



# Motor Skill Learning and Interdisciplinary Working

[The body is] a marvelous machine...a chemical laboratory, a power-house. Every movement, voluntary or involuntary, full of secrets and marvels!

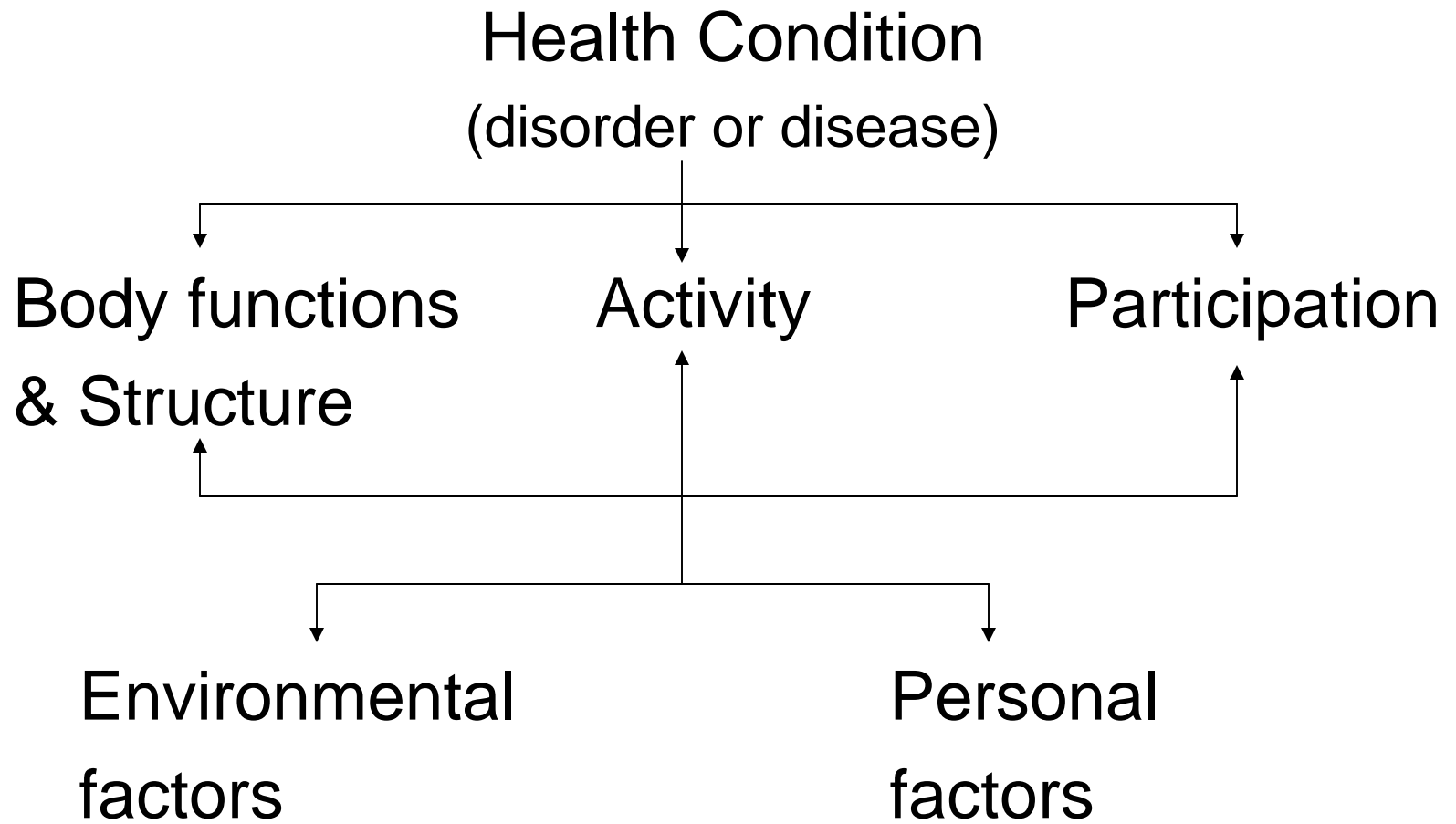
**Theodor Herzl (1860 - 1904)**

The task of the educator lies in seeing that the child does not confound good with immobility and evil with activity.

**Maria Montessori (1870 - 1952)**

*Amanda Connell, University of Limerick*

*HemiHelp Conference, Dublin, 25<sup>th</sup> Oct. '07*



*Ref.:(ICF model, WHO 2002)*

# Health professionals and the ICF

- Specialist knowledge in specific area
- Communication
- Prioritising
- Goal setting
- Goal attaining
- Reality

*(Palisano 2006, Mu & Royeen 2004, Horn 1997, Law et al 2004, Sanger et al 2006)*



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JIM BERGMAN "LIVING WITH LOSS - ANOTHER"



I'M A 9/11 BABY.  
HERE'S WHAT I'VE  
LEARNED.



FOR A LONG  
TIME, ALL YOU  
CAN DO IS  
WATCH.



YOU THINK  
YOU MAY NEVER  
UNDERSTAND.



CRYING  
HELPS.



ONE DAY  
YOU FIND YOU  
CAN SIT UP.



EACH NEW  
THING IS  
HARD.



SOMETIMES  
YOU HAVE  
TO HIDE.



IT ALL TAKES  
LONGER THAN  
YOU THINK IT WILL.



BUT EVENTUALLY  
YOU DO  
MOVE ON.



ONE STEP  
AT A TIME.

# *For a long time all you can do is watch.....*

- Fetal movement patterns
- Neonate and infant positioning
- Milestones and variability
- Qualitative aspects of movement

*(Stanojevic et al 2004, Yigiter & Kavak 2006, Hutchinson et al 2006, Angulo-Knzler et al 2002)*



# *You think you may never understand.....*

- “Getting the idea” of a movement
  - Gentile (2000)
- Dynamical systems  
or
- Motor programming?

*Refs: Magill (text book)*

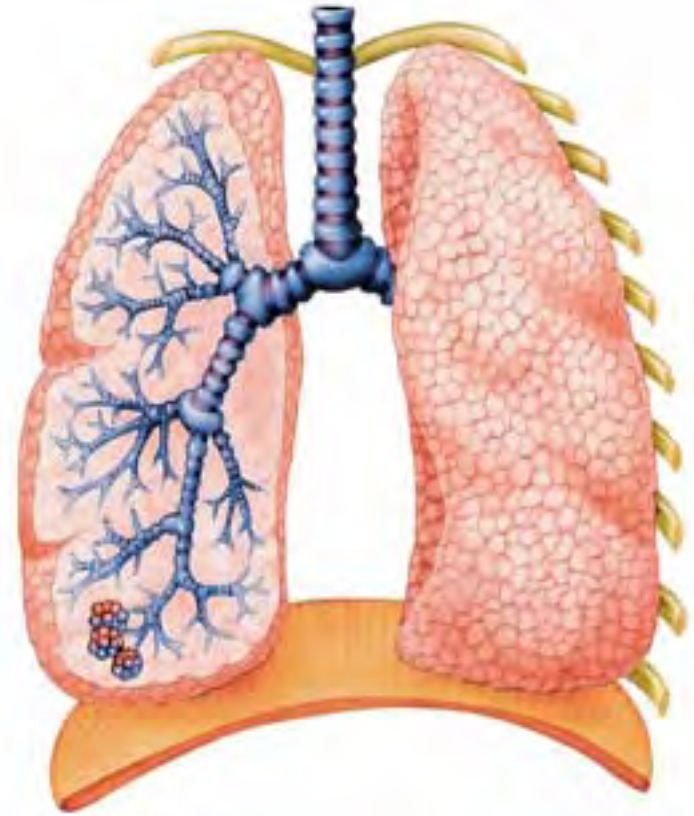
*Thelen and collaborators*



# *Crying helps.....*

- Respiratory function
  - Muscles especially diaphragm
  - Lungs
- Breathing control / Voice
- Fitness / Aerobic capacity

*Goldfield et al 1999*



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# *One day you find you can sit up....*

- Non-linear progression
- Co-ordination

*Hirshfeld 2007, Utley & Steenbergen  
2006*



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# Each new thing is hard....

- Task analysis
- Specificity
- Practice
- Adjuncts

*Bryanton et al 2006, Morton et al 2005, Odman & Oberg 2005, Ricken et al 2007, van Dijk et al 2005, De Luca et al 2006*

*Savage Chickens*

by Doug Savage

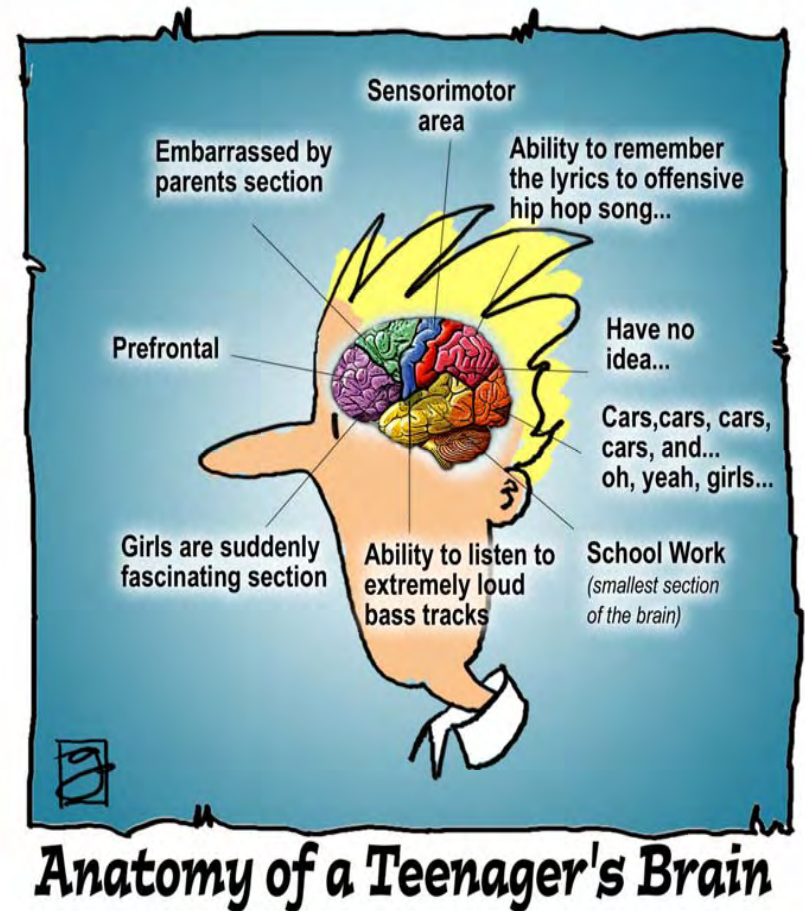


[www.savagetchickens.com](http://www.savagetchickens.com)

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# *Sometimes you have to hide....*

- Lifespan development – ages and stages
- Rest



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# *It all takes longer than you think...*

- Key milestones
- Complexity and interactions
- Predictors

*Fily et al 2003, Bucher et al 2002,*



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# *But eventually you do move on...*

- Goal setting
- Evaluation / measurement
- Continuum

*Hammal et al 2004, Tieman et al 2004,  
Morris et al 2005, Dunn et al 2007*

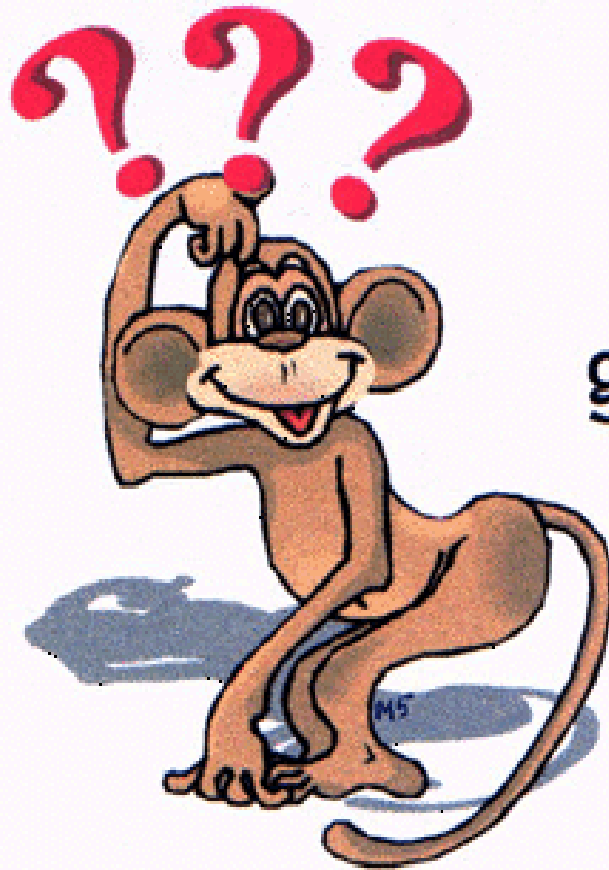


*One step at a time....*



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HemiHelp Conference, Dublin, 25<sup>th</sup> Oct. '07*

Thank you for your attention



Questions  
are  
guaranteed in  
life;  
Answers  
aren't.