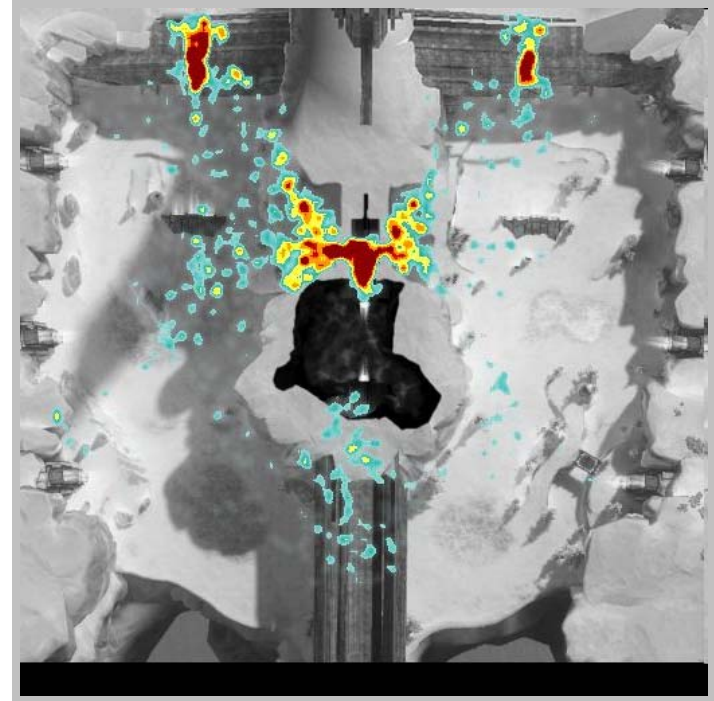
#2: Research and Testing

- ▶ Everyone can afford something
- ▶ Integrate throughout the development timeline



#3: Track what users do

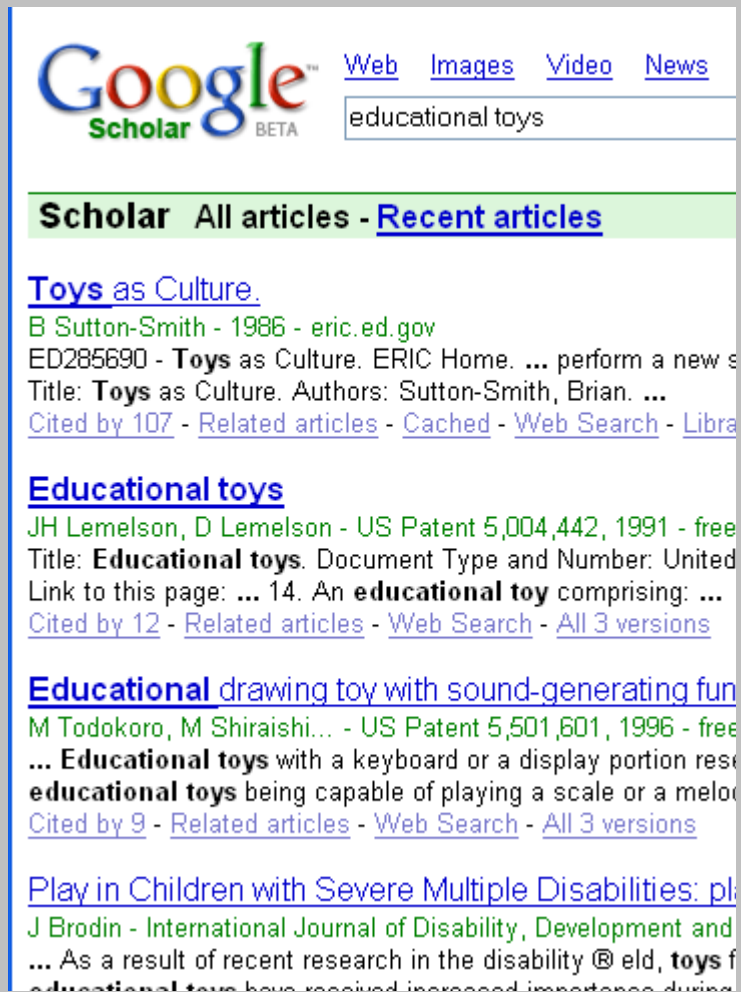
- ▶ Automated data tracking and in-game metrics can
 - ▶ Identify where users get stuck
 - ▶ Aggregate reaction times to inform level design
 - ▶ Supply intelligence for automatic leveling
 - ▶ Provide usability information



From Bungie.net

#4: Read.

- ▶ First, know the basics
 - ▶ Read information for parents or basic developmental psychology textbooks
- ▶ Then, stand on the shoulders of those who are doing the research relevant to you
 - ▶ Look in unusual places: overseas, other academic fields



The image shows a screenshot of a Google Scholar search results page. At the top, the Google logo is displayed with 'Scholar BETA' underneath. To the right of the logo are links for 'Web', 'Images', 'Video', and 'News'. A search bar contains the text 'educational toys'. Below the search bar, there is a green bar with the text 'Scholar All articles - Recent articles'. The search results are listed below, each with a title, author, and publication information. The first result is 'Toys as Culture' by B Sutton-Smith, published in 1986 in ERIC Home. The second result is 'Educational toys' by JH Lemelson and D Lemelson, a US Patent from 1991. The third result is 'Educational drawing toy with sound-generating fun' by M Todokoro and M Shiraiishi, a US Patent from 1996. The fourth result is 'Play in Children with Severe Multiple Disabilities: pl' by J Brodin, published in the International Journal of Disability, Development and ...

Google Scholar BETA

Web Images Video News

educational toys

Scholar All articles - [Recent articles](#)

[Toys as Culture.](#)
B Sutton-Smith - 1986 - eric.ed.gov
ED285690 - **Toys** as Culture. ERIC Home. ... perform a new s
Title: **Toys** as Culture. Authors: Sutton-Smith, Brian. ...
[Cited by 107](#) - [Related articles](#) - [Cached](#) - [Web Search](#) - [Libra](#)

[Educational toys](#)
JH Lemelson, D Lemelson - US Patent 5,004,442, 1991 - free
Title: **Educational toys**. Document Type and Number: United
Link to this page: ... 14. An **educational toy** comprising: ...
[Cited by 12](#) - [Related articles](#) - [Web Search](#) - [All 3 versions](#)

[Educational drawing toy with sound-generating fun](#)
M Todokoro, M Shiraiishi... - US Patent 5,501,601, 1996 - free
... **Educational toys** with a keyboard or a display portion res
educational toys being capable of playing a scale or a melo
[Cited by 9](#) - [Related articles](#) - [Web Search](#) - [All 3 versions](#)

[Play in Children with Severe Multiple Disabilities: pl](#)
J Brodin - International Journal of Disability, Development and
... As a result of recent research in the disability @ eld, **toys** f
educational toys have received increased importance during

#5: Become an Observer

- ▶ Don't just play with the neighbors, friends, and family
- ▶ YouTube and other video sharing sites are a gold mine of valuable usability info
- ▶ Walk the toy store aisles



#6. Break the model of one child per screen

▶ Encourage intergenerational interaction

▶ Think outside the 'keyboard' box

▶ Combine the virtual & physical worlds



#7. Leverage consumer market trends for learning

▶ 'Youth' generated content

▶ Virtual Worlds

▶ Video content on the web

▶ Casual games



#8: Go beyond the “three R’s”

- ▶ Rethink literacy for the 21st century:
 - ▶ Creativity and Innovation
 - ▶ Critical Thinking and Problem Solving
 - ▶ Communication and Collaboration
 - ▶ Global knowledge and skills



#9. Explore new mechanics

- ▶ Add new twists to old mechanics (or vice versa)
- ▶ Transfer or evolve mechanics from different platforms
- ▶ Look to general audience games for new ideas



#10: Tap into your own childhood

▶ Do you remember...

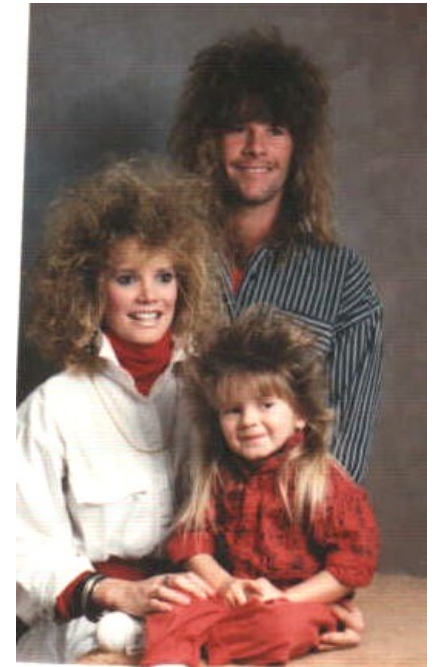
The 60's



The 70's



The 80's



Thank You!



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