

Assistive Technology: What's It All About?

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Cognitopia

Eugene, OR

Washington State AT Conference

A Family Journey



James 1957 - 2012

In the beginning...



“What about me?”



An Experiment



Greetings from the Wild West



Who was James?

- Loved raw meat
- Very well-oriented around town
- Loved music and old TV and computers, all at once
- Yawned loudly if priest talked for more than 10 min.
- Remembered people's names or gave it a go
- Loved his mother, my wife, his nephews, his sibs
- Very good at “bumping” into people
- Prolific phone call maker. Could have been a pro.
- Liked making lists (things to buy, places to go, dead people)
- Shop til you drop
- Knew what he wanted; didn't suffer fools gladly

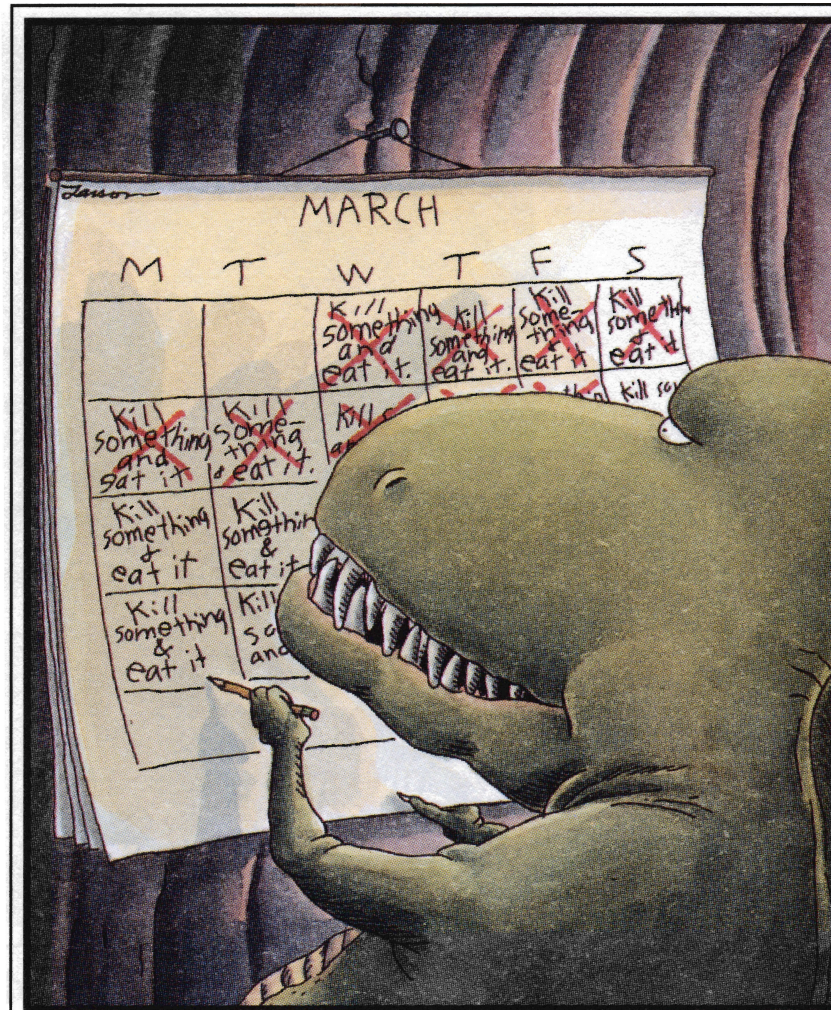
Rise of the Machines



Revelations

- Graphic user interface had huge potential to extend access to individuals with disabilities
- So much more than budgeting
- No more Mr. Bad Guy
- Fools, I'll kill them all!

Why is Self-Management So Powerful?



Jurassic calendars

Far Side Gallery 5
- Gary Larson

A Brief Exercise

- Your morning routine....
- How many different technologies do you use?
- How do they compensate for your disabilities?
- How do they let you express yourself and exert personal preferences and environmental control?
- Would you want it to be any different if suddenly dependent on others to make it happen?

Tom's Morning Routine

- HVAC
- porch sensor: is it safe to get up?
- alarm clock (options, redundancy, snoozability)
- glasses
- coffee pot (gurgling!)
- newspaper
- wireless weather station
- personal care (toothbrush, shaver, radio, accessible shower and toilet, anti scald feature)
- faucet handles have to be right
- dress (mirror at correct height)
- eat (toaster just so)
- remember what I'm doing today
- leave (open door, get in car or on bus or on bike)

Who Needs Assistive Technology?

- “To be successful at home, school, work, and in other environments, to achieve our hopes and dreams, and to simply get through each day, *everyone* needs assistive technology, accommodations, and supports.”

-Kathie Snow (2006)

www.disabilityisnatural.com

What technology is *really* about

- A lot of us would rather be told what to do by machines we control than by people
- Decrease coercion, increase autonomy
- Bottom line:
 - control through self-management-
- Supports caregiving and transitions

“For people without disabilities, technology
makes it better;
For people with disabilities, technology makes it
possible...”

John D. Kemp
www.usicd.org

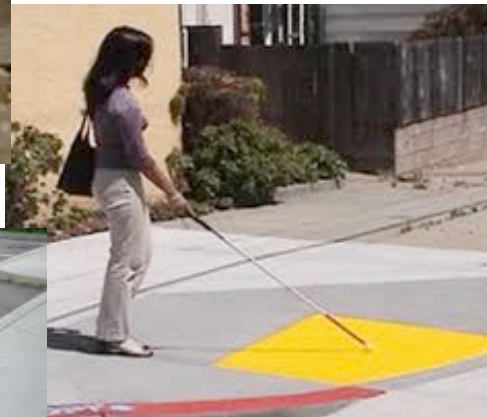
What Made it Possible for James (and Me)

- Remote monitoring
- Technology-based employment
- Cognitively accessible scheduling
- Household Gadgets (certain microwave, grill)
- Animated story books
- Excel for obsessive list making and budgeting
- Simple safety lighting
- Community survival tools
- Shopping and buses walkable from his apartment

Fast Forward

- Grant funding success
- Picture Planner released in 2009
- Pocket Picture Planner for iPhone and iPad
- Development of web-based platform for self-management
- Creation of “Cognitive Curbcuts”

What's a Curbcut?



The Original Universal Design



For Better or Worse



So What's a *Cognitive* Curbcut?

- Not about physical access to places and spaces
- *Information access*
- But, functional barrier can be the same



What are the barriers?

- Not curbs, stairs, and doors,
- Instead:
 - using text
 - lack of universal symbol set
 - visual complexity/cognitive load
 - social cues
 - behavioral initiation

Cognitopia

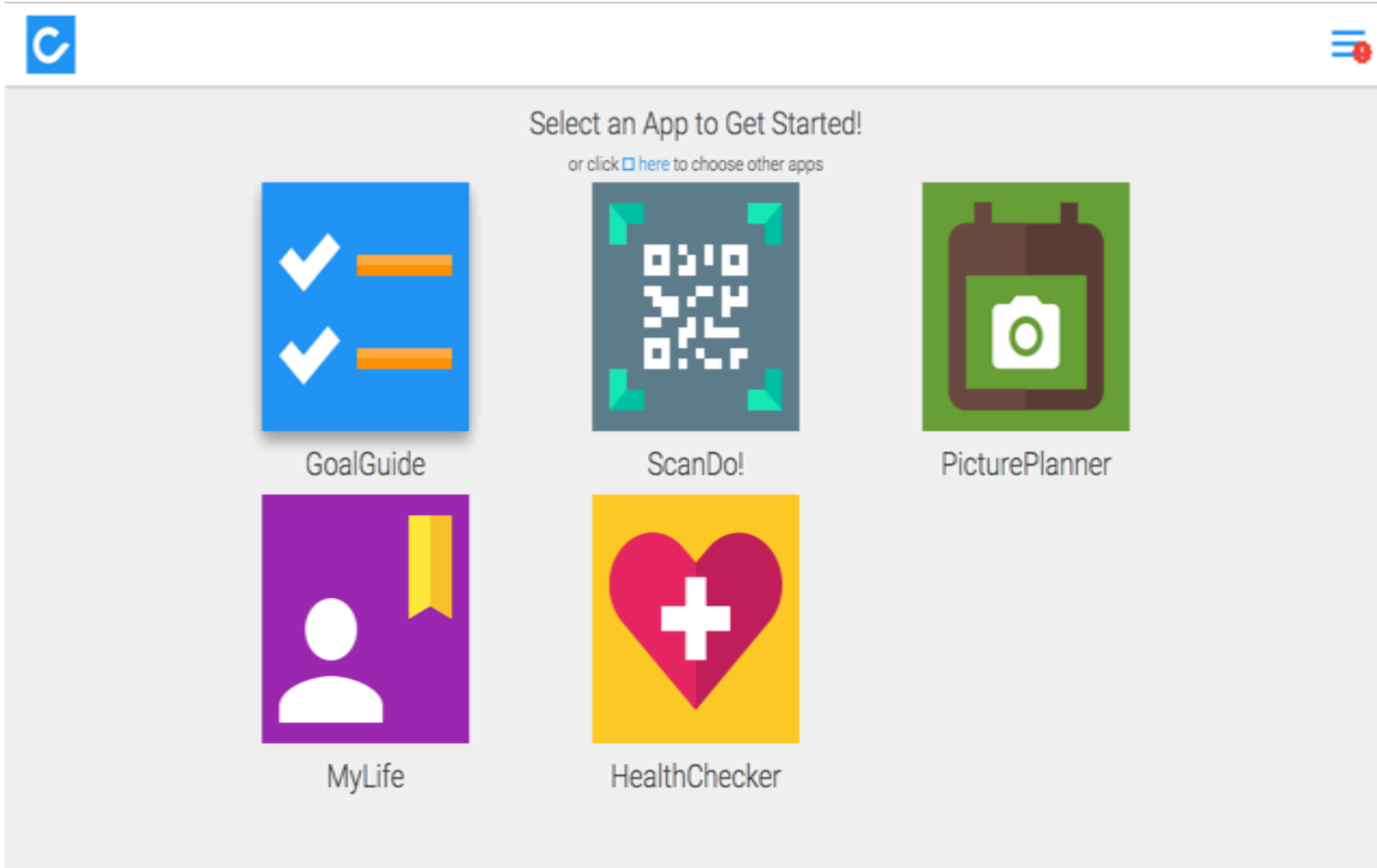
Life management apps for people
who see the world a little differently



Cognitopia Connect: Core Features

- Focus on self-management skills
- Maximize self-determination
- Universal design for UX/UI
- Reminders and notifications
- Shared information management
- Understandable progress data
- Support family and provider roles
- State of the art technology/platform agnostic

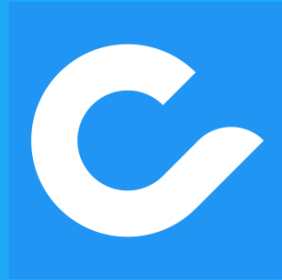
Cognitopia Connect



The screenshot shows the Cognitopia Connect interface. At the top left is a blue square icon with a white 'C'. At the top right is a blue menu icon with a red notification dot. The main content area has a light gray background and contains the following text and icons:

Select an App to Get Started!
or click [here](#) to choose other apps

- GoalGuide**: A blue square icon with two white checkmarks and two orange horizontal bars.
- ScanDo!**: A dark blue square icon with a white QR code and four teal corner markers.
- PicturePlanner**: A green square icon with a white camera lens and a brown camera body.
- MyLife**: A purple square icon with a white person silhouette and a yellow ribbon.
- HealthChecker**: A yellow square icon with a pink heart and a white cross.



www.cognitopia.com

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Keating, T. (2009) Who sings the shower song? In Thicker Than Water: Essays by Adult Siblings of People with Disabilities. D. Meyer (Ed) Woodbine House: Bethesda.