

# Free technological solutions to support self-determination of people with an intellectual disability or a pervasive developmental disorder

AAIDD 135th Annual Meeting  
Inclusive Communities : Pathways to Realizing the Vision

**Martin Therrien-Bélec, M. Sc., Ps. Ed., Research Professional**

**Yves Lachapelle, Ph. D.**

[martintherrienbelec@gmail.com](mailto:martintherrienbelec@gmail.com)

<http://martintherrienbelec.wordpress.com>




## *Goals*

- Review of literature to find free technological solutions that can be use to enhance self-determined behaviors among people with IDD or pervasive developmental disorders
- Create a directory
- 15 technologies were chosen, field-tested and discussed in order to prepare material for training activities
- Initial work has been done toward conceptualizing a Framework on Technology uses

# *Free – Open*

« Nothing belongs to nothing, everything belongs to everyone »  
Alfred de Musset

- Anywhere
- Anyone
- Modification
- Adaptation
- Improvement
- Redistribution
  
- Developing rapidly
- Community support
  
- EXAMPLES : Wikipedia, OpenOffice, FireFox...



**Cooperation  
Teamwork  
Multidisciplinarity**

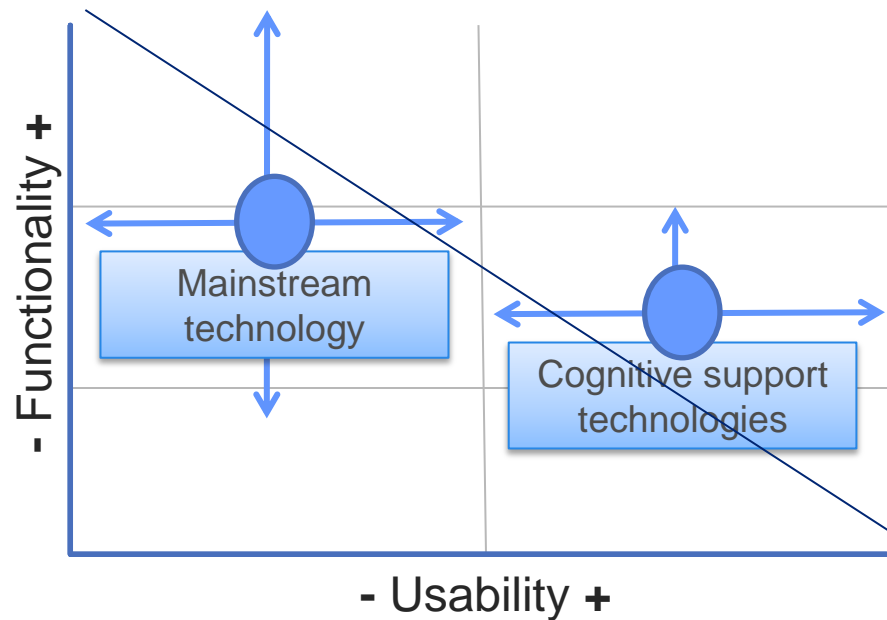
## *Core concepts*

- People need (Rogé, 2003; AAMR, 2002)
- Policies and orientations (OPHQ, 2007; MSSS, 2001)
- Self-Determination (Lachapelle & Boisvert, 1999; Wehmeyer, 1999)
- Support (AAIDD, 2010)
- Barriers reduction between people and their environment (Haelewyck, Lachapelle, & Boisvert, 2003)
- Social participation (Wehmeyer, Smith, & Palmer, 2004)
- Quality of Life (Schalock, & Verdugo, 2002; Haelewyck et al., 2003)
- Integration and inclusion (Wehmeyer & Sands, 1996)

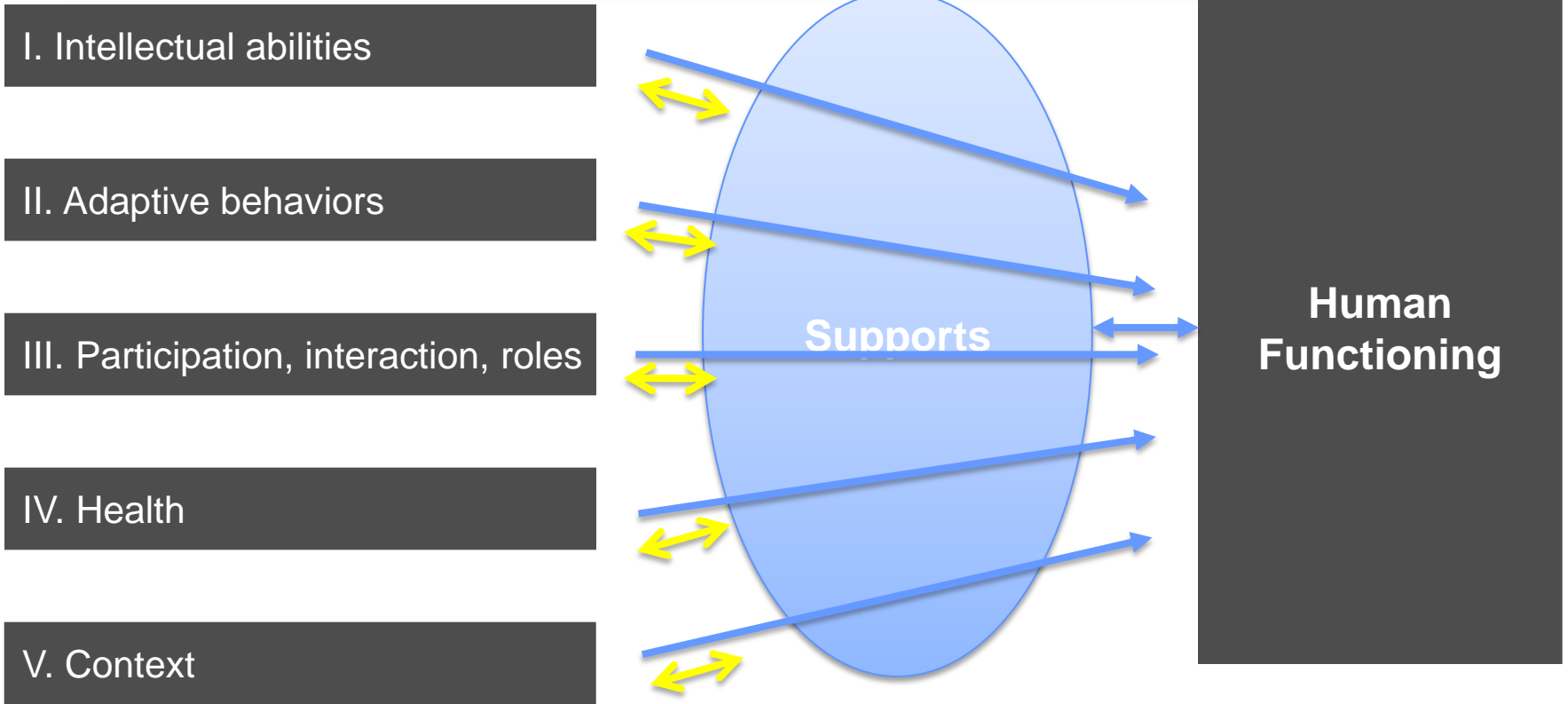
- Self-Determination Support Technologies facilitate learning, independence, mobility, communication, control and exercise of choice (Parette & Wojcik, 2004)
- Technological support have a positive impact on self-determination, quality of life and brings a high level of satisfaction to the user (Davies, Stock, & Wehmeyer, 2002a, 2002b, 2003; Lancioni et al., 2001; Lancioni, O'Reilly, Seedhouse, Furniss, & Cunha, 2000; Wehmeyer et al., 2006)

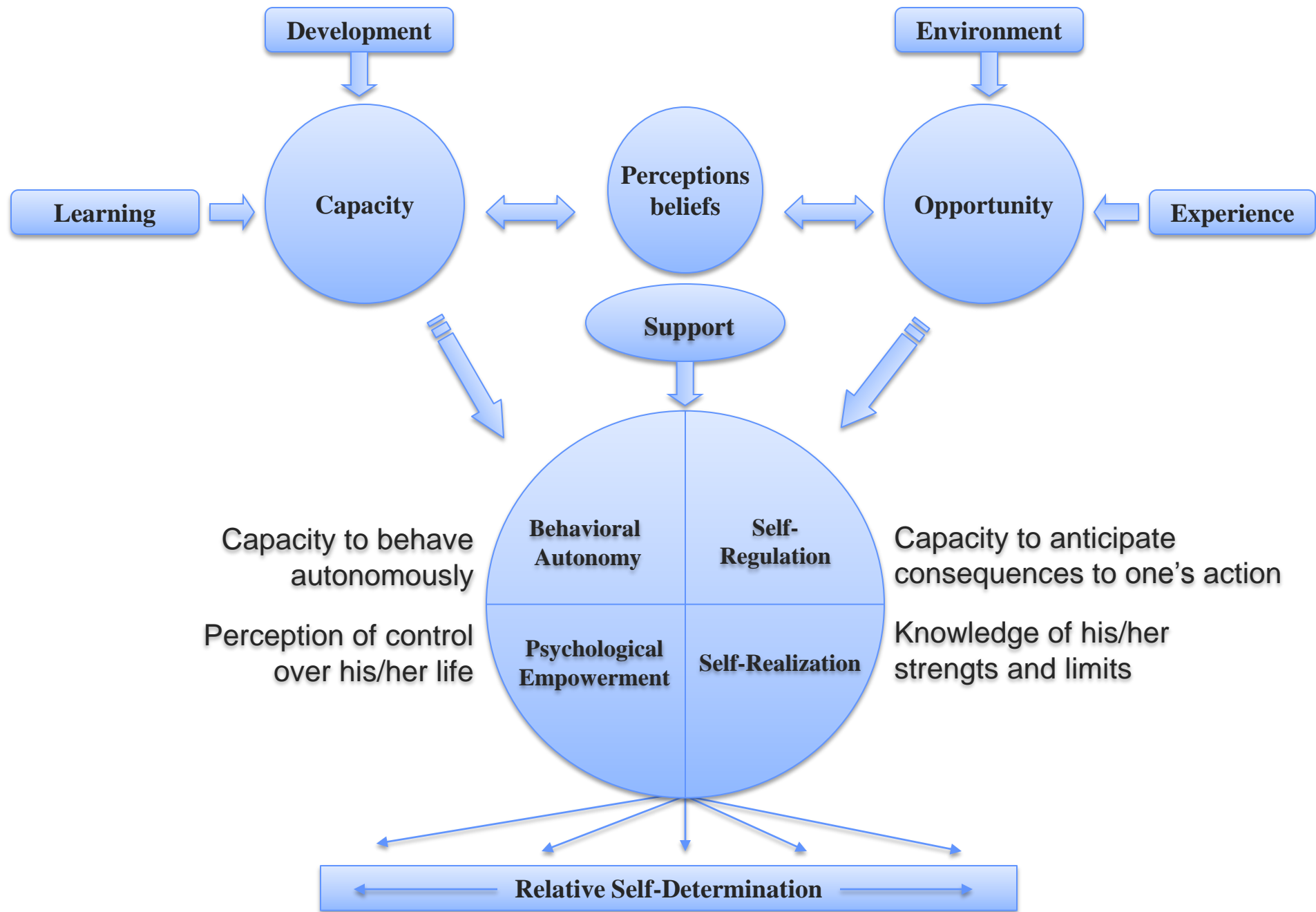
## Foreword

- Technology is a tool that reduces the gap between the person and the environment (mutual adjustment)
- Technology paradox (Davies, 2010)
  - “...the same technology that simplifies life by providing more functionality ... also complicates life by making it hard to learn. This paradox of technology is often used by people as an excuse for poor design...” Donald A. Norman - *The Design of Everyday Things*, 1988 (pp. 30-31) in Davies 2010



# Conceptual framework of human functioning (AAIDD, 2010)





*Self-Determination can be observe  
through behaviors such as  
(Lachapelle et Wehmeyer, 2003)*

- Choice-making
- Decision-making
- Problem-solving
- Goal setting and attainment
- Self-advocacy
- Self-observation, evaluation and reinforcement
- Internal locus of control
- Positive attributions of efficacy and outcome expectancy
- Self-awareness
- Self-knowledge

# Technological solutions & resources

*Some items belong to more than one category*

- COMMUNICATION
  - Donner la Parole
  - Free Natural Reader
- LEARNING
  - G Compris
- SURFING ON THE WEB & SOCIAL PARTICIPATION
  - ZAC Browser
  - Q Wiki
  - JD Voice Mail
  - Eye Jot and Tok Box
- DAILY LIFE & AUTONOMY
  - Tasks
- RESOURCES
  - Pictograms
  - Audio books

**Les solutions et ressources technologiques  
(majoritairement libres ou gratuites) de support à  
l'autodétermination pour les personnes présentant une  
déficience intellectuelle ou un trouble envahissant du  
centre de santé et de services sociaux<sup>1</sup>**

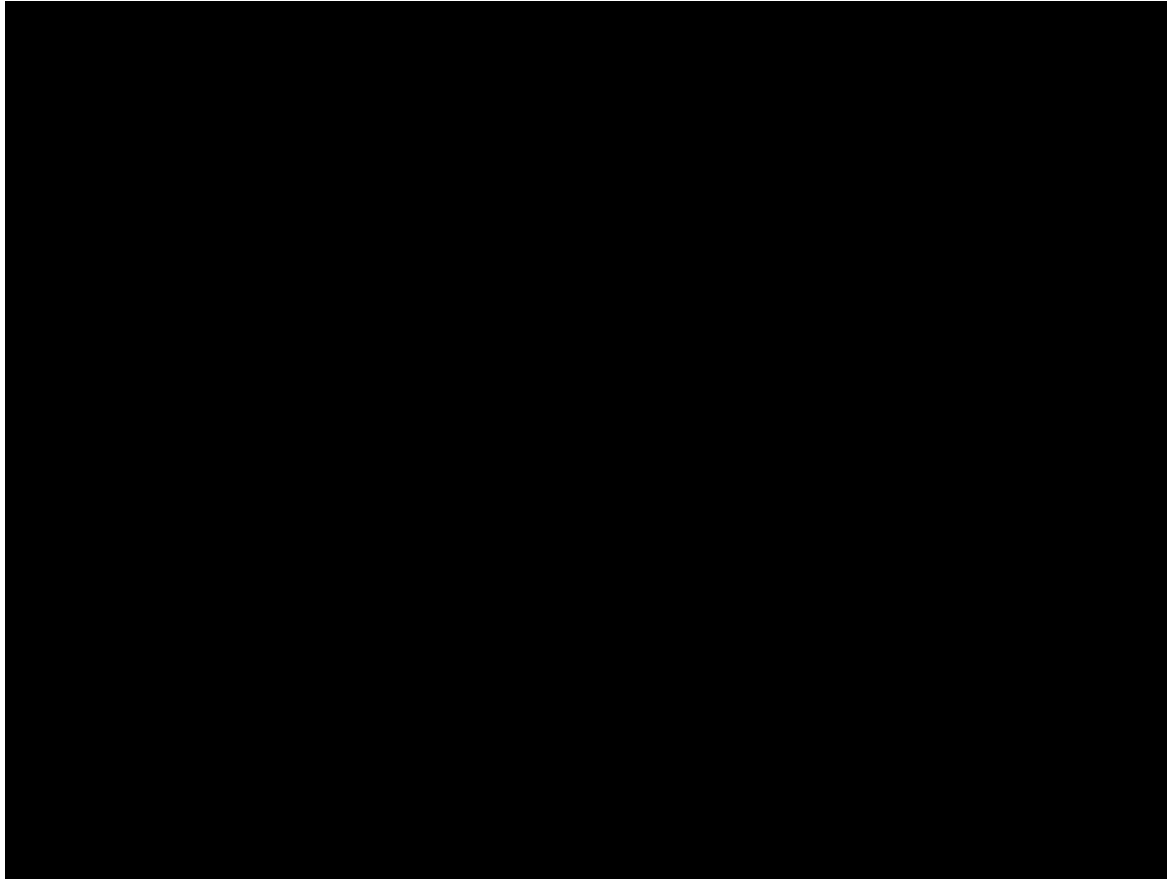
Martin Thérien-Bélec  
Candidat à la maîtrise en psychoéducation  
[martintherienbelec@gmail.com](mailto:martintherienbelec@gmail.com)  
<http://martintherienbelec.wordpress.com>

.....  
Ce projet s'intéresse à l'élaboration d'un répertoire des différentes solutions et ressources technologiques qui peuvent soutenir les personnes et favoriser l'émergence de leur autodétermination.  
.....  
« Rien n'a plus de force qu'une idée dont l'heure est venue »  
Victor Hugo

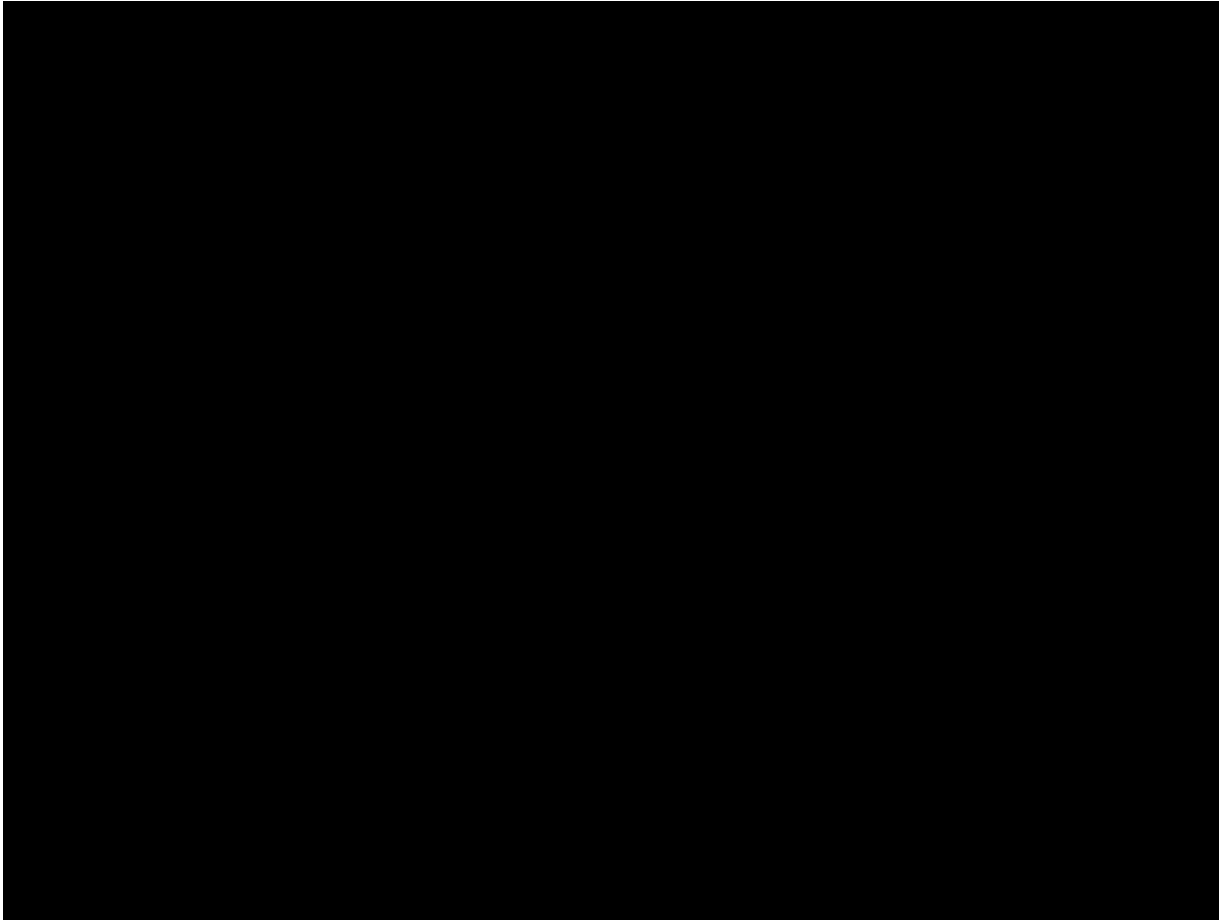


<sup>1</sup> Une formation existe sur les diverses solutions et ressources technologiques. Cette présentation a pour but d'exposer les différentes solutions technologiques qui s'offrent à l'intervention. Plus précisément, les logiciels favorisant l'autodétermination et l'autonomie des personnes présentant une déficience intellectuelle, un trouble envahissant du développement ou des difficultés semblables. De plus, la majeure partie de la présentation s'intéresse aux logiciels libres ou gratuits et du cadre dans lequel on peut les utiliser. Pour plus d'information, contactez-moi!

*Donner la parole*  
<http://donnerlaparole.sourceforge.net>



*Free Natural Reader*  
<http://www.naturalreaders.com>



# G Compris – 100

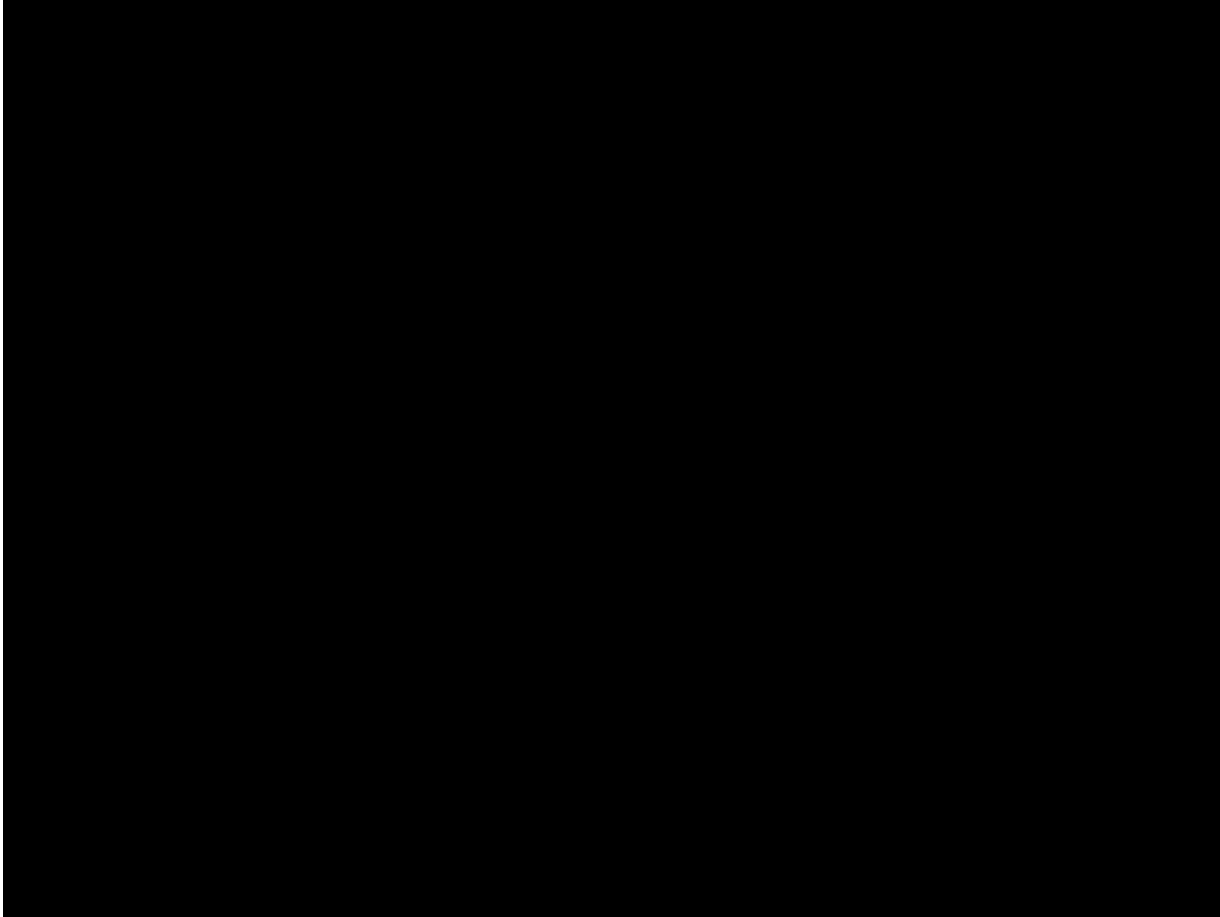
<http://gcompris.net>



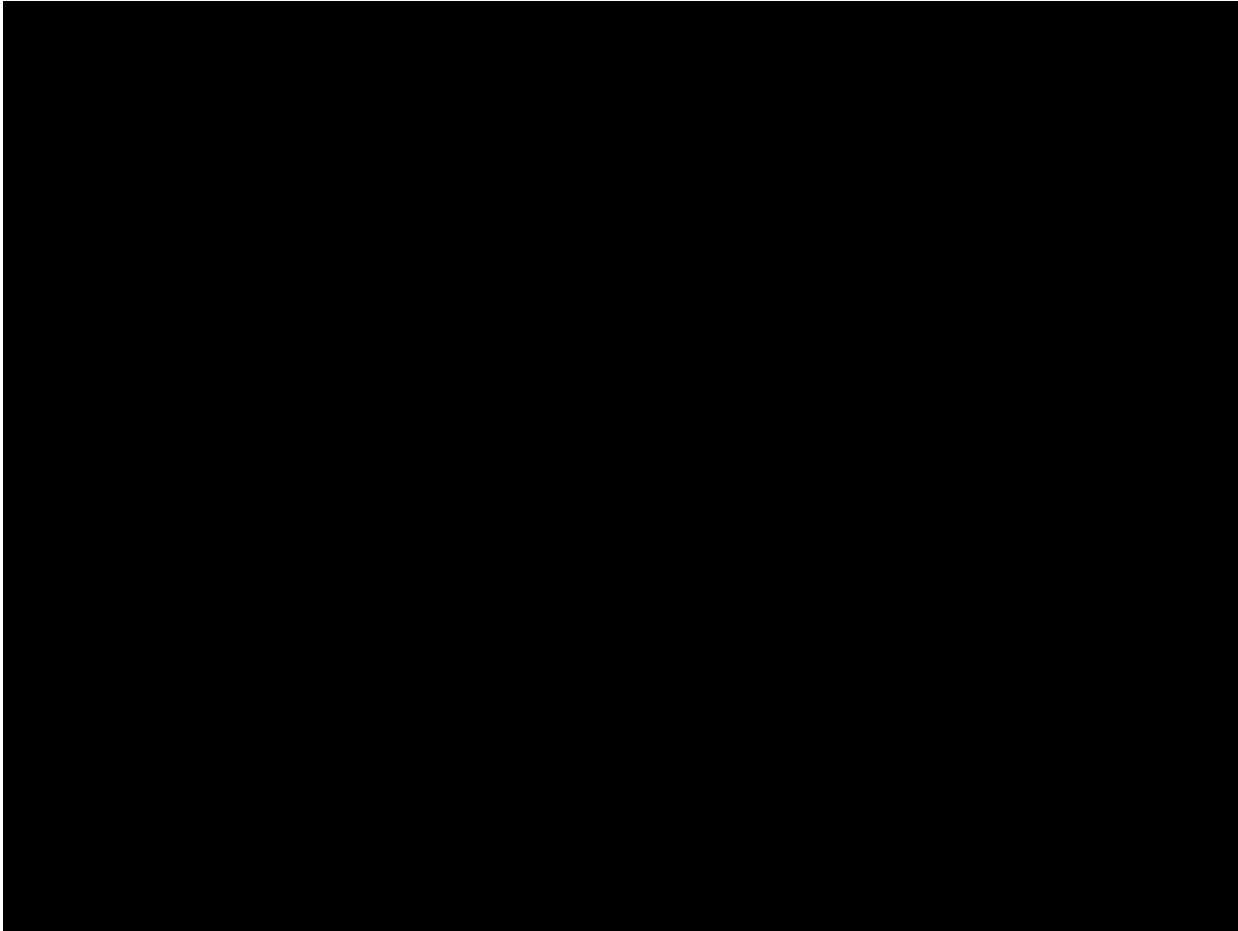
# ZAC Browser

<http://www.zacbrower.com>

<http://www.kidzcd.com>

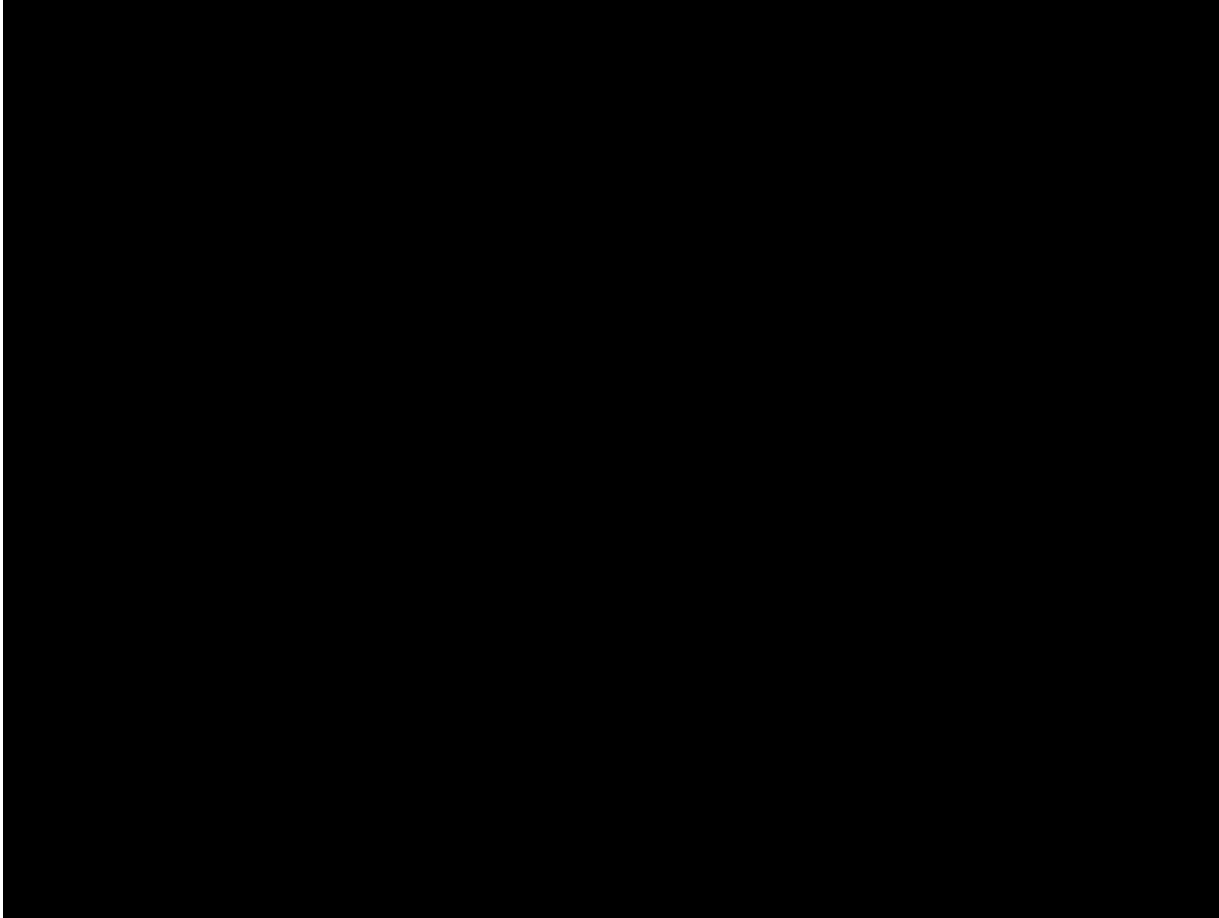


*Q Wiki*  
*<http://www.qwiki.com>*



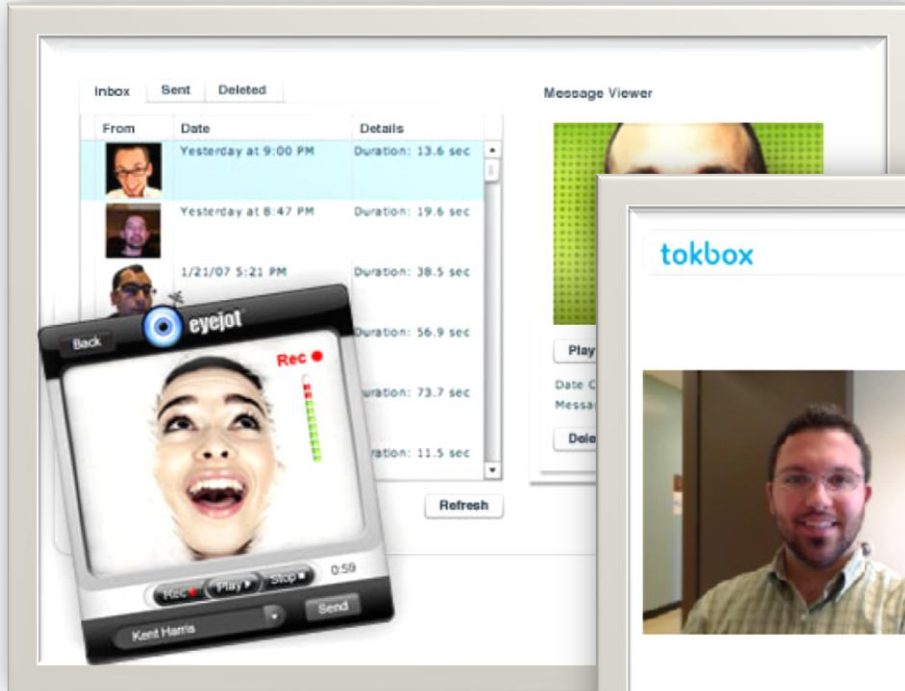
# *JD Voice Mail*

<http://jdvoicemail.telecharger360.com/telecharger>

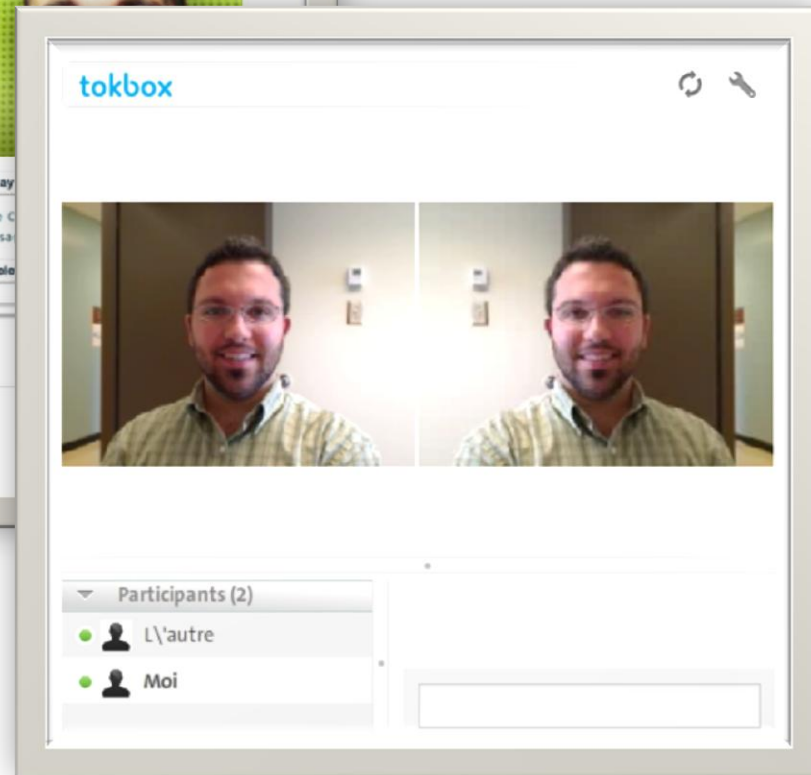


# Eye Jot and Tok Box

<http://www.eyejot.com> and <http://www.tokbox.com>



## VIDEO MAIL



## VIDEO CHAT

# Tasks

<http://office.microsoft.com/fr-ca>

<http://fr.openoffice.org>

## Archambault



## Steps

audio & visual

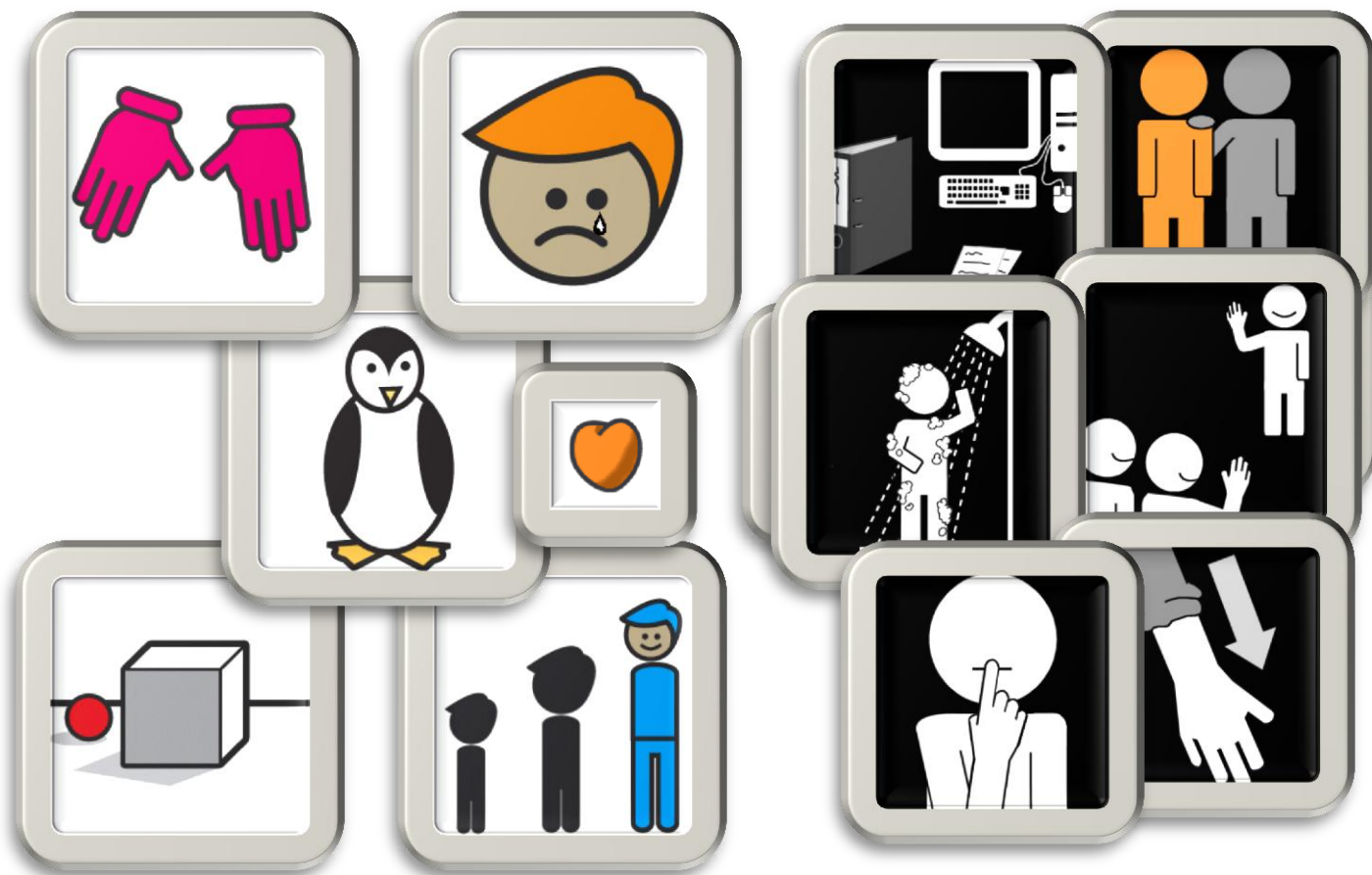
- ✓ Travel
- ✓ Task (ex.: home, work)
- ✓ List (ex.: grocery)
- ✓ Routine (ex.: leaving)
- ✓ Cognitive Process (ex.: decision)
- ✓ Accompaniment (ex.: exercise)
- ✓ ETC.

# Pictograms – 2000 / 5000

<http://aides.electroniques.proteor.fr/rubrique,30-telechargements.php>

<http://www.sclera.be>

<http://www.axelia.com>



# LibriVox

<http://librivox.org>

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# OTHERS

## Peripherals

# ExoPC

<http://www.exopc.com>



# Wii

<http://fr.wii.com>

- Mouse (with or without SensorBar)
- SmartBoard (1 or 2 pens)
- ETC

