



# Assistive Technology Strategies for Students with TBI

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Brain Injury Services

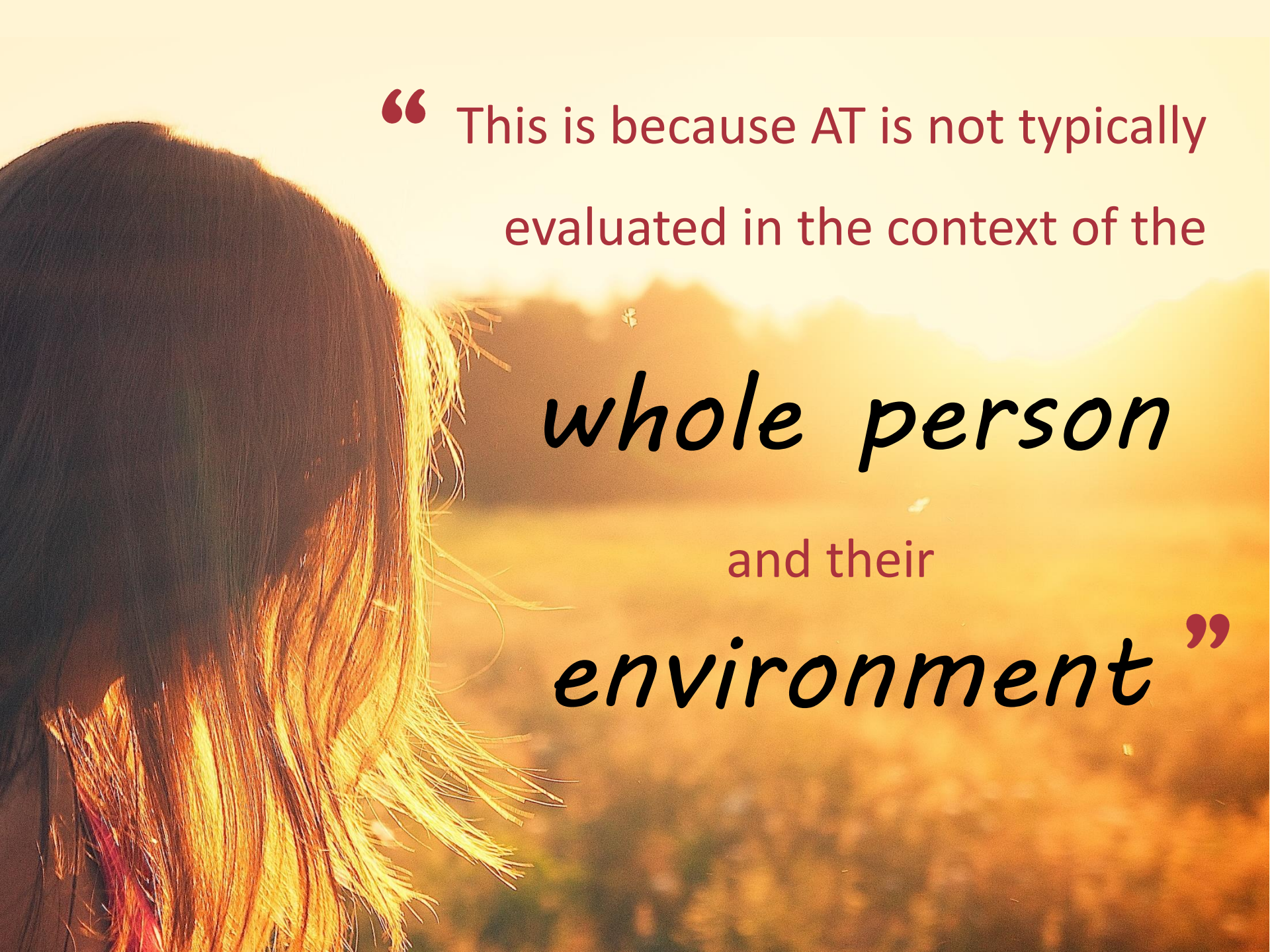


For people with  
cognitive disabilities

90%

of devices are

**DISCARDED**



“ This is because AT is not typically  
evaluated in the context of the

*whole person*

and their

*environment* ”

The tool or technology is  
the **least** important thing





Validation

Empathy

Resiliency

Agency

Hope

The Visitor  
The Complainant  
The Customer



\*Adapted from Solution Focused approaches\*



# The Visitor

- There is no problem or
- The problem belongs to someone else
- Want to get others off their back
- Sees no reason to change



# The Visitor

- Compliment willingness to attend and listen
- What is working?
- How can you show others you can \_\_\_\_\_?
- How can I help you demonstrate your skill?



# The Complainant




- Understands there is a problem
- Uncertain how to address issues
- Views self as a victim
- May not see self as part of solution or be committed to taking action

# The Complainant




- Praise awareness and insight
- Ask for exceptions and analyze for ideas
- Encourage creative problem solving
- Identify small actions to take and monitor



I got this!

# The Consumer

- Aware of issues and ready to address
- Has concrete goals
- Willing to try new things and make changes
- Can be active partner in exploring new strategies



I got this!

# The Consumer

- Praise current efforts and provide positive feedback
- Keep focused on goals and prioritize
- Prepare for setbacks and frustrations
- Reinforce growth mindset

The Power of

YEET

The word "YEET" is written in a thick, orange, hand-drawn font. Below the word are two horizontal orange brushstrokes of varying lengths and positions, suggesting motion or a trail.

# Assistive Technology for Cognition

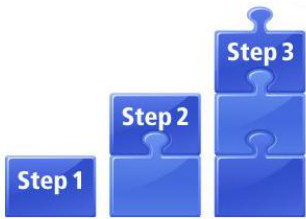
- Types of AT for cognition with examples
- Three components of independent use
- Environmental modifications



Alerting



Reminding



Prompting



Storing and Displaying

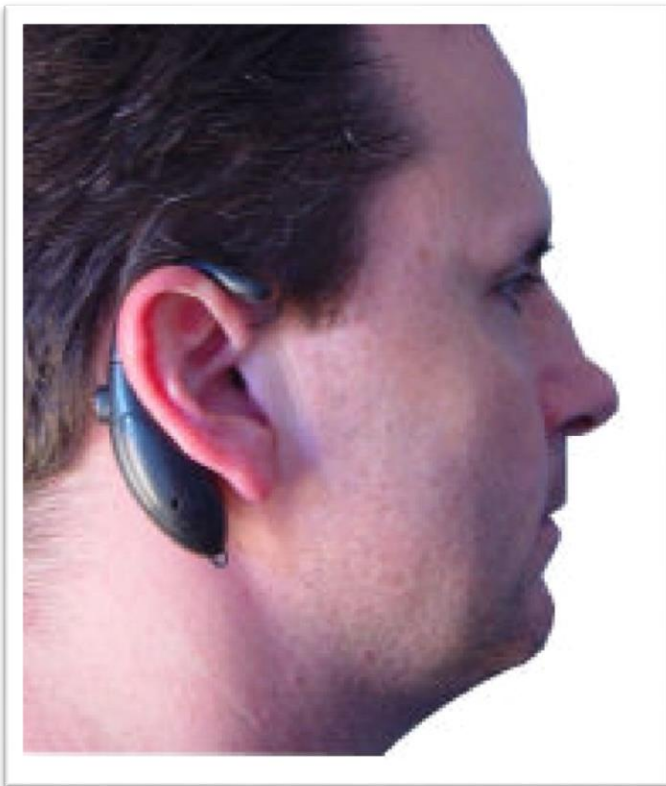


Self-Regulating

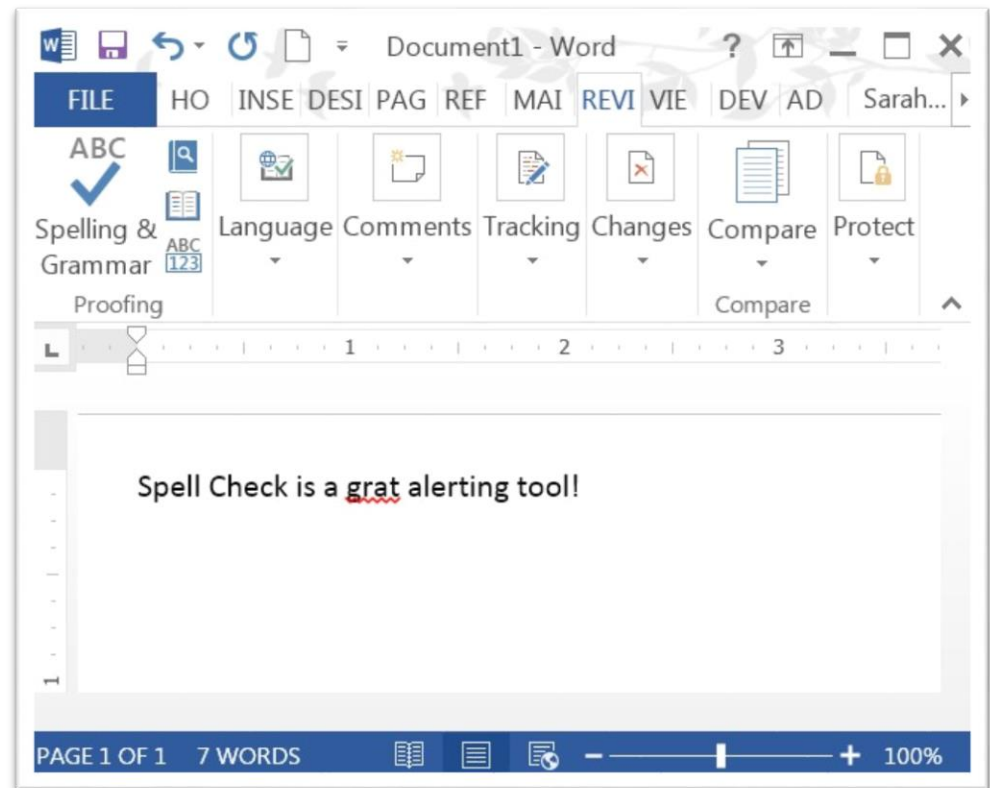
# Alerting Technologies

Direct attention to internal or external stimuli

Drowsiness Alert



Spell Check



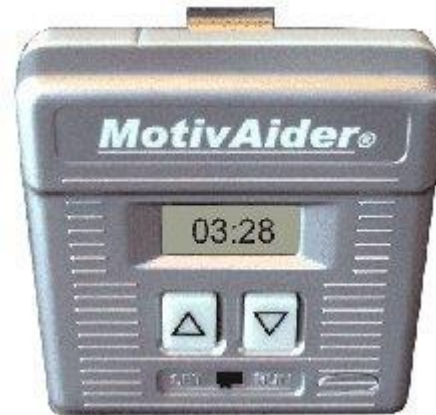


# Mid-Tech Alerting

Vibrating Pager



MotivAider



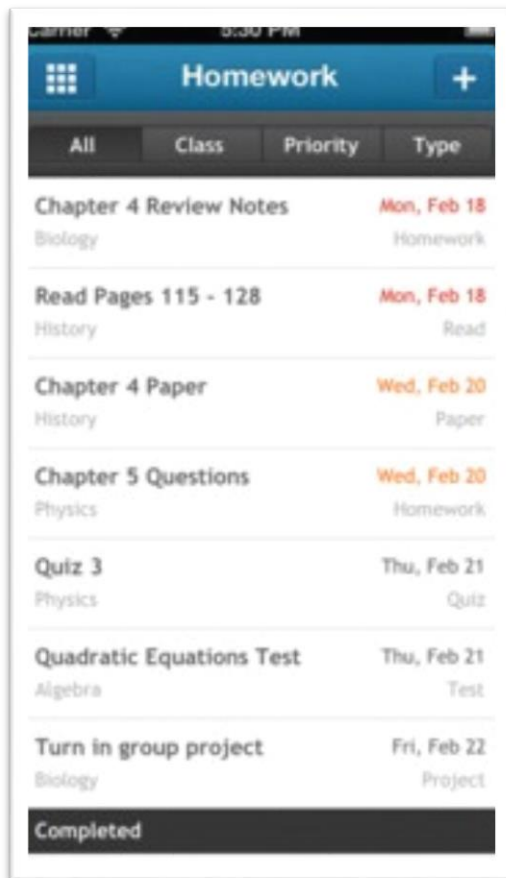
RE-vibe



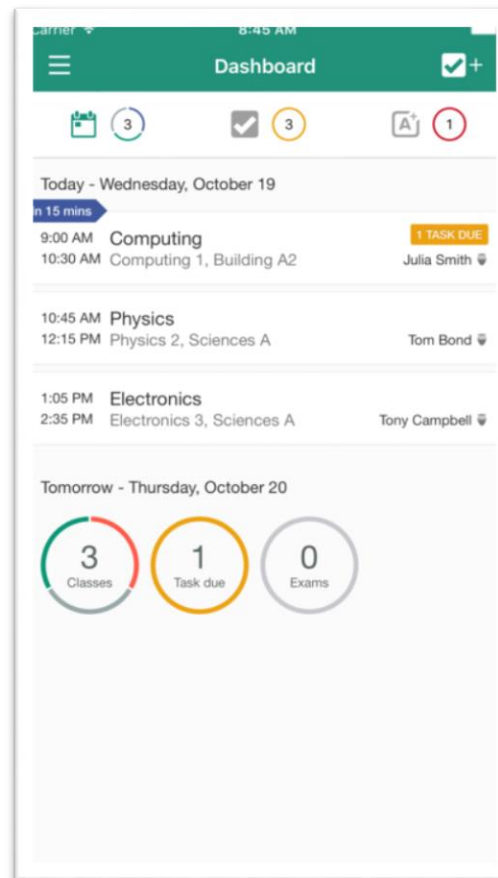
# Reminding Technologies

Time-dependent reminders to cue action.

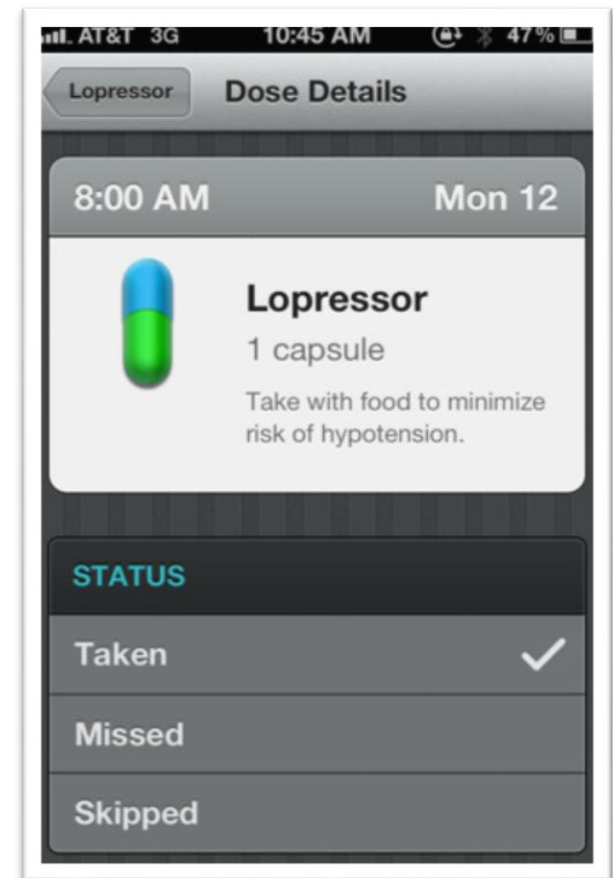
MyHomework



My Study Life



Pillboxie

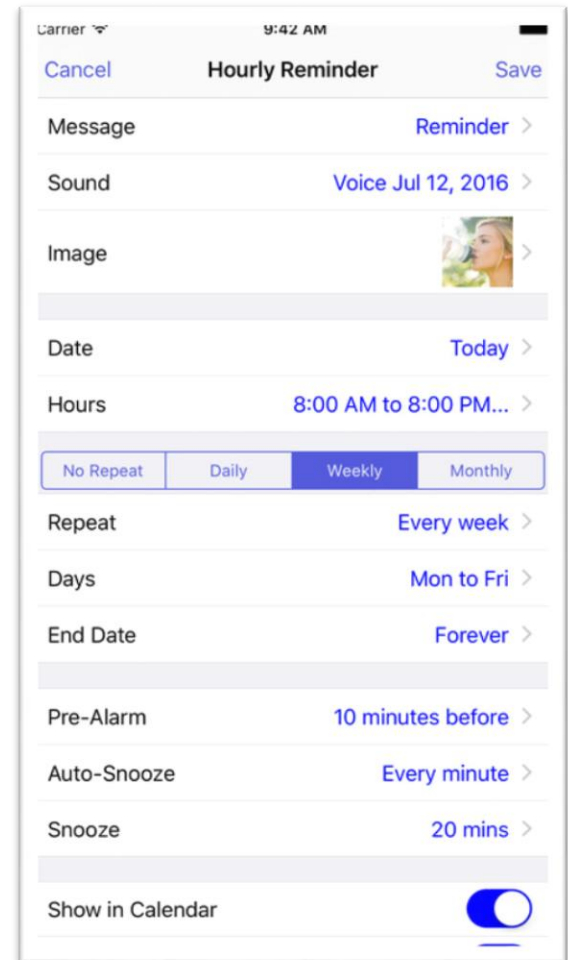
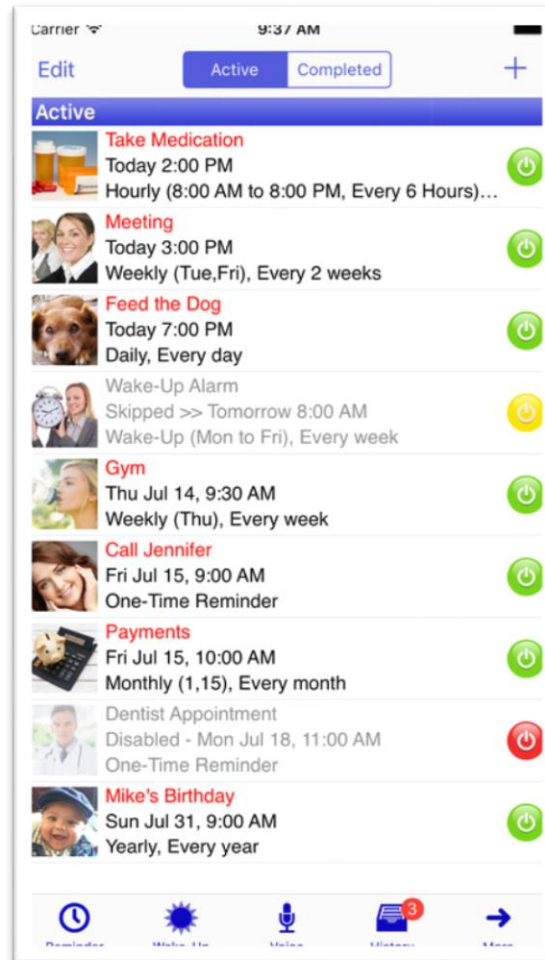


# Reminding Technologies

## Aida Reminder

(Reminder, Alarm and Voice Reminders. Remind Me App)

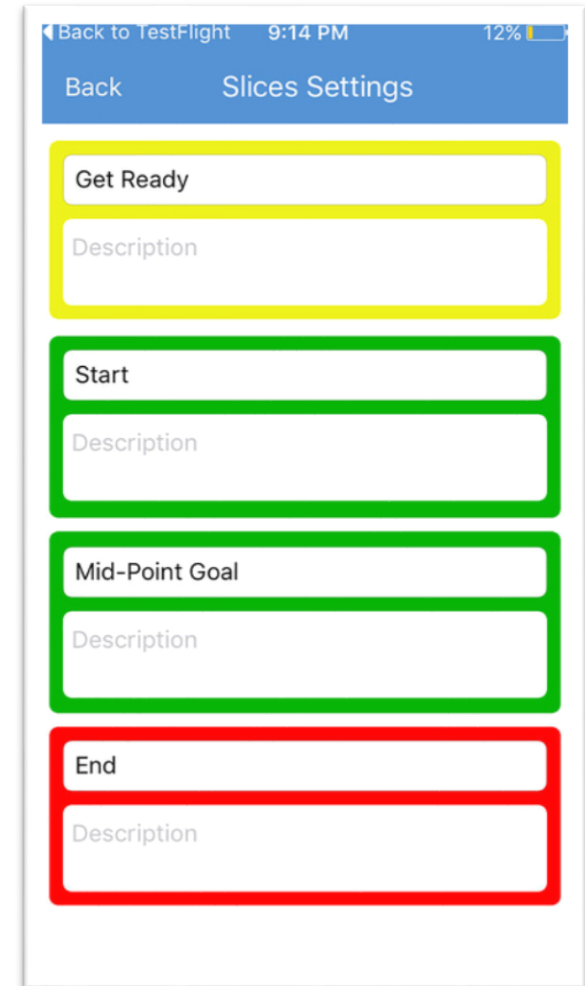
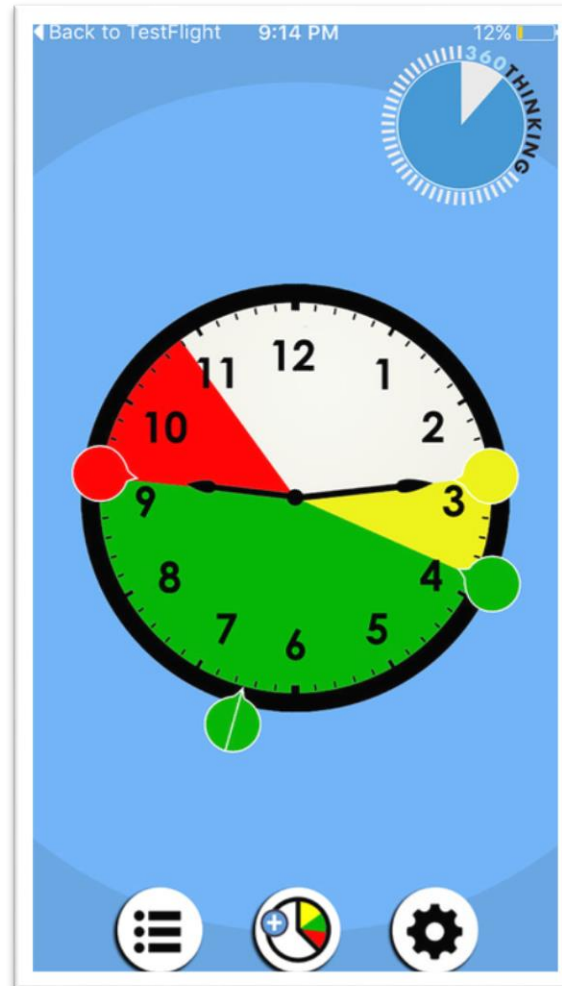
- Record own voice
- Pre-Alarms
- Auto-Snooze
- Images



# Reminding Technologies

## 360 Thinking Time Tracker

- Indicates ready, midpoint and stop points
- Users can compare the planned vs. actual use of time.



# Mid-Tech Reminding

WatchMinder3



VoiceCue



Time Timer



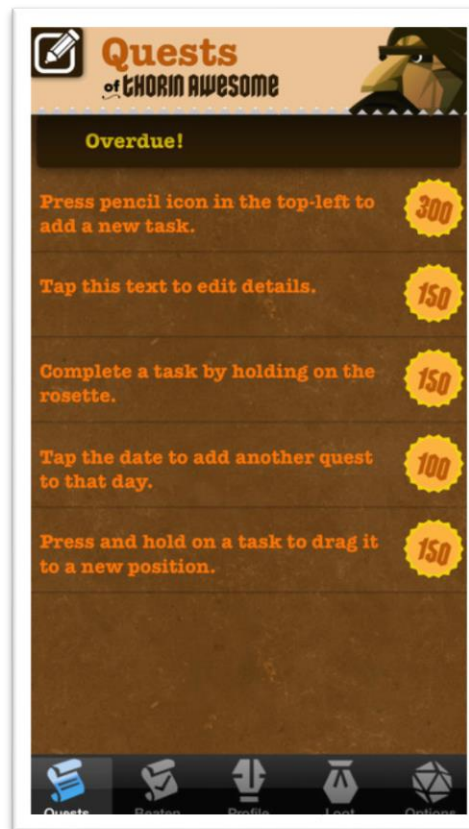
# Prompting Technologies

Step-by-step prompts for present task.

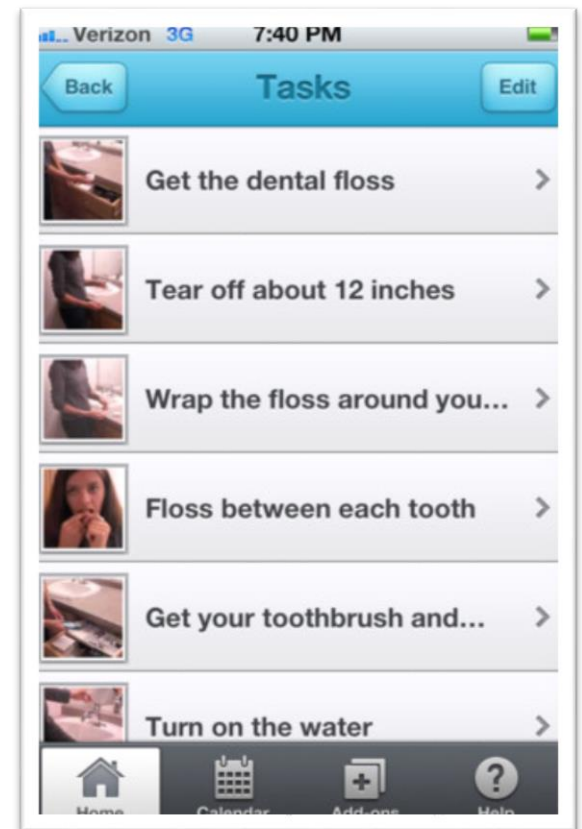
Step-by-step cues  
(Next Thing)



Checklists  
(EpicWin)



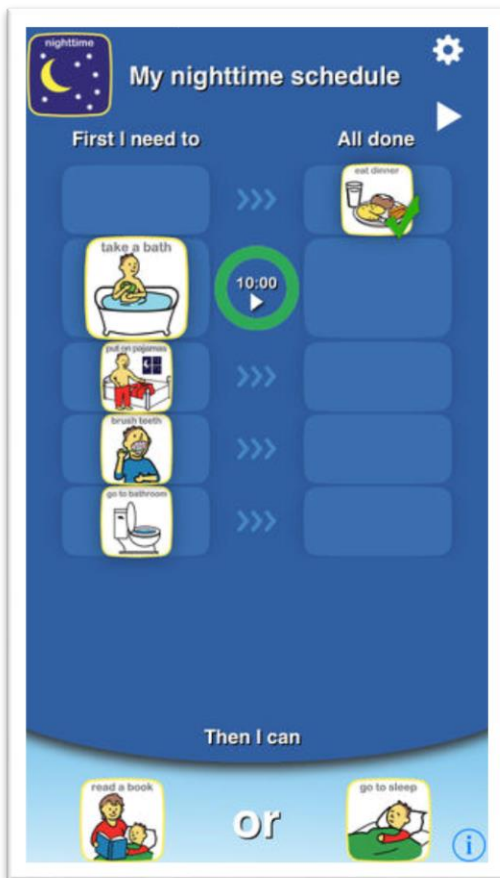
Functional  
Planning System



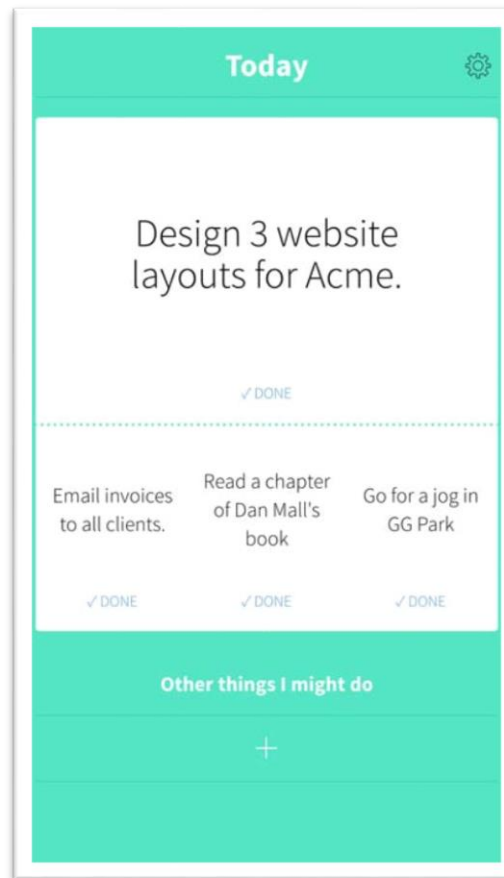
# Prompting Technologies

Step-by-step prompts for present task.

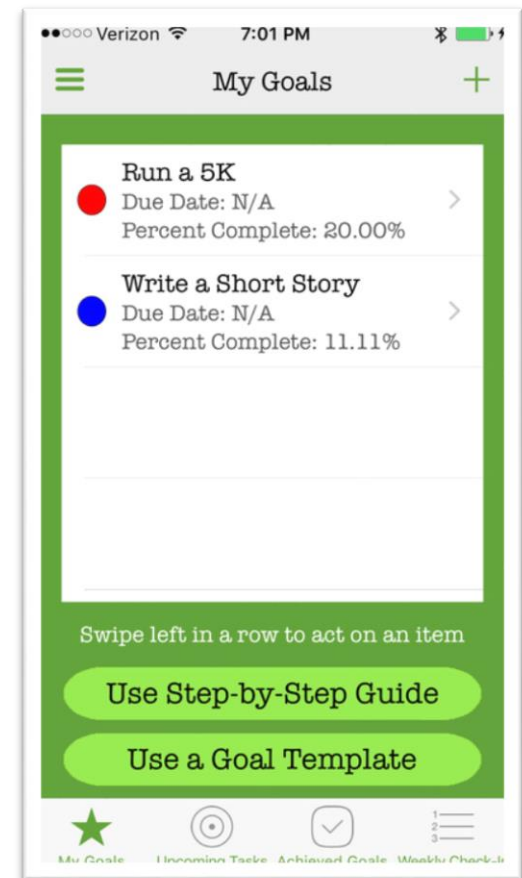
Choiceworks



One Big Thing

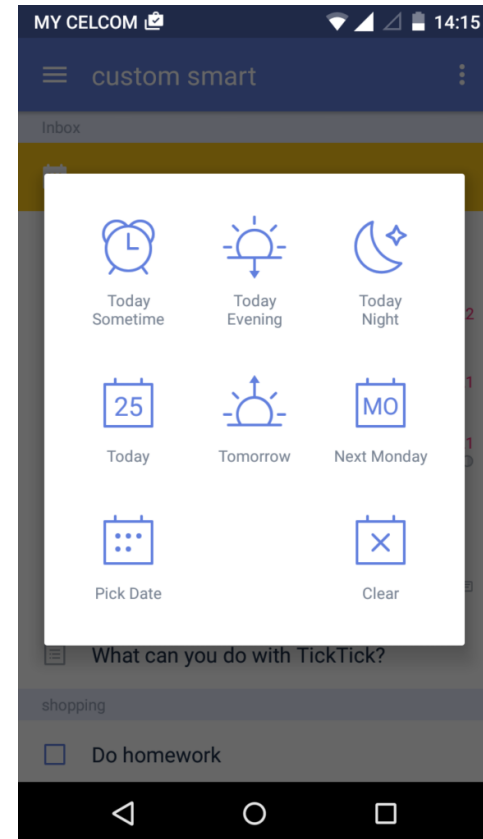
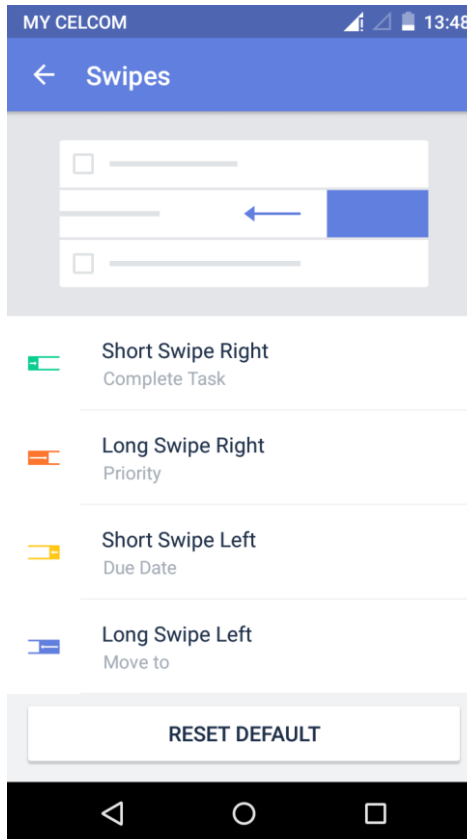
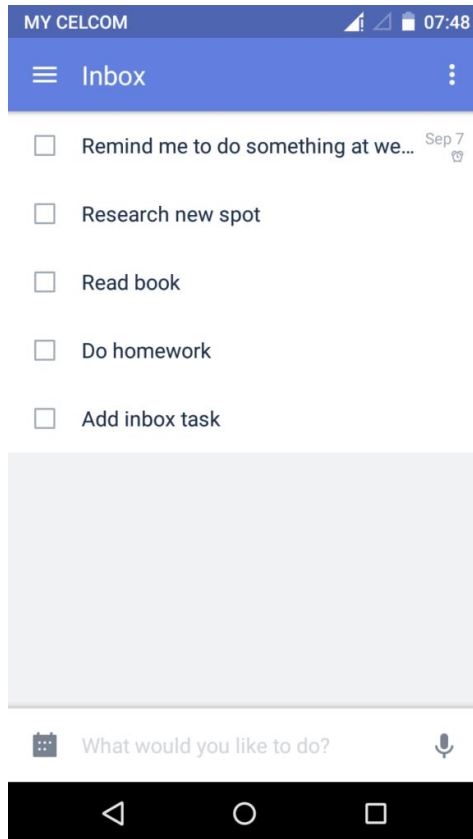


ReachMyGoals



# Prompting Technologies

TickTick is a cross-platform app with to-dos, subtasks, and reminders





# Prompting Technologies

- Use a pillbox as a visual schedule and reward system
- Place small tokens (coins, stickers, etc.) inside the box
- Try a bead in each compartment...the student can keep a string and see how many they can earn
- Put the reward activity in the last box so it's a surprise!



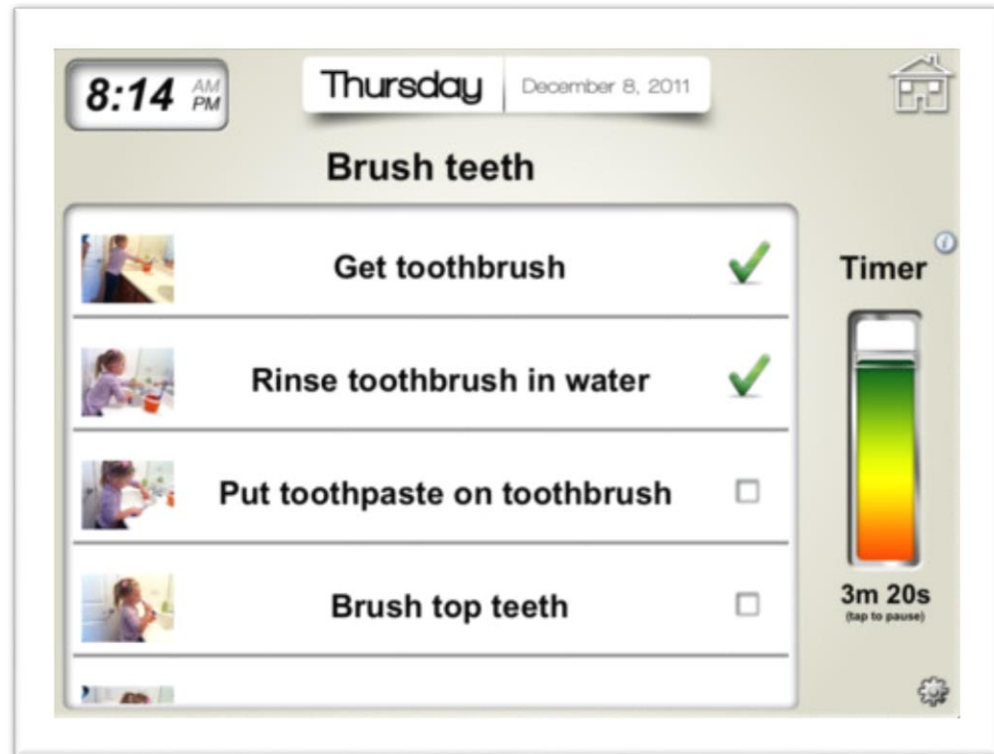
From Shannon of the Speechy Musings Blog  
<http://tinyurl.com/y8o2bpcd>

# More Prompting Ideas

StepPad Mini



Visual Schedule Planner App



Low-tech solution

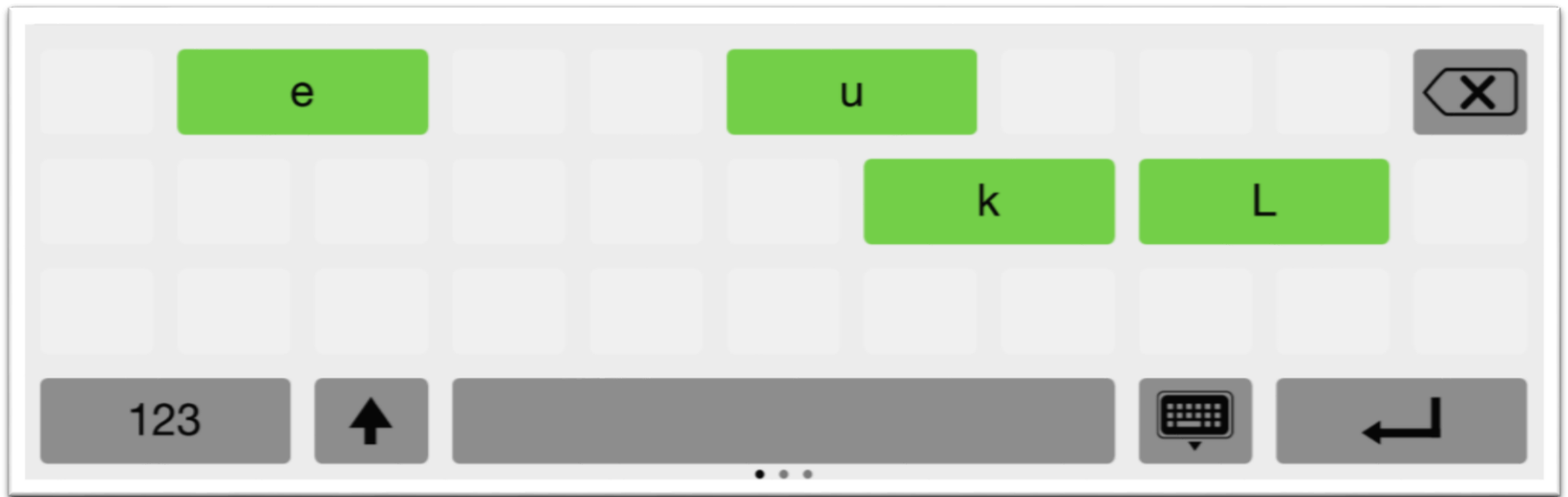
# More Prompting Ideas

Brili for works on iOS devices, Andriod devices, and the Pebble watch. It will soon also work in your browser.



# Fading Prompting Technologies

Customized keyboard with fading prompts created in the Abilipad App



# Create Tutorials on Class Computer




Welcome • Go Pro!

**Make it Easy**

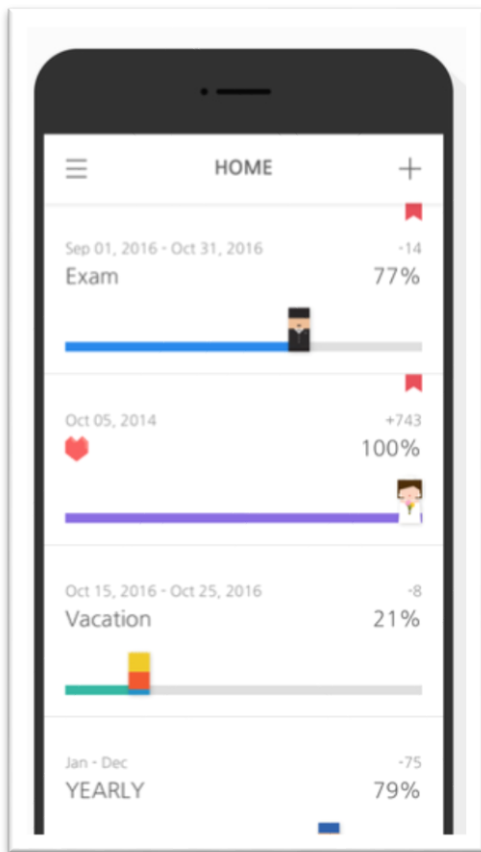
One-click screen capture recording on Windows or Mac computers with no install for FREE!

Just click **Start Recording** to record.

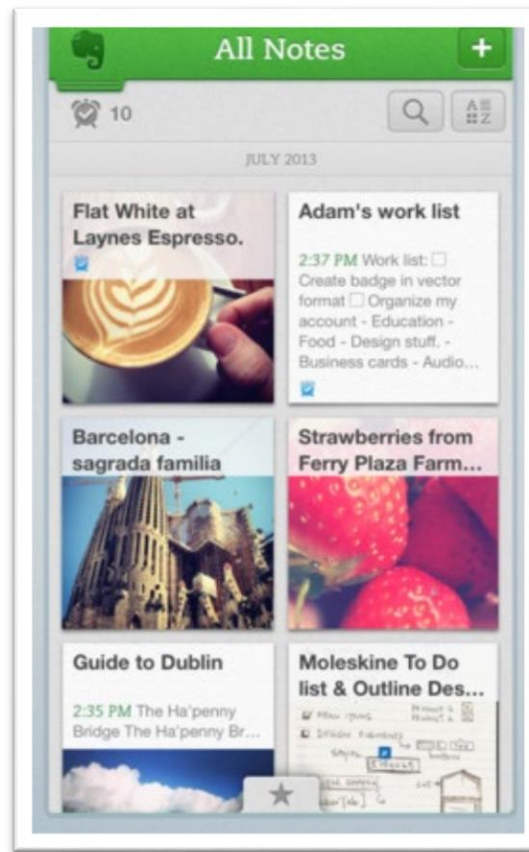
Or you can download an application to launch from your Start menu:  [Download + Install](#)

# Storing & Displaying Technologies

Countdown  
(AT - Countdown reminder)



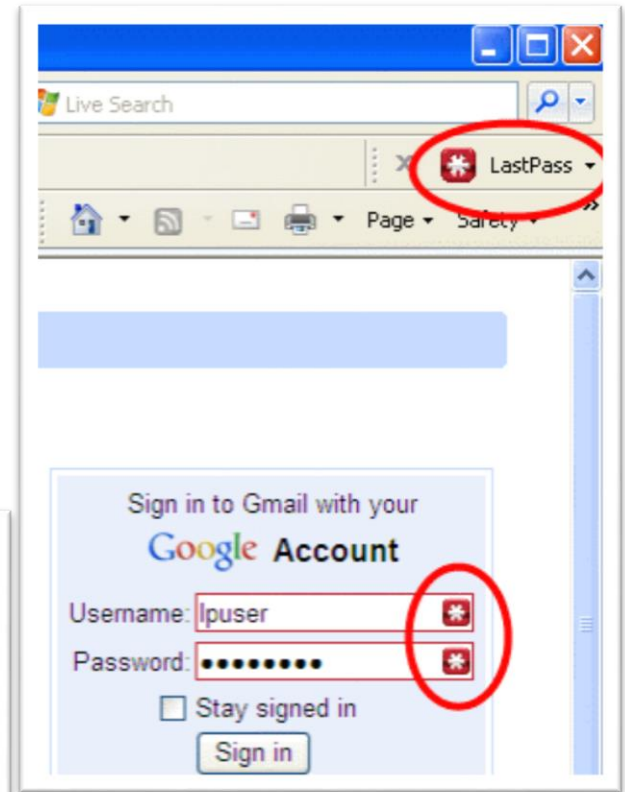
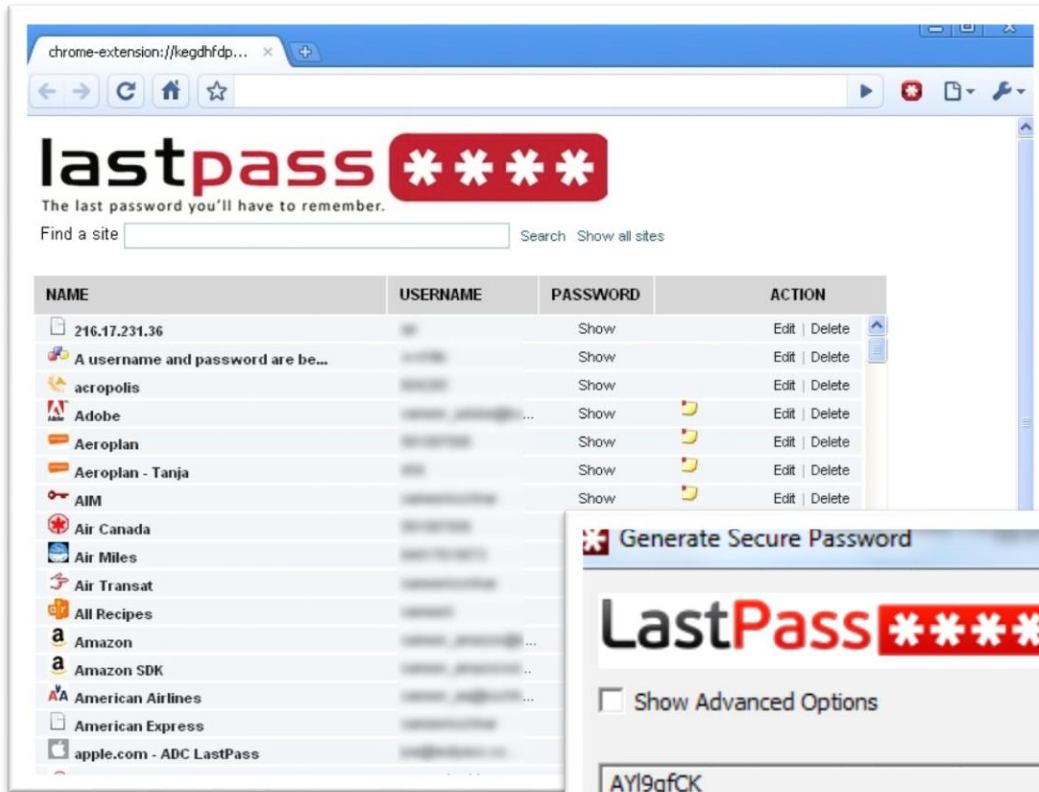
Notes  
(Evernote)



Study  
(Bitsboard)



# Password Management



# Creating Passwords

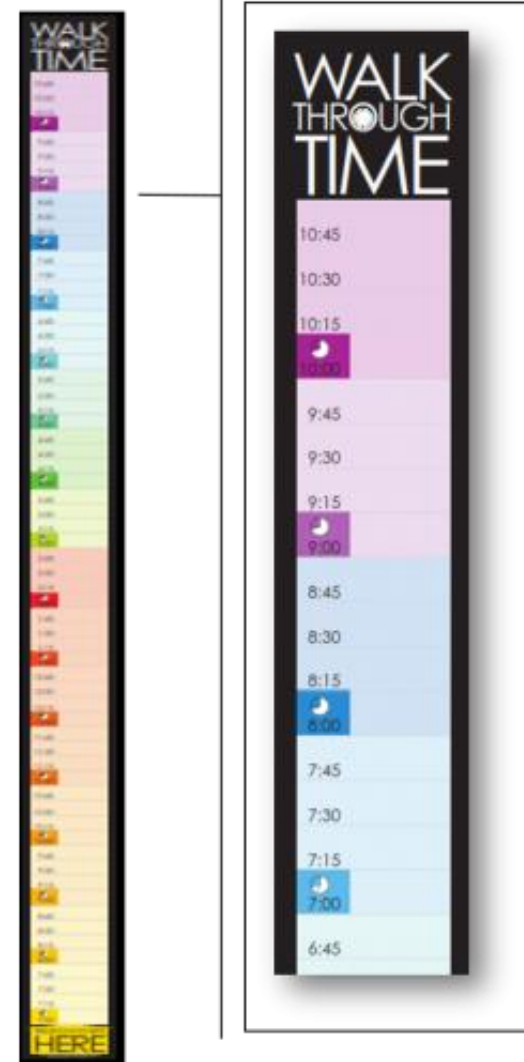
- Wizard of Oz
  - ?g&pOzem11
    - Question (?) for the great and powerful (g&p) Oz in the emerald (em) city (11)
- Space System
  - plnts@\$UN\*
  - Eis3rdfr0m\*



# Storing and Displaying iPad Apps

## Walk Through Your Day Time Banner

- 1 x 16 feet laminated banner
- Students walk on the banner to see how their day will unfold as they 'walk across the day'.
- One day 7:00 a.m. - 11:00 p.m. with 15 minute time slots



# Storing and Displaying iPad Apps

## Plan My Day Academic Planner

- Students block their Chill Time, Obligated Time and Productive Time.
- The choices of Important Goal, Must Do, Should Do and Want to Do encourage prioritizing skills
- Time estimation
- To Think About & Coming Up

**PLAN MY DAY: Monday, August 20, 2012**  
Block Schedule Day: \_\_\_\_\_

CHILL	Fun / Entertainment / Errands	What time is it at?	How long will it last?
American Idol		8:00	60m
Buy new shin guards		?	

OBLIGATED	Appointments / Practices / Etc...	What time is it at?	How long will it last?
Tutor		3	60m
Soccer Practice		5	60m

PRODUCTIVE	Homework / Things To Do	Materials	Due Date	How long will it last?
CLASS	English: read of Mice an Man Chap 6 Do novel notes	Books Binder Handouts Notes	Thur	60m
CLASS	Math: chap 14, pg 62, do probs. 1-7	Books Binder Handouts Notes	Thur	25m
CLASS	History: Read chap 4 Answer summary questions	Books Binder Handouts Notes	Fri	45m
CLASS	Spanish: Make flash cards from study guide	Books Binder Handouts Notes	Thur	15m
CLASS		Books Binder Handouts Notes		
CLASS		Books Binder Handouts Notes		

**Tests / Quizzes Today:**

7:00	
7:15	
7:30	
7:45	School
8:00	
8:15	
8:30	
8:45	
9:00	
9:15	
9:30	
9:45	
10:00	
10:15	
10:30	
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2:00	
2:15	
2:30	
2:45	
3:00	Tutor
3:15	
3:30	Help w/ English
3:45	
4:00	
4:15	Buy Shin Guards
4:30	
4:45	
5:00	Soccer
5:15	
5:30	
5:45	
6:00	
6:15	
6:30	
6:45	
7:00	Math
7:15	
7:30	
7:45	
8:00	Idol
8:15	
8:30	
8:45	
9:00	Spanish
9:15	History
9:30	
9:45	
10:00	Bed!
10:15	
10:30	
10:45	

**TO DO - DON'T FORGET**  
Take notes/note cards for history paper

**TO THINK ABOUT**

**COMING UP**  
Spanish Quiz Fri

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# BeeLine Reader

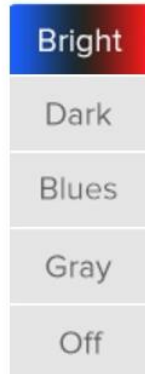


BeeLine Reader

[About](#) [Connect](#) [Our Story](#) [How It Works](#) [Get Started](#) [Team](#)

## HOW IT WORKS

Ever wonder why stop lights use colors and not words? It's because the human brain processes color very quickly—much more quickly than it can process words. BeeLine Reader uses the same principle to make reading easier and faster. With BeeLine Reader, the color of the text guides your eye across and between lines, eliminating "line transition errors" (accidentally skipping or repeating lines) and making reading faster, easier and more efficient.



Web

iOS, Android,  
Computer



Kindle

iPad, Computer



PDF

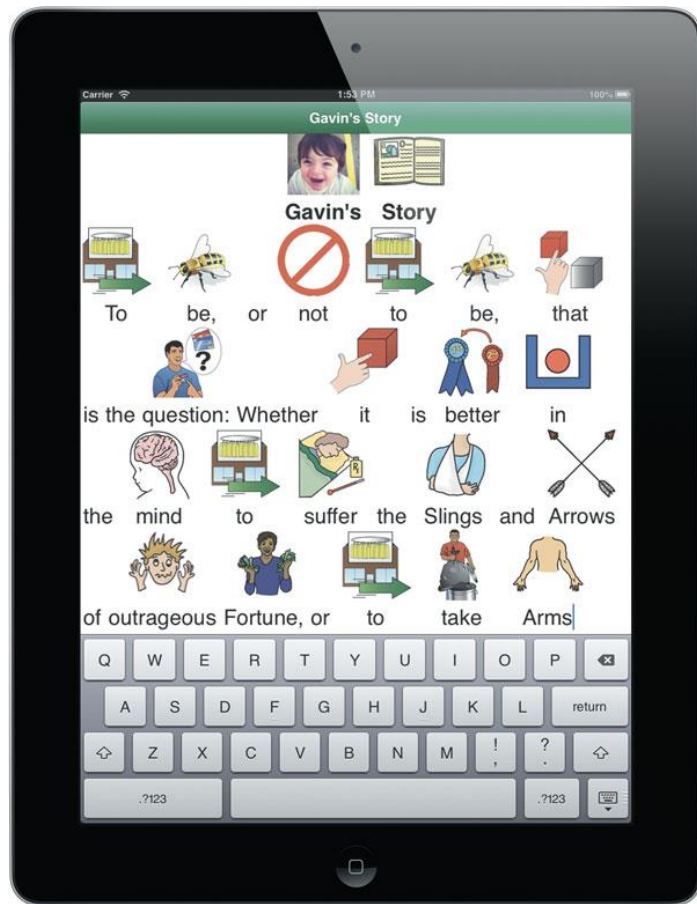
Computer



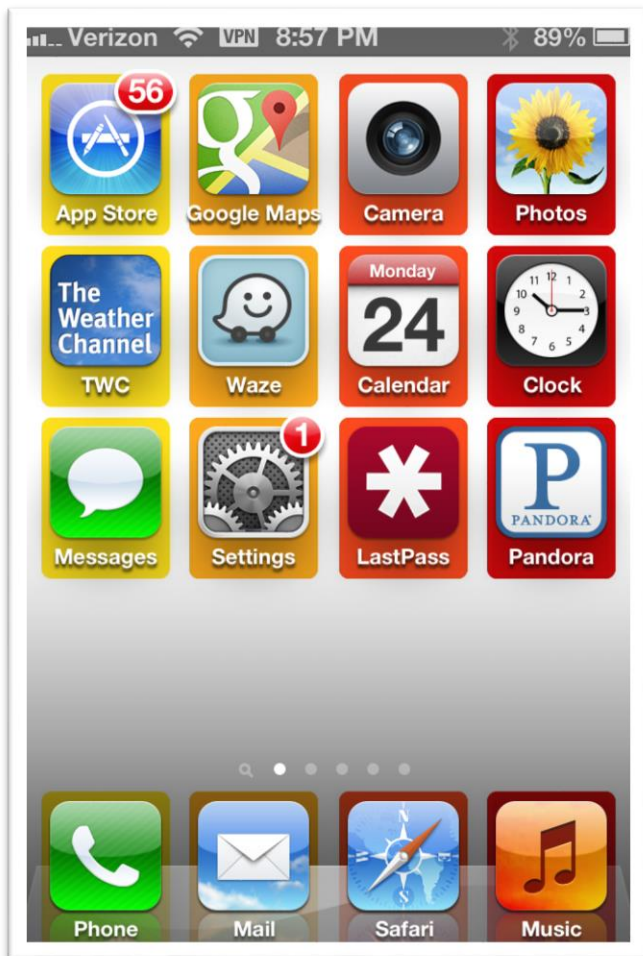
ePub

iPhone, iPad,  
Android

# SymbolSupport App



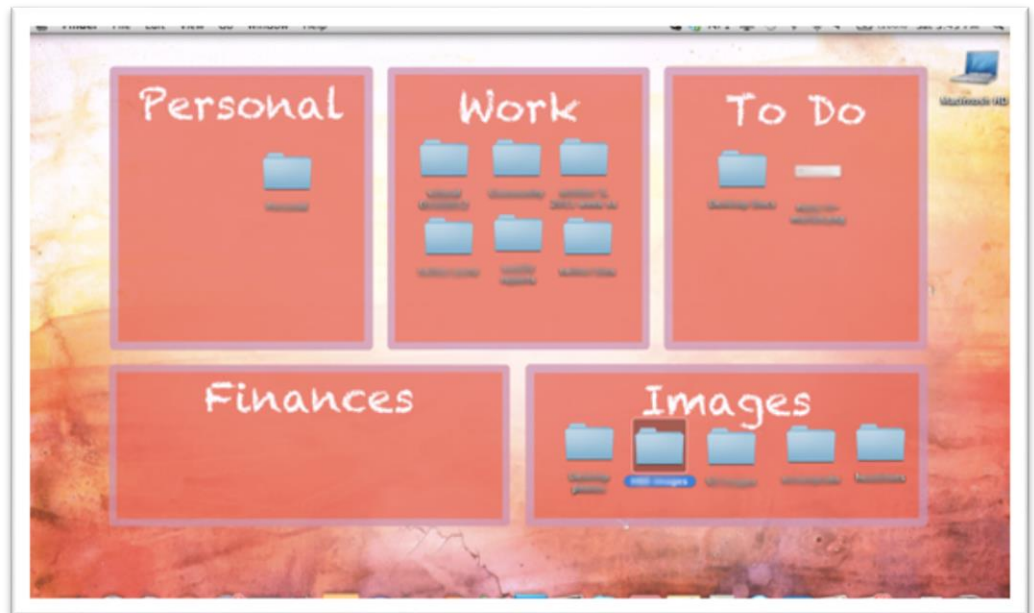
# Accessible Wallpaper



<http://www.pinterest.com/sarahpickford/accessible-wallpaper/>



<http://kohnphotography.com/blog/?p=621>



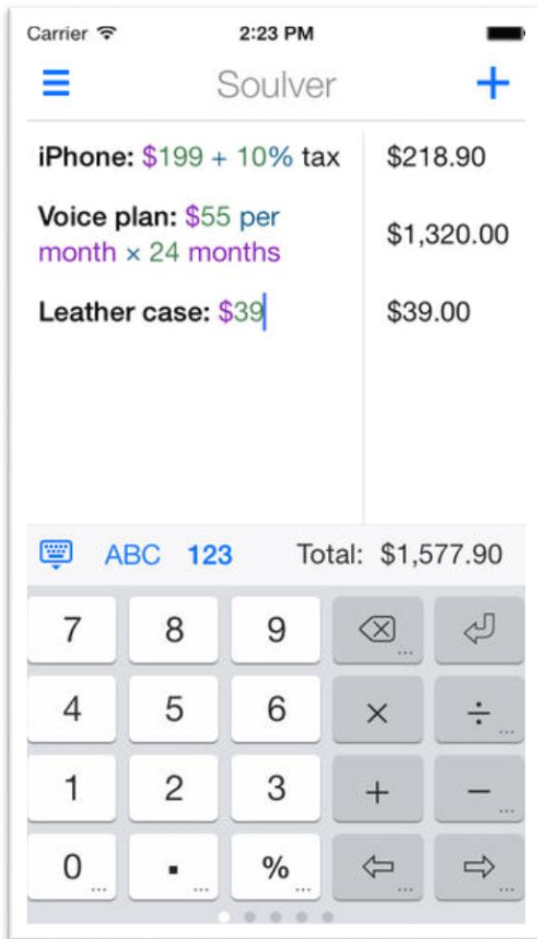
<http://www.linneyville.com>

# Livescribe Pen

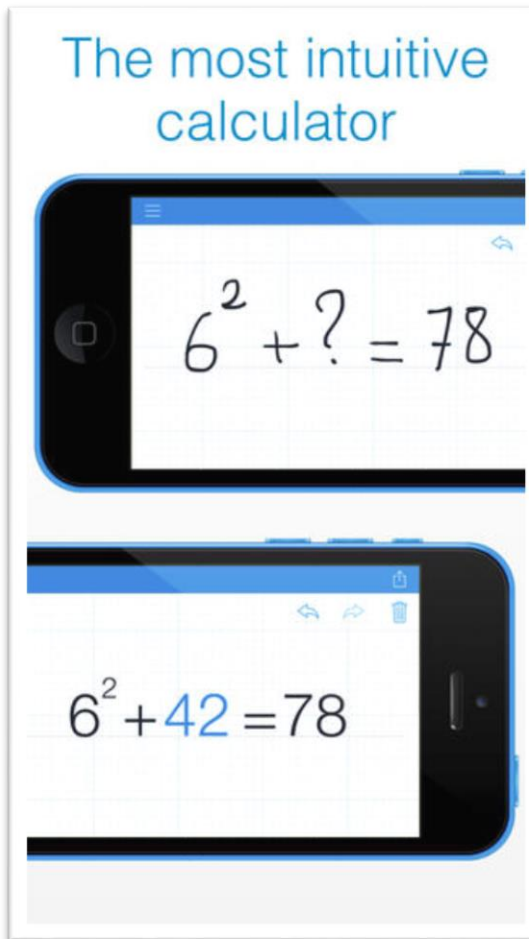


# Other Tools

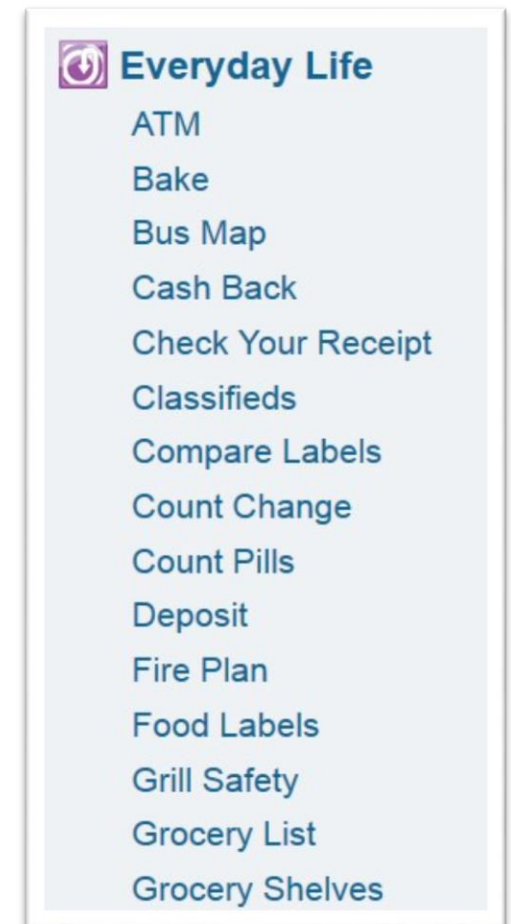
Souler Calculator



MyScript Calculator



GCFLearnFree.org

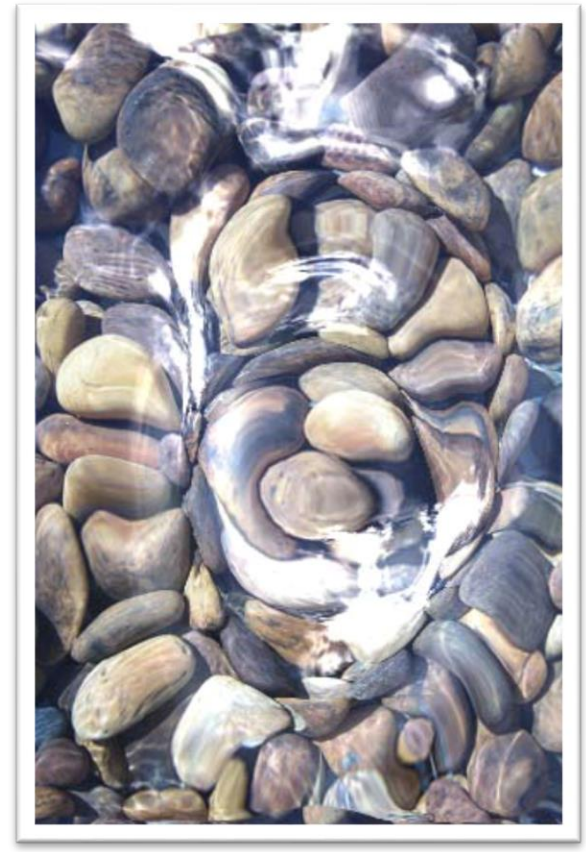
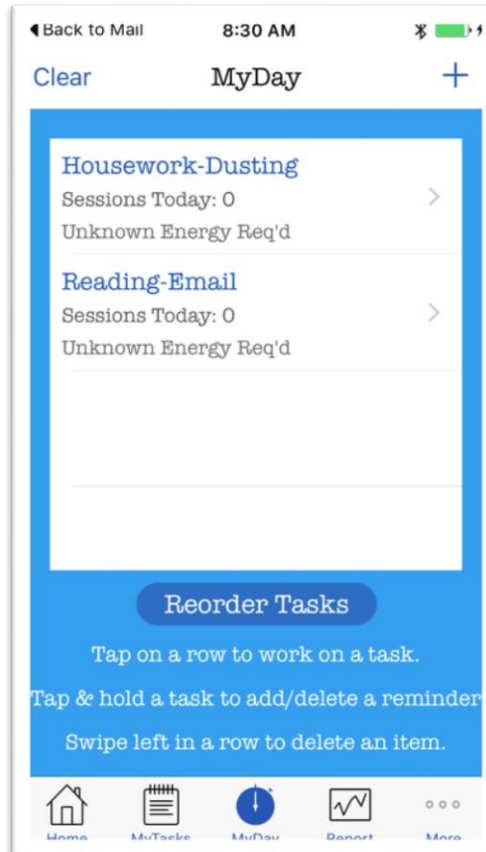
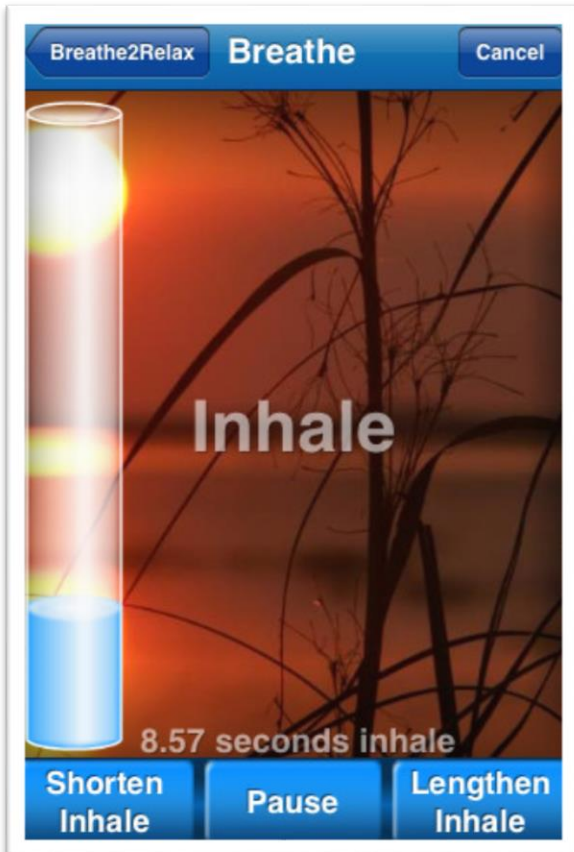


# Self-Regulating Technologies

Breathing or Meditation  
(Breathe2Relax)

Personal Strategies  
(Pace My Day)

Sensory-Based  
(Fluid)



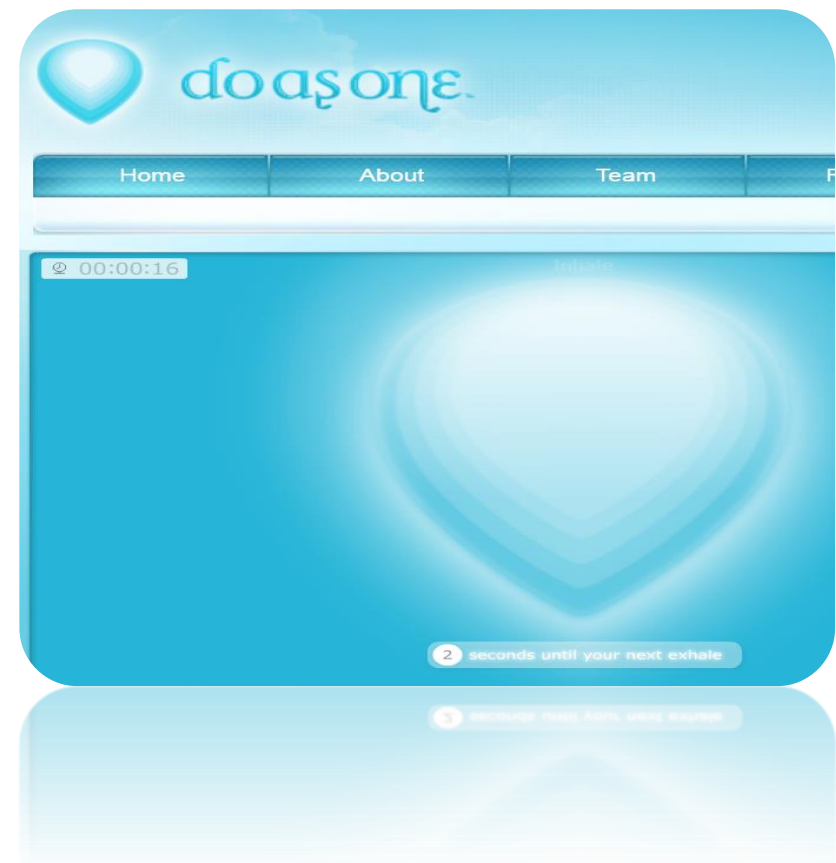


# Self-Regulating Technologies

Yoga Studio app



Doasone.com



# Unstuck



## THOUGHT STARTERS

Be honest. And consider these questions:

- Are you passionate about it?
- Does it play to your strengths?
- Does it support your core values?
- How will you overcome barriers?
- How will you deal with any risk involved?

## I'M STUCK BECAUSE...

I need to start exercising but just can't get my butt in gear. I work long hours and just can't seem to find the time to get a good routine going.




## SO I NEED TO...

Commit.

MIRROR, MIRROR

## 3 CONVINCING YOURSELF

For each potential goal, tell yourself why you would pursue that path.

1 Go back to school.	or	2 Find a new job.	or	3 Take time off.
				
				

Tap "Record" to make your video messages

# 3 Components of Independent Use

## Initiation

Student retrieves the device when it is required.

Student displays awareness of the device's purpose.

## Operation

Student is able to perform basic device functions.

Student displays increasing skill levels.

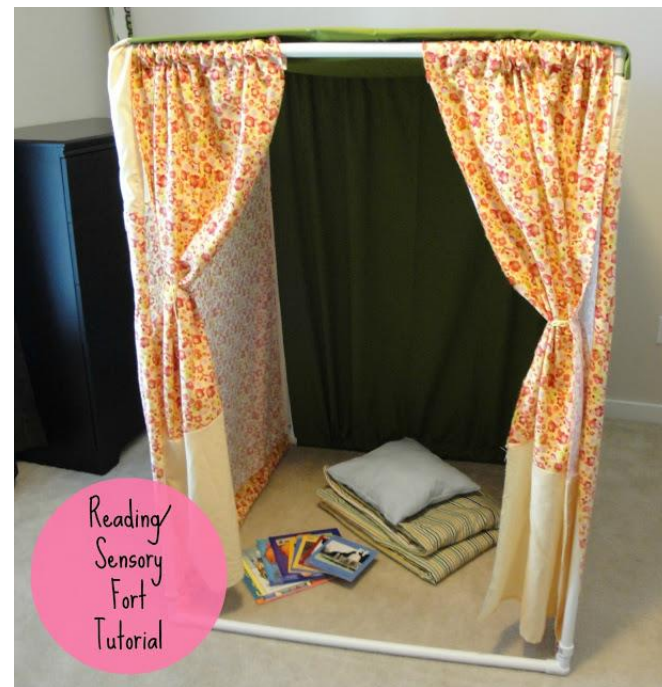
## Management

Student is tasked with caring for the device.

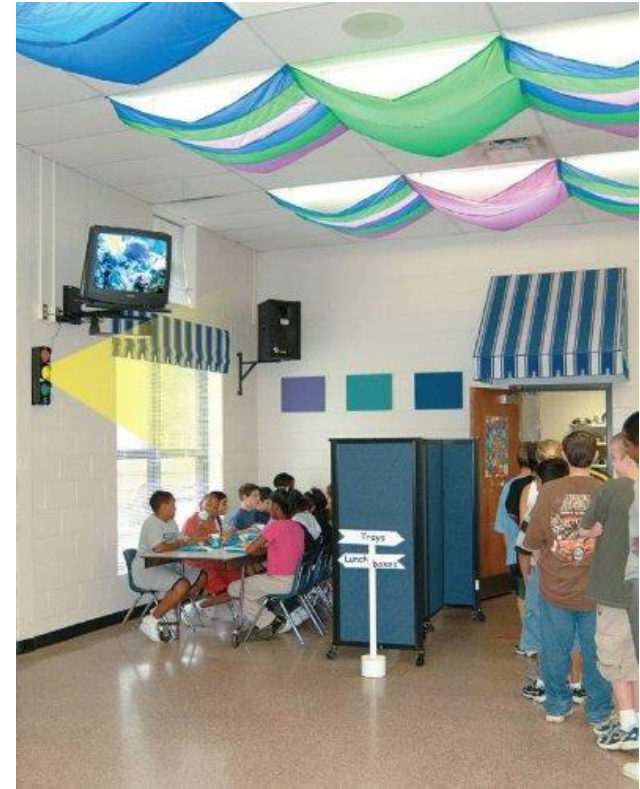
Student accepts responsibility and ownership.

# Environmental Modifications





# Light Filters





# Questions?

You can view the presentation file  
and other resources by visiting:

<http://tinyurl.com/Summer-TBI-2017>

Or contact Sarah at:

[spickford@braininjurysvcs.org](mailto:spickford@braininjurysvcs.org)