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THE ONLY SAFE DRIVER IS A LEARNING DRIVER (WJ7 269 hand out)

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Hand out (more information: see www.laukwoltring.nl a bilingual site)

- Young men peak in almost every unsafety graph in traffic (and elsewhere...): just description of facts or a more developmental look?
- Some fundamental concepts about:
 - Motives, self-concept, self awareness and Learning behaviour of young males in traffic
 - Gender sensitivity in driver education
 - Learning to obey or learning to learn...? (after all driver education is just a first step in a driving career.....)

Rule nr. 1: One cannot 'not-learn'

- Why are we here?
- We are here to learn and get to know ourselves.
- To process stimuli
- from within and from outside
- in order to survive, to develop, to enjoy and to find some meaning
(Spinoza & Damasio adapted)

We are 'stimuli processing beings'

- Seeking sensations (sense and make sense) and taking risks is natural learning behavior but may get dangerous and even perverse...
- The 'body-brain' matures and looks for challenges & tests to make connections (*Use it or loose it-principle*)
- Interference with:
 - Prolonged adolescence (lack of responsibilities & meaning)
 - Social images of manliness (regressive, tribal or defensive)
 - Poor role-identification (absence of fathers & men in education)
- Need for safe experimentation; meaningful feedback & education; physical activities, work and just enough developing space with feedback & changing boundaries

Young men in traffic (try to imagine yourself as an 16 or 18 year old boy, do you remember?)

Key questions are:

- *Why do we take risks again and again?*
- *What do we see and what do we learn?*
- *From (near-) accidents, from tickets/police-contacts?*
- *From parents? From each other?*
- *In the media, advertisements, virtual world?*
- *What do we need?*

- *What can adults offer us? (We look at them!)*

Importance of teacher, trainer, coach

- McKinsey Worldwide Education Report (sept. 2007) emphasizes the importance of the personal quality of teachers above systems...
- Research should be done on style, culture and didactics of driver educators and examiners
- **Hermes project High Impact approach for Enhancing Road safety through More Effective communication Skills for driving instructors** :From instruction -> coaching (*State of the art on coaching*: see www.gutefahrt.at/hermes)

Great chances in driver education!

Traffic education is an educational *chance* instead of a *problem*: where else can we find those great possibilities to have that relation with young men?

- The Netherlands: 30-50 hours 1:1 life contact
- Individual feedback *in reality* (no classroom or media with transfer-problems to everyday life)
- Something to offer that boys want (mobility! skills!)
- Tailormade learning experiences
- Alternately action and speech, quiet and high pressure situations. Opportunities for direct action, reflection, access to emotions, affect

Vygotsky's Zone of proximal development (see: <http://www.laukwoltring.nl/backgrounds.htm>)

Distinguish already mastered skills, yet to be mastered and beyond present capacity. The importance of not humiliating neither overestimating and the results from addressing the zone of proximal development. See for more explication and backgrounds the link above.

Risktaking: not poor decision making but sensation seeking

- Taking some risks is normal and functional.. (trial and error, make new connections, *use it or loose it*) but it can get other functions (silencing reflection....)
- Romer & Duckworth (2007): the faster developing GO-system (*dopamine rewards sensations from novel situations*) may overrule the slower maturing control centers in PFC (anticipation, reflection, inhibition)
- Key question here: >How to develop/accelerate the STOP-system? (Romer development of the PFC, or: development of better decision making, seeking help (see Romer) or Woltring: grounding, breath, relaxation, opening the cortex (for a good example, see: Freerk Ykema the Rock and Water Program (Netherlands, Australia):
<http://rotsenwater.nl/site/www/index.cfm?fuseaction=default&CFID=3090404&CFTOKEN=44614627>
- Not easy. Education, give them novel situations but less dangerous activities, good education, examples, respectful and demanding school settings

Learning from experience

- What are their goals? Which experiences are open to them? How do they process them?

- When? In which phase of their development?
- Can they change? Of course, one does change. Our role?

For example: Depth interviews with young speeding drivers (Falk):

- Make contact, *personalize* and concretize.
- Anticipated regrets: how would you cope if you get hurt, if you kill someone else, if your girlfriend dies in *your* crash?

Brigitta Falk & Henry Montgomery: Developing traffic safety interventions from conceptions of risks and accidents . Transportation Resesearch Part F 10 (2007) 414-427

License and test are just a start...

- It takes *at least* 3 years or 50.000 kms to automatize normal driving skills enough to have mental space for difficult situations
- So use traffic education to prepare them for the learning in their traffic career ahead

Training and examination: 'Learning or Obeying?'

- *Learning is based on internalising **and** reflection, the last one basically a function of the frontal lobes and language centres in the brain. In boys these parts of the brain tend to 'switch off' (disconnect from deeper functions) under stress or when these functions are overruled by more basic functions (coping, Fight-Flight-Fright, or strong rewards from novel and exciting situations: if not learned how to deal with them: dopamine projection 'gone wild')*
- *Obeying is basically a function of the Fight-Flight-Fright system (coping with stress, 'survival') located in lower and inner brain parts (different from only deliberate and tactical obeying: then they learn how to do as if, a specific kind of learning)*

A Coaching Perspective: the HERMES-project

- Another approach
- Focus on GOALS instead of warning for DANGERS
- Sensation: Go-stop-systems or make sense...
- Feel your senses... **Awareness** is followed by responsibility
- Instead of focusing on preventing mistakes, they may experience safe, clean, smooth, social and enjoyable driving
- Focus on goal setting, development of 'inner compass' , self-acceptation, real self-esteem, responsibilities, self control, making life worthwhile and not put at risk.
- Not easy, start early: do not separate car driving from earlier stages (first steps, tricycle, bicycle, moped) and other domains (going out, consumption, drinking, sport, sex, leisure, work, etc.)

It is basically the same: getting to know how to move, react and behave in a steadily bigger, more complex and demanding environment.

A plea for Gender sensitivity. No Reduction to sex or gender.

- There are many overlaps, but we see important sex and gender differences in:
- maturation of the 'body-brain' (slower),

- influence of environment (ambivalent)
- development of evaluation, anticipation, empathy, and introspection (slower, sometimes blocked)
- Boys: Ambivalent socialization, coping behaviour with paradoxical demands
- -> *Not feeling* -> Sensation seeking and risk taking behaviour

Boys: nature/maturation

- The male 'body-brain' matures later, irregular growth
- Drive, movement and vision develop *fast*
- Language (= a.o. reflection) develops *later*
- Boys tend more to learn by trial and error (Girls more inclined to listen, imitate and follow examples. They may seem more obedient (and they are sometimes) but they do give their own interpretation.
- Boys: Testosterone: sharp rise from 11/13
- Boys: Dopamine (sensation rewards) peak higher & later (levels may stay higher)
- Equilibration of system lasts till 24/25 (girls: 22-23)
- Under stress: fight-flight-fright: the PFLC 'switches off', accent on action
- Drives and correlating affect develop *faster* than the ability/capacity to control them (PFC)

Boys in traffic

- Underestimation of task demands & overestimation of skills (Fuller) -> low safety margins. Why? Just biology or also result of their (under-)developed coping styles?
- Sensation seeking (normal <-> dopamine addicts)
- Risk taking as a challenge or as an anesthetic?
- Some high riskgroups (high on sensation seeking) : Low reflection on consequences (Falk)
- Amplifiers of reward systems :
- Drugs & Peergroup effects (Romer 2007)
- Advertisements
- Virtual reality
- Extra need for rewards when they lack success and meaning (or can't get to it..)

Reactions from environment

- Double messages and double binds: Boys are seen either as a nuisance and source of dangers either as underperforming or sissies
- Much negative feedback; ("*What are you doing there..?*")
- Much verbal feedback, asked to account for...
- So: speaking is giving away control... '*Everything you say can be used against you*' -> (this may block their essential development of speech and language)
- Environment is often 'unsafe' leading to predominance of Fight-Flight-Fright reactions

Developmental tasks for boys

- 'Learning to ride their own horse': directing their own energy; learning about themselves

- Self-awareness / Self Acceptance /Inner compass: getting to know and appreciate their body and their emotions: Learning to control their emotions
- From there: development of competences
- Real self esteem or acted-as-if... in what aspect? -> Choices **Again:**
- **Obedience** (stress-reduction, basically: survival) or:
- **Learning** (self assessment, finding direction)

How do boys Learn? Boys need:

- Appreciation, respect
- Examples (**in contact**, not only just on the screen...)
- Challenges (short term and *gradually* longer term)
- Action alternates with speech
- Guidance (not too little, not too much)
- Boundaries (short, clear, no long explanations)
- Feedback (if possible: positive, when really necessary: negative but mind safe conditions)
- 'Do's' give more information than 'don'ts'...
- Blocking energy -> stops but also *reaction/defence*
- Good guidance of energy -> satisfaction and confidence in mentor/teacher etc.

Boys: Environment

- What is their environment?
- Which tasks /challenges?
- Who sets which example? Gives what feedback?
- Family
- Kindergarten/School
- Street
- Media & Advertisements
- Virtual reality: the internet and games
- Eventually: driving instructor or coach...

What happened before the first driving lessons?

- Socialisation and education: few nearby male role-identification models in predominant female environment
- With female learning and feedback: lingual, emotional, mimics, examples, styles (boys forced into the more female formats that favors girls)
- Boys get more attention, but get accustomed to negative feedback
- Boys try to cope with school (*'not a place for me'*) and may develop school-anger
- Averse attitude towards adults, learning, instruction (reduced to 'how to' instead of complete learning)

And then comes traffic...:

- Offering many challenges
- A 'male arena' (competition, technical, showing off, compensation)

- 'You are your own boss'
- Protected in a steel cage
- Here and now: no past, no future
- Many rewards: adrenaline, dopamine, forced 'self-esteem', peer group (also in the mind)
- Little communication, much expression

Discussion

- Driver education and testing can have contrary influences when they address the 'externally obeying function' (passing the test, basically the f-F-F-system)
- rather than those 'internal learning functions' that especially young males need for developing as safe drivers *after the test*.

Essential

- Addressing learners awareness of:
 - self
 - the car
 - the road and environment
 - **their own responsibility (concrete, personalized, within their capacities!)**
- Asks for
 - Not addressing the stress system but:
 - Safe environment and safe communication (trust)
 - Also: opening the higher brain functions (developing connections with PFLC: thinking!)
 - Very concrete and personalized reflection on consequences of behaviours

What to do?

A plea for more research on:

- Culture, style and didactics of driving educators & examiners
- Ways to accelerate the self-controlling abilities in the development of boys (not only in driving education, also in school, sport, self defense, etc.)
- Reflection, *self acceptance*, guided experimentation, development of responsibilities
- Effects of graduated licensing on self-awareness and self-control
- Compare all levels and items in GDE-matrix to phases of male development

Thank you for your attention

- More information: www.laukwoltring.nl (bi-lingual)
- **See also:**
- Brigitta Falk & Henry Montgomery: *Developing traffic safety interventions from conceptions of risks and accidents* . Transportation Research Part F 10 (2007) 414-427
- Daniel Romer & Michael Hennessy: *A biosocial-Affect model of Adolescent Sensation Seeking: the role of Affect Evaluation and Peer-Group Influence in Adolescent Drug Use....Prev.Sci* (2007) 8:89-101
- John Whitmore *Coaching for Performance* (2006)