

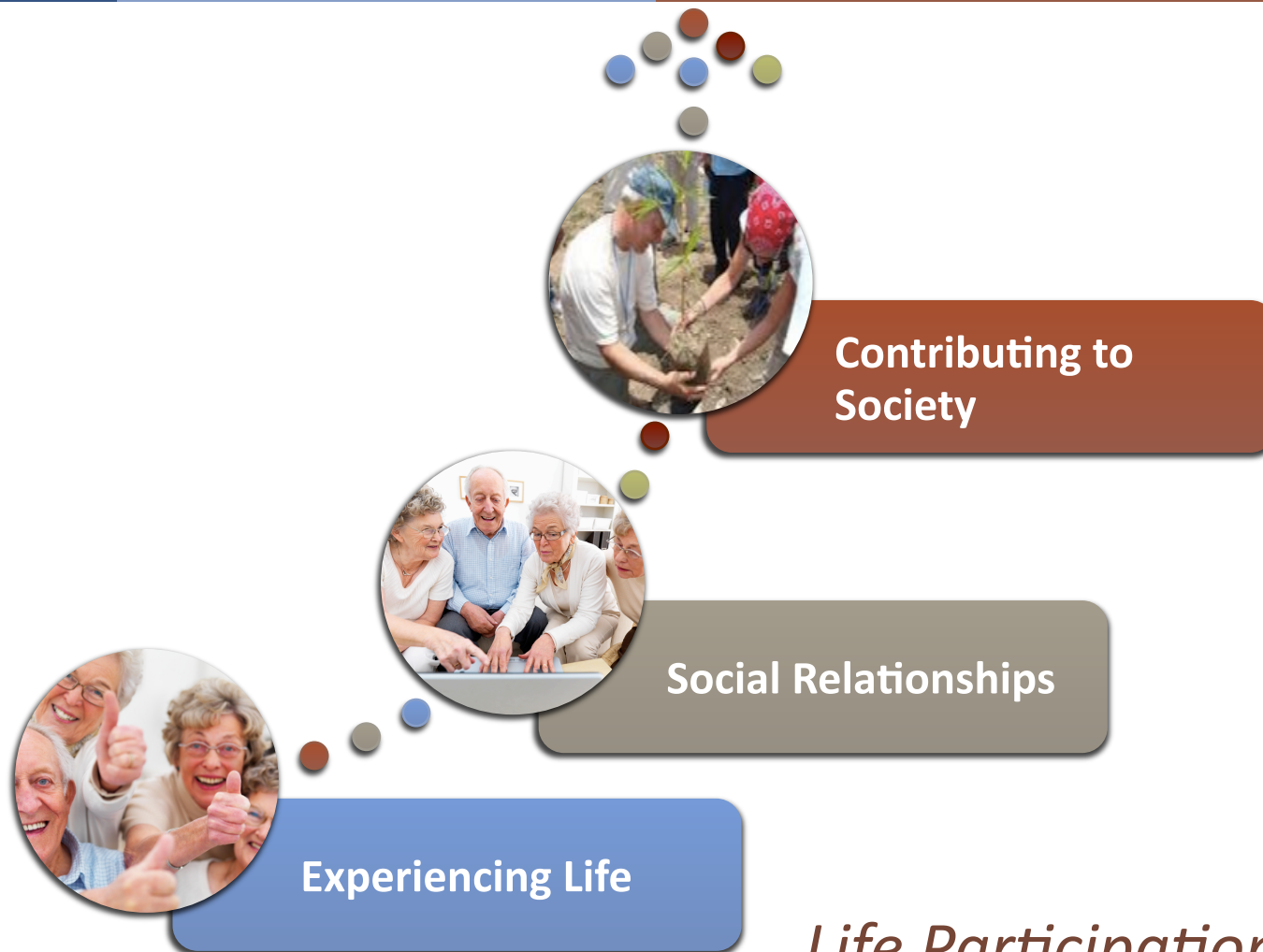


# Life Participation

Computer Supported Collaborative Work Class



# Happiness



*Life Participation Factors*

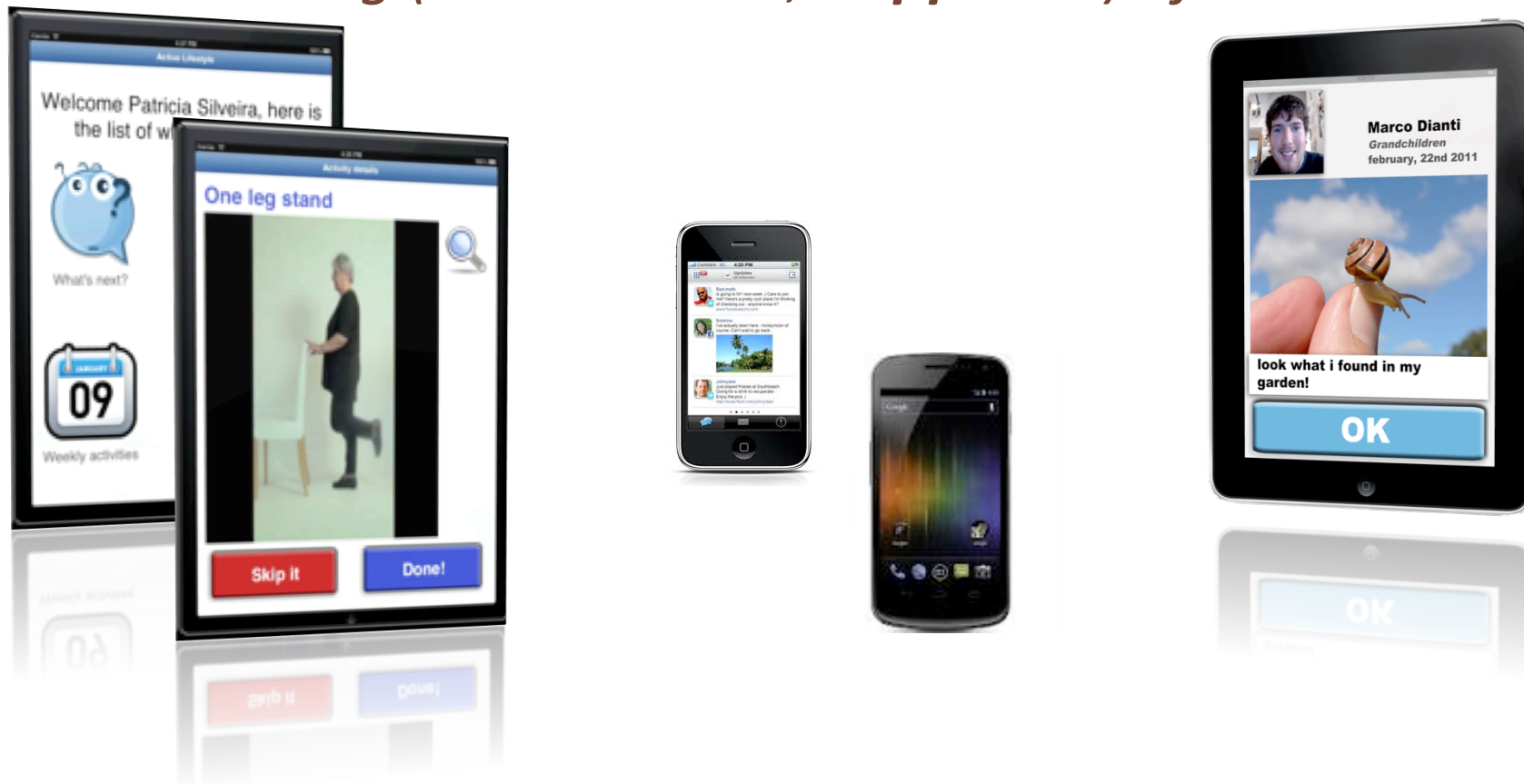
# Life Participation Project



**HAPPY ELDERLY**

# Life Participation Goal

*To develop technologies and solutions for the emotional wellbeing (in bold terms, **happiness**) of older adults.*



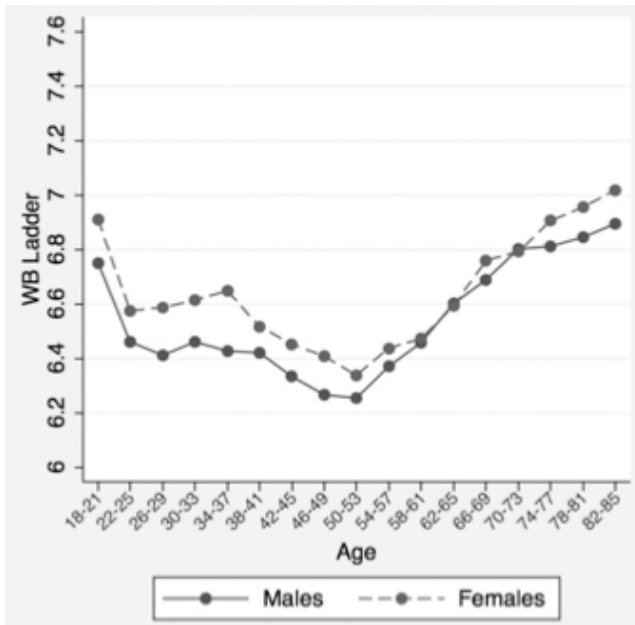
# Topics

- Gerontechnology
- Intergenerational Social Interaction
- Project

“social relationships influence health through behavioral, psychological and physiological means” [Umberson 2010]

“clusters of happiness”  
[Christakis & Fowler 2009]

# Happiness + Social Relationships



“happier when older” “increased wisdom and emotional intelligence”  
The U-bend of life [Stone 2010]

“principal contributing factor to wellbeing in UK after the age of 65” [Gabriel 2004]



# Gerontology+ Technology

## Gerontechnology

support elders in 5 ways:  
prevention, enhancement, compensation,  
care support, and research  
**[2008-Dara-Abrams]**



# Gerontechnology

“positive design vs deficit driven” [2011-Carrol]

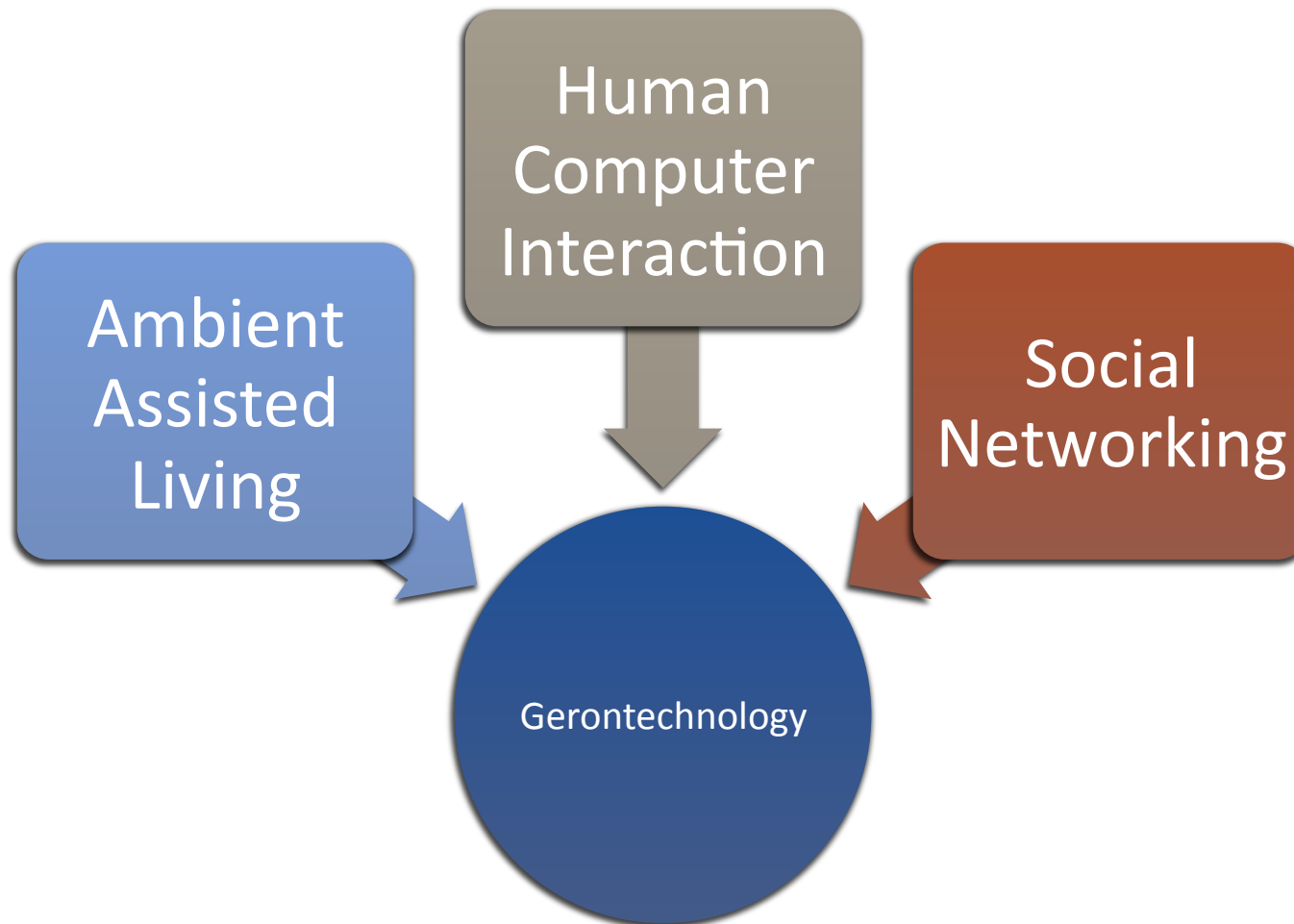
Human Layer	Theory	Gerontech Way	Technology
Social (4)	Social Network	Care Support, Enhancement	Collaborative Social Networks
Cognitive (3)	Multiple Intell.	Compensation, Enhancement	Multimedia presentation
Physical (2)	Person-Environ.	Prevention	e-learning, automated fitness
Physio. (1)	Activity	Compensation, Research	Automated measurement devices, medical imaging

Technology support for Elders [2008-Dara-Abrams]





# Gerontechnology



# Ambient Assisted Living (AAL)

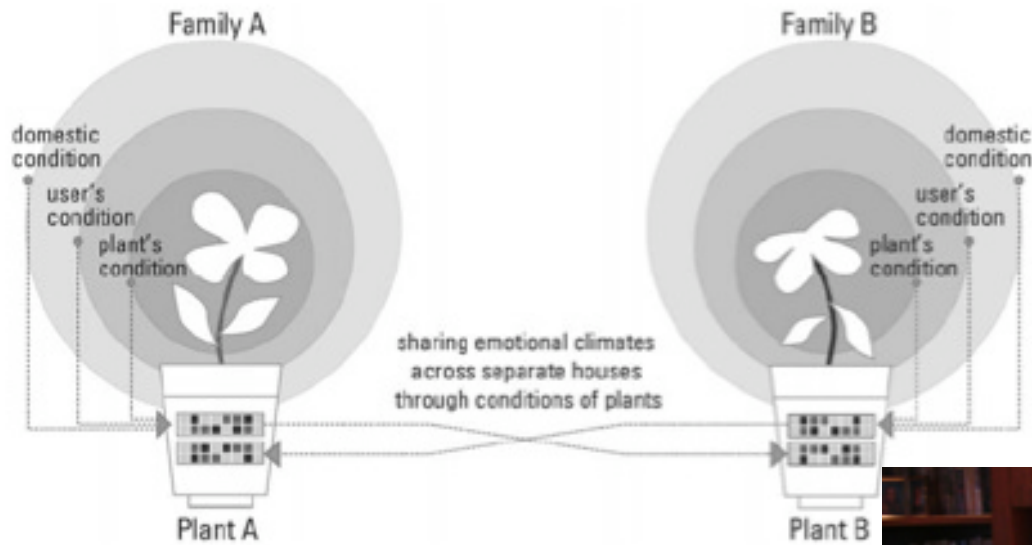
- Technologies that provide supervision or assistance with activities of daily living; coordination of services by outside health care providers; and monitoring of resident activities to help to ensure their health, safety, and well-being.

# AAL examples



Nösphere [Future of Elderly Project, 2006]

# AAL Examples



[Fig. 9] Conceptual Model of Ambient Plant



Each LED (blue dot) represents a level of color intensity, this being the LED's level of brightness and amount of presence detected per hour. As you can see, hours 1, 8 and 9 have a heavy presence detected, whereas 3, 6 and 10 had minima contact.



# AAL Examples

The screenshot displays the website for the Aware Home Research Initiative at Georgia Institute of Technology. The top navigation bar includes links for Home, ABOUT US, PEOPLE, PUBLICATIONS, RESEARCH, SPONSORS, NEWS, and CONTACT US. A secondary navigation bar below it features three categories: Chronic Care Management in the Home, Future Tools for the Home, and Digital Entertainment and Media. The main content area is titled 'Future Tools for the Home' and contains the following text:

**Future Tools for the Home**

Technology will revolutionize the tools that are used in the home of the near future. Embedded computing, sensing and actuation technologies—coupled with new infrastructure in the built environment itself—will combine to enable new opportunities to support the work of the home. Taking fullest advantage of these opportunities requires that we understand both the base technology on which these new tools will be built, as well as the domestic setting in which they will be used.

For example, robots are one category of home tools that people will likely increasingly purchase for their homes. However, to date very little is known about how to design robotic products that fit into the home, do meaningful work there, and are desirable to own. These are critical questions to answer if we are going to design usable and useful home tools for the future. Understanding how current home tools (including devices such as the iRobot Roomba vacuum cleaner) fit into the work of the home can shed light on how to design the next generation of domestic robots. Such understanding can also inform the creation of new low-level technologies that can be built into tools, or into the home infrastructure itself.

Aware Home [[awarehome.imtc.gatech.edu](http://awarehome.imtc.gatech.edu)]

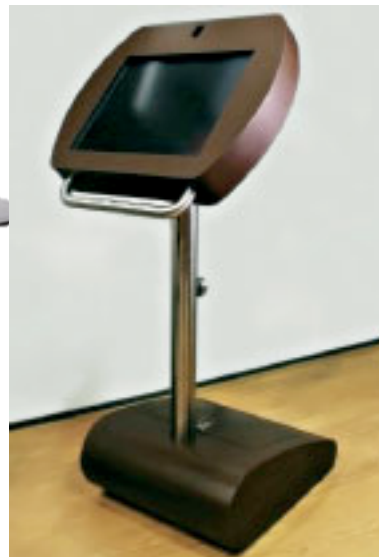
# Human Computer Interaction

- Study, planning, and design of interaction between people and computers

# HCI Examples



**simpliciTy (£399)**



**mobiTable**

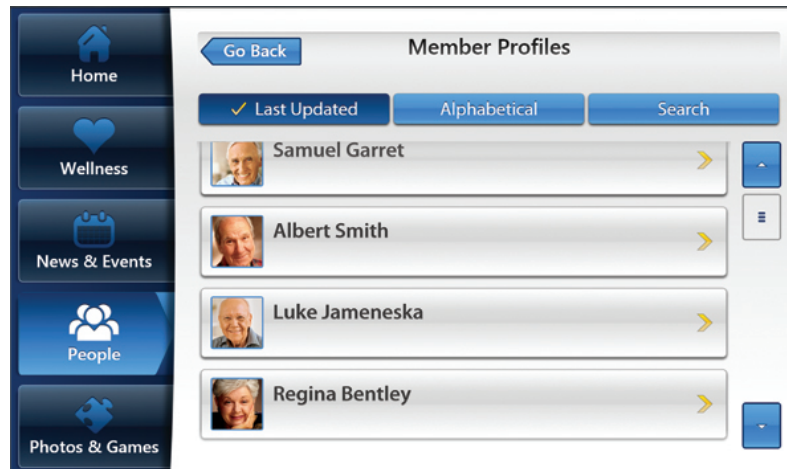
<http://wn.com/i3fbk>



# AAL+HCI in Caregiving



Waldo Telecare (\$???)



IntelCare Connect (\$???)



Blood Pressure



Weight

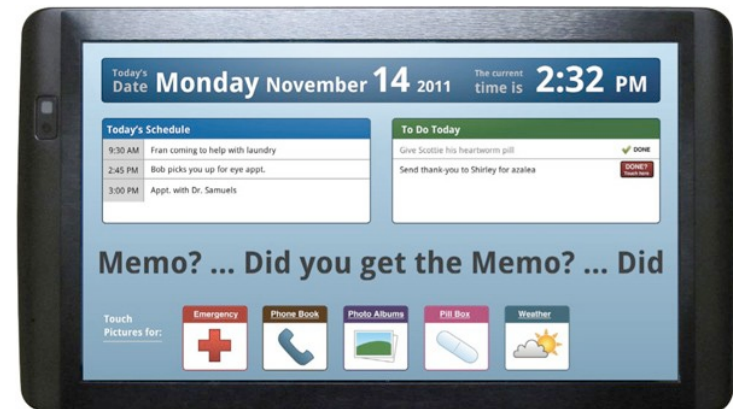


Motion



Door

Grand Care (\$1995)



Memotouch (\$299+\$29/m)



# Social Networking

- Online service, platform, or site that focuses on building and reflecting of social networks or social relations among people

# Social Networking Examples

bettie™

Products

About

Press

Blog

Allowing friends and family to effortlessly keep up to date and stay in touch.

Introducing bettie, a device that will let you keep up to date with your friends and family. You don't need to belong to any network, just plug in bettie and you can stay in touch. All without having to...

[Come Explore](#)



# Social Networking Examples



Already have an account?

[Sign in](#)

## The private social network for your neighborhood

See if Nextdoor is available in your area:

Email address

Street address

City

State

[Check availability](#)



Learn about Nextdoor in 90 seconds. Watch a video.

# Intergenerational Interactions

- Social networking to connect people of different generations

# Intergenerational Interaction

StoryVisit

Let's read stories together!



Choose a storybook to read together

Touch the page to point to something. The other reader will see where you point.

StoryVisit Welcome, Jones family! (Grown-Up)

Camera Set-up About Feedback

Maybe you do not understand. You see, turning pages will bring us to the end of this book, and there is a **Monster** at the end of this book...

...but **this** will stop you from turning pages. See? I am tying the pages together so you cannot...

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Turn the page, and the other reader's page will turn too.

Child's camera

Grown-up's camera

# Intergenerational Interaction

## Programmes pour l'Autonomie et la Communication des Aînés *Programmes Intergénérationnels pour Aînés et Jeunes*



### A propos de nous

- Mandat
- Prix et reconnaissances communautaires
- Histoire et dates clés
- Organisation
- Commanditaires et Partenaires

### Activités Inter-génération

- Activités de groupe
- Télé-mentorat face-à-face
- Au sujet du Village Virtuel Inter-générationnel
- Télé-santé
- Village Résidentiel (A suivre...)

### Actualités et publications

- Actualités PACE 2000
- Reportages média
- Publications - Presse
- Publications - Télésante et Autonomie
- Multimédia
- Autres sites

### Votre contribution

- Devenir bénévole
- Devenir participant
- Devenir donateur
- Devenir partenaire

PACE Project [[www.pace2000.org](http://www.pace2000.org)]

# Elderwisdomcircle.org



Elder Wisdom Circle™

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with a gift to the  
EWC this  
season.



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Fan Us!

Ask for Advice

Read Advice

Offer Advice

Wednesday, February 08, 2012

## Welcome

### Ask our Elders for advice and get a FREE personal response via e-mail.

Need advice on your family, relationship, self-improvement and career questions? Not sure where to turn? This is the place where people in their teens, 20s, 30s, and beyond connect with Cyber-Grandparents for confidential, personal, and compassionate guidance. More information about our service [here](#). [Our privacy policy](#) is located [here](#).

**Sorry... NO financial, legal or medical advice offered.**

Your E-mail Address:

Confirm Your E-mail:

Detail Your Problem Below

## CHECK OUT OUR AMAZING ACTIVITIES!



### **STRICTLY AMAZING WITH JEANNETTE**

Saturday 11th February  
10:00am - 2:00pm

**BOOK NOW**



### **KNITTING MASTERCLASS WITH BERNADETTE**

Wednesday 15th February  
7:00pm - 9:00pm

**BOOK NOW**



### **STREET PHOTOGRAPHY WITH ANDREW**

Saturday 18th February  
11:00AM - 2:30PM

**BOOK NOW**





## AAL

- Netcarity [2008-Leonardi] Nosphere [2006-Nosphere] IntouchFun [2009-MezaKubo][2010-Meza]
- Aware Home [2006-Roger-Fisks][2004-Mynatt]
- Ambient Plant [2011-Conelly][2010-Lynggaard]

## HCI

- Story Visit [2011-Raffle]
- Simplicity [2011-Talamo] SCUF [2010-Picking]
- Input Devices Review [2009-Loureiro][2009-Taviera]
- Photoframes [2011-Lopes] [2007-Biehman]

## Social Networks

- PatientsLikeMe [2009-Brownstein]. Nextdoor
- IntouchFun [2009-MezaKubo][2010-Meza]
- Tablet Solutions [2005-Santana]
- (to rThe Desire to Be in touch [2009-Lindley]

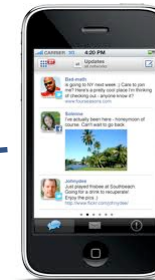
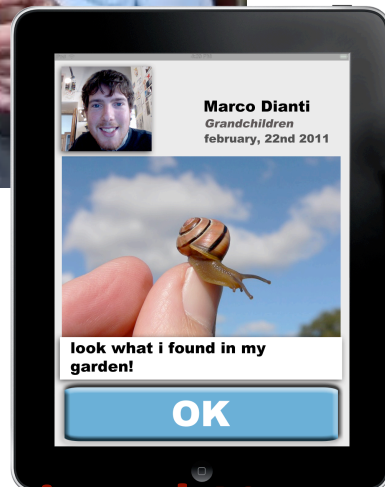
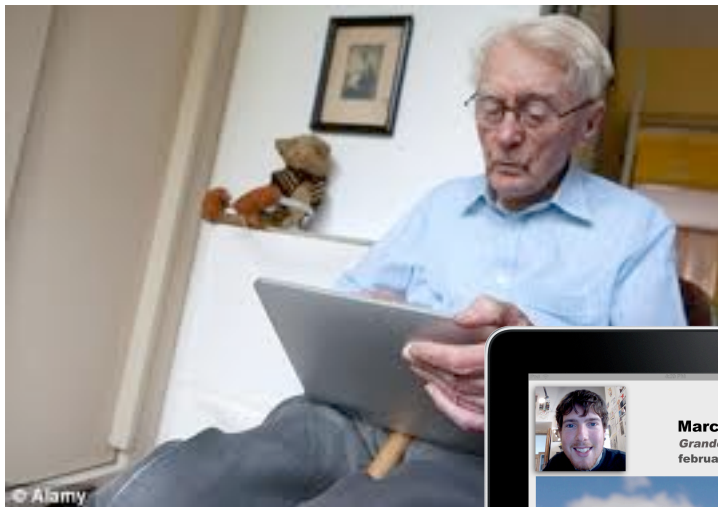
What's UP



## Supporting Intergenerational Interactions in Life Participation

# The 1<sup>st</sup>. Prototype: What's UP

*a one way communicational channel in which elders receive messages sent by others*



**\* Intergenerational Networking**

# Whatsup Demo

➔ <http://www.youtube.com/watch?v=U-B-gfgjuz0>

# Project Goals

- Understanding the **Usability** of the UI
- Understanding the **Sharing** Behavior of intergenerational networks

# Project Activities

- Think Aloud Study
  - 4 elders + video + transcript + analysis
- Longitudinal Remote Testing
  - 1~2 elders + 2 weeks usage + activity logging + analysis
- Design Exercise
  - Recommendation based on Results

# What's UP Think Aloud Study

## ➤ Groups

- Young-Old (65-74)
- Middle-Old (75-84)
- Old-Old (85+)

## ➤ 4 Interfaces

- No buttons
- Request
- Feedback
- Complete



# What's Up Think Aloud Study

➔ <http://www.youtube.com/watch?v=pouFfeR0n0A>



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Thanks!



Questions?

