2

The DADE program

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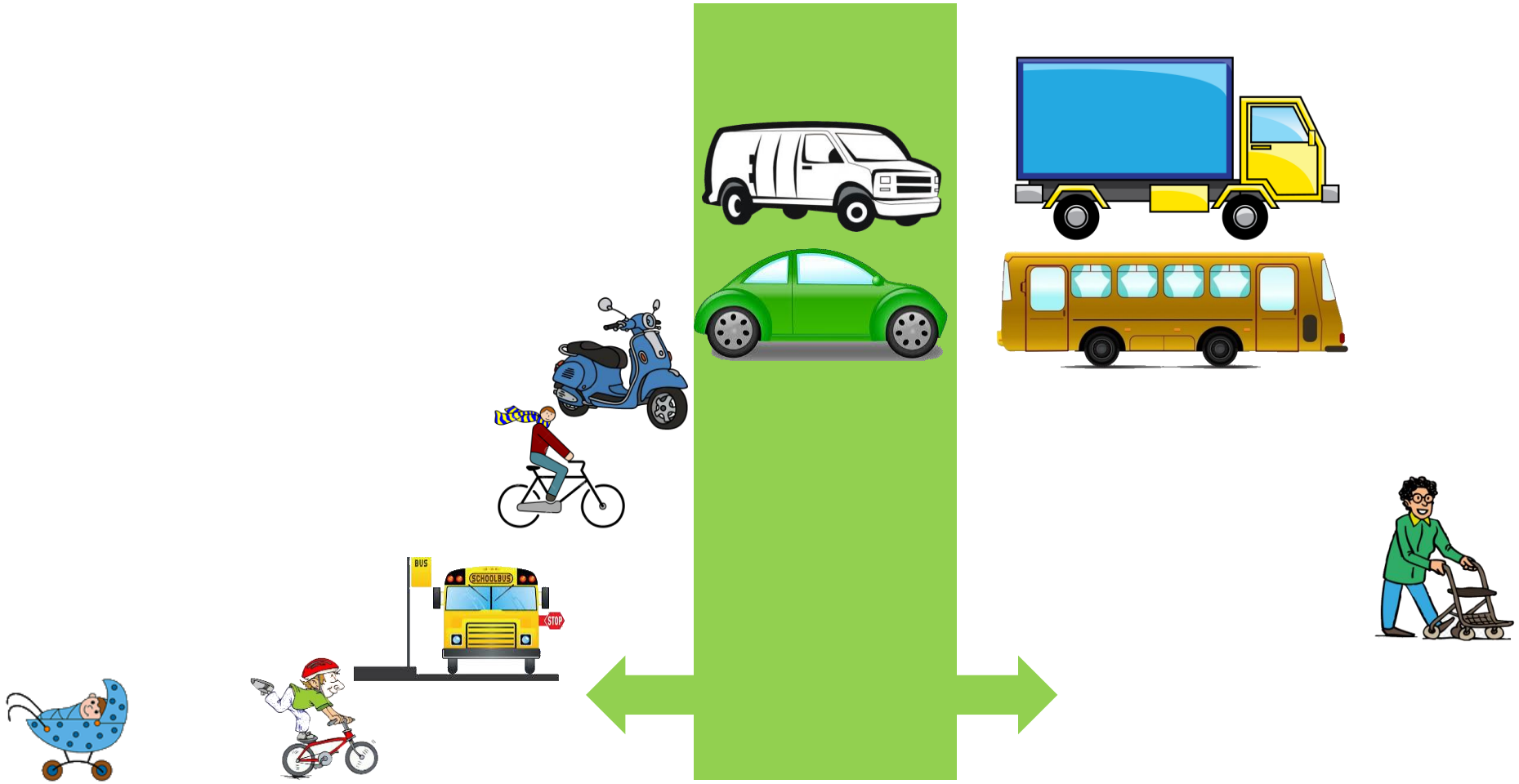
Connect to other traffic roles



0 4 12 17 80+

Age

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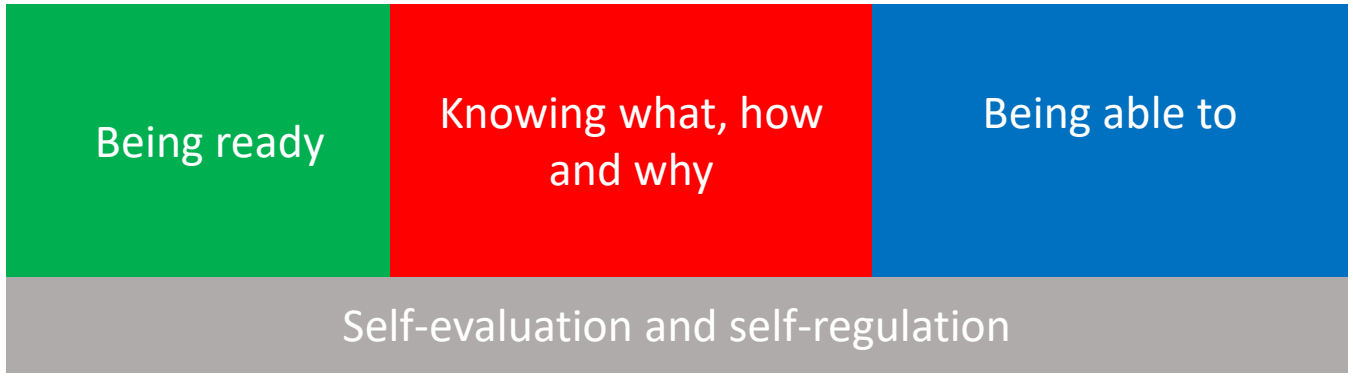
Combination of aspects of competence



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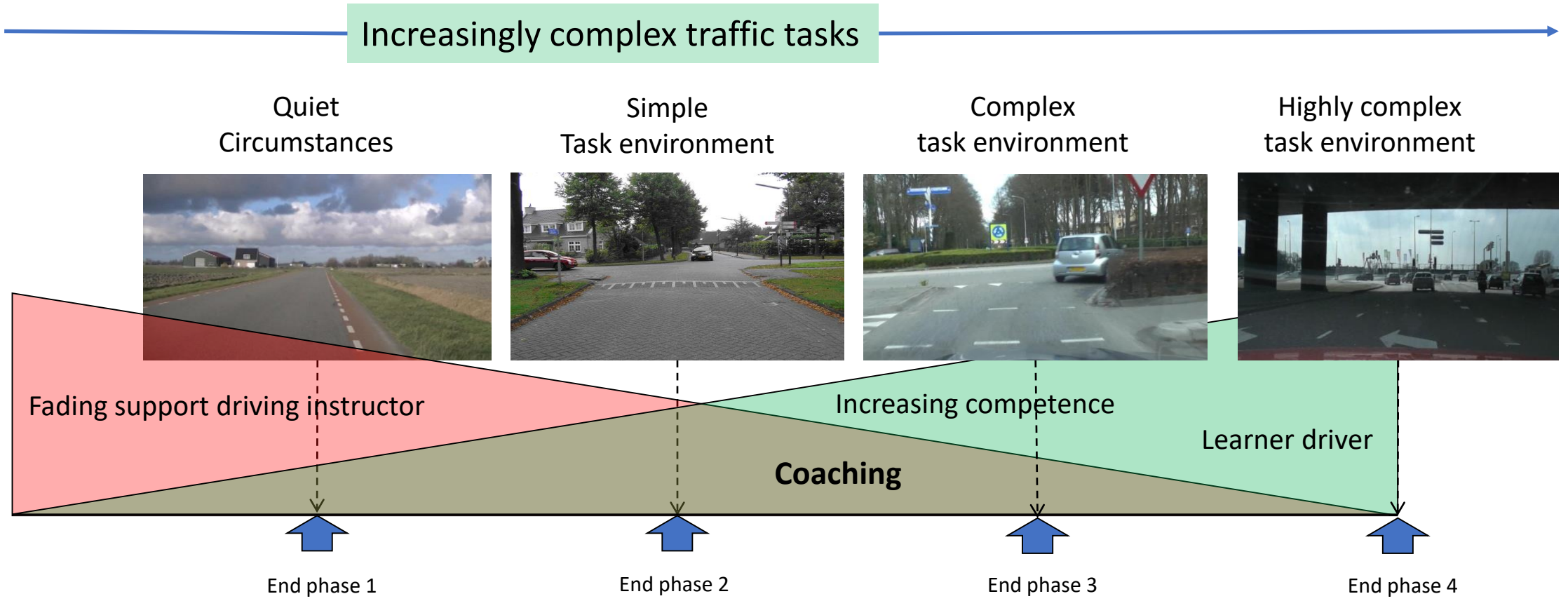
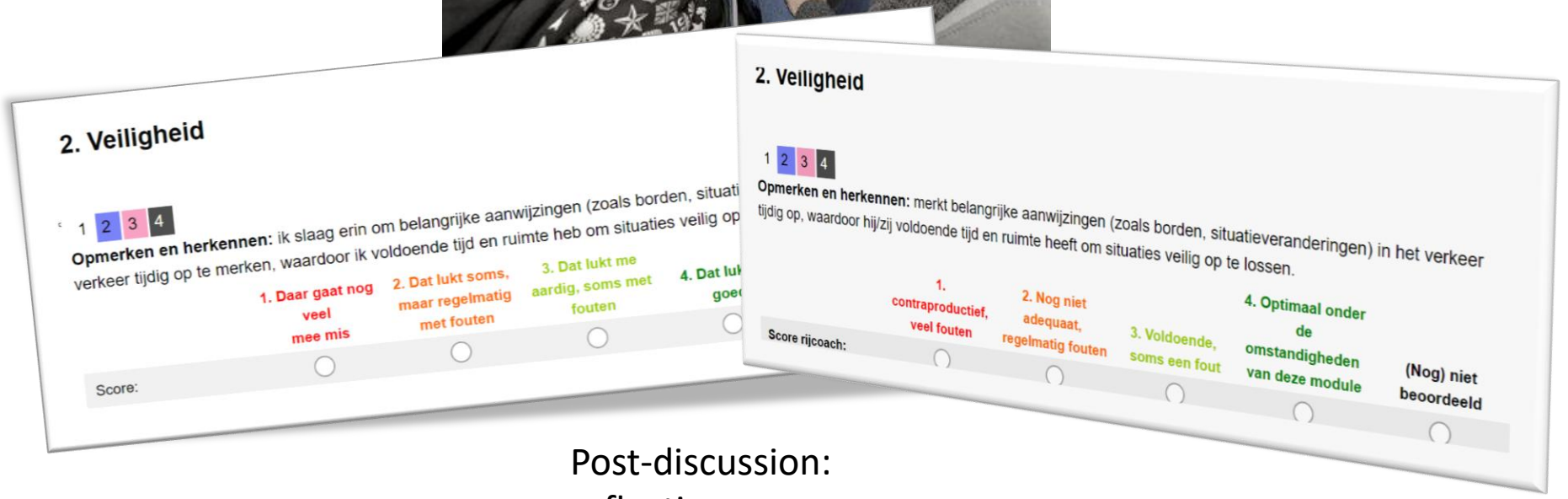
Design: developmental learning trajectory



End of phase: performance assessment

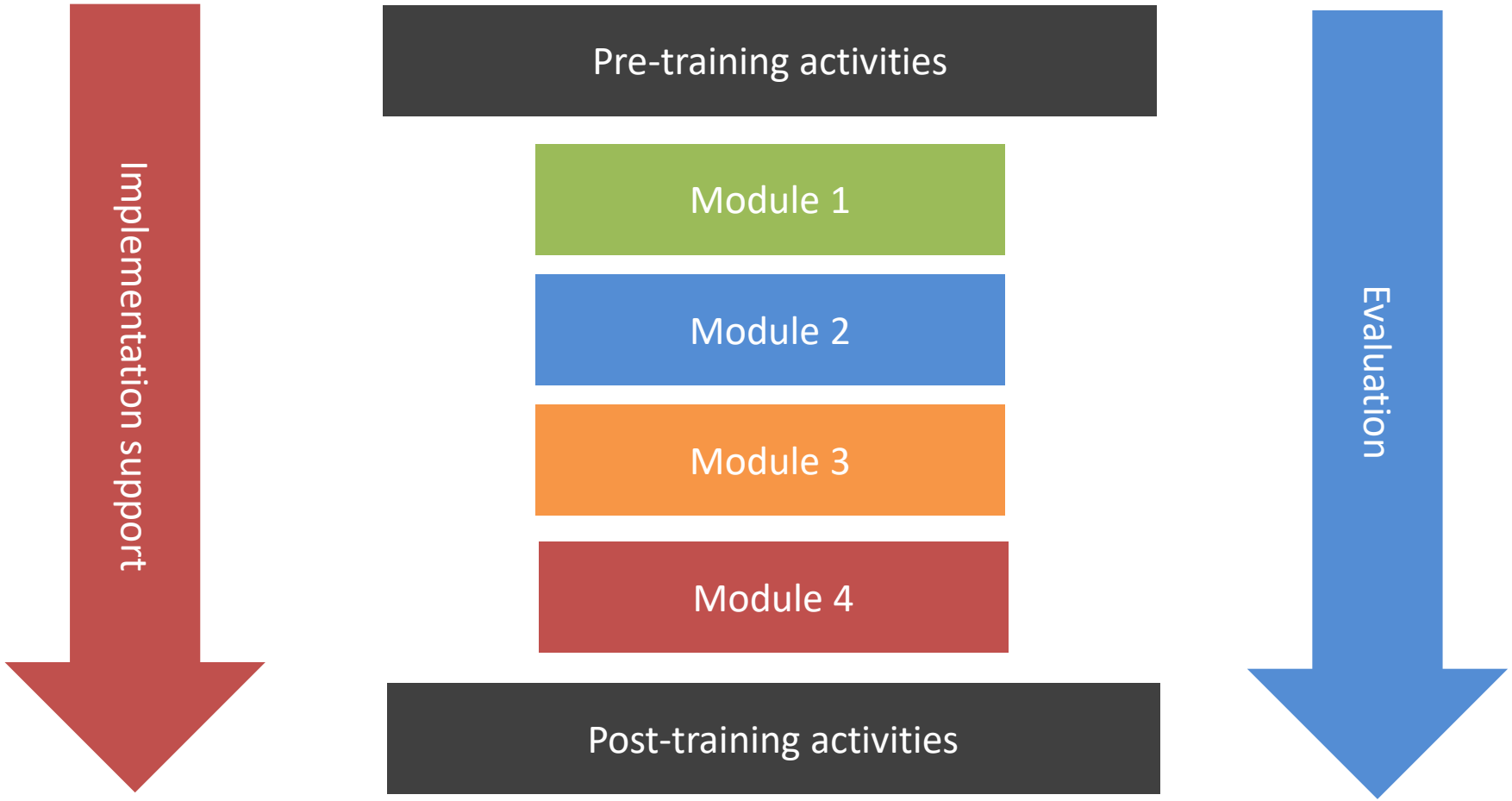
Self-evaluation

Coach evaluation



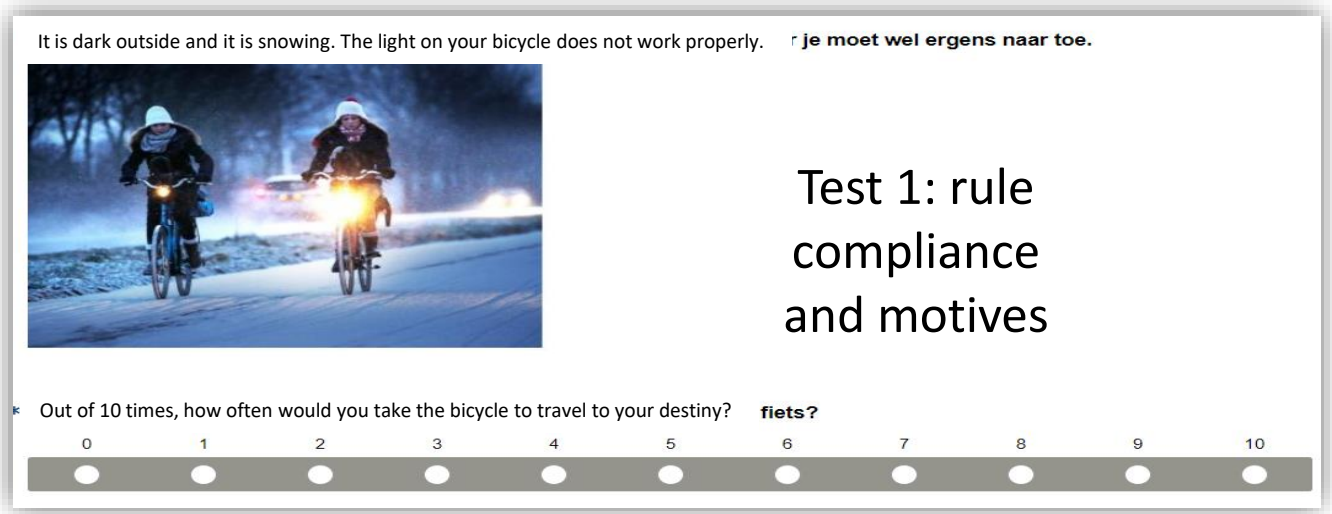
Post-discussion:
reflection

The DADE-program

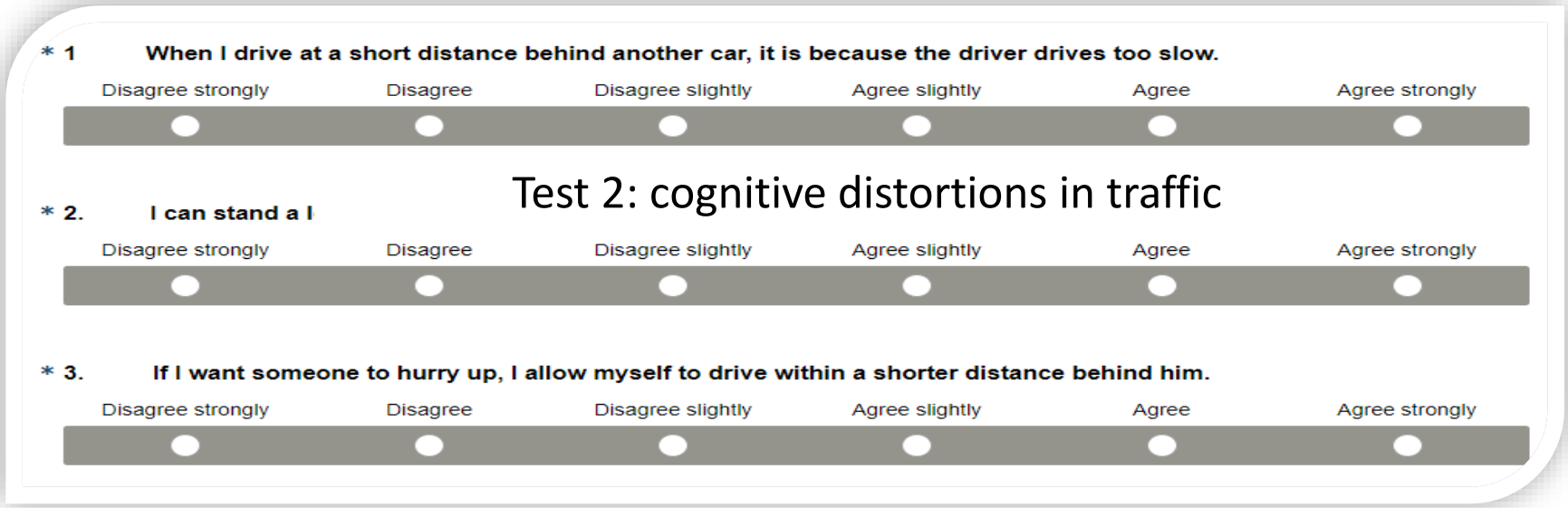


Pre-training: traffic participation style as a cyclist

Pre-training activities



Test 1: rule compliance and motives



Test 2: cognitive distortions in traffic

DADE-Module 1: Vehicle handling

Module 1

DADE-Module 2: driving in simple traffic situations

Module 2

DADE-Module 3: driving in complex traffic situations

Module 3

- DPA is combined with the official intermediate CBR Driving Test
- Theory-exam CBR

DADE-Module 4: Independent driving in highly complex traffic situations

Module 4

- City trip with 3 LDs and a coach
- Track experience: awareness of speed – breaking distance
- Practical Test + shadow assessment by coach and learner driver

6 months after licensure: post training activities

* 6 **Often other road users block my passage**

Disagree strongly | Disagree | Disagree slightly | Agree slightly | Agree | Agree strongly

Driving style test 1: Speeds, fines, cognitive distortions

* 7 **I can't help it if I loose my patience in traffic.**

Disagree strongly | Disagree | Disagree slightly | Agree slightly

Driving in a city where you have not been before during rush hour.

Driving style test 2: driving under various circumstances

How many times have you been in this traffic situation since you got your driving license?

Unitil now: never | Between 1 and 5 times | Between 6 and 10 times | Between 11 and 20 times | More than 20 times

Post-training activities

2. Safety Coached drive and DPA

* 1 2 3 4

Scanning: I succeed to notice important changes in the traffic situation (like road signs, road types), so me and others have enough time and space to carry out manoeuvers

	1. In this respect I still make a lot of errors	2. I sometimes succeed, with still with frequent errors	3. I succeed reasonably, sometimes an error	4. I succeed well	5. Not yet assessed
Score:	○	○	○	○	○

3 Evaluation study

Implementation support

- **Training driving coaches**
  - Backgrounds
  - Application of new program parts
  - Use of in-car progress assessments
  - Adapt coaching to developmental phase

- **Planning and monitoring**
  - Working group (realizing the program)
  - Stake holders group (support in the field)

Data collection pilot group (n=112)

- Riding style as a cyclist (attitude and violations)
- Progress Assessments (DPA)
- CBR (exam. institute): scores on intermediate test and final exam
- Questionnaire training quality:
  - Instruction and coaching
  - Opportunities to practice in traffic situations
- Two tests for driving Style

Data collection reference group

- Participants: 1000 clients of a Dutch publisher: those who bought educational materials
- Instruments:
  - All equal to the pilot group, except Cycling style tests and Driver Progress assessments
  - Abbreviated versions

4 Results

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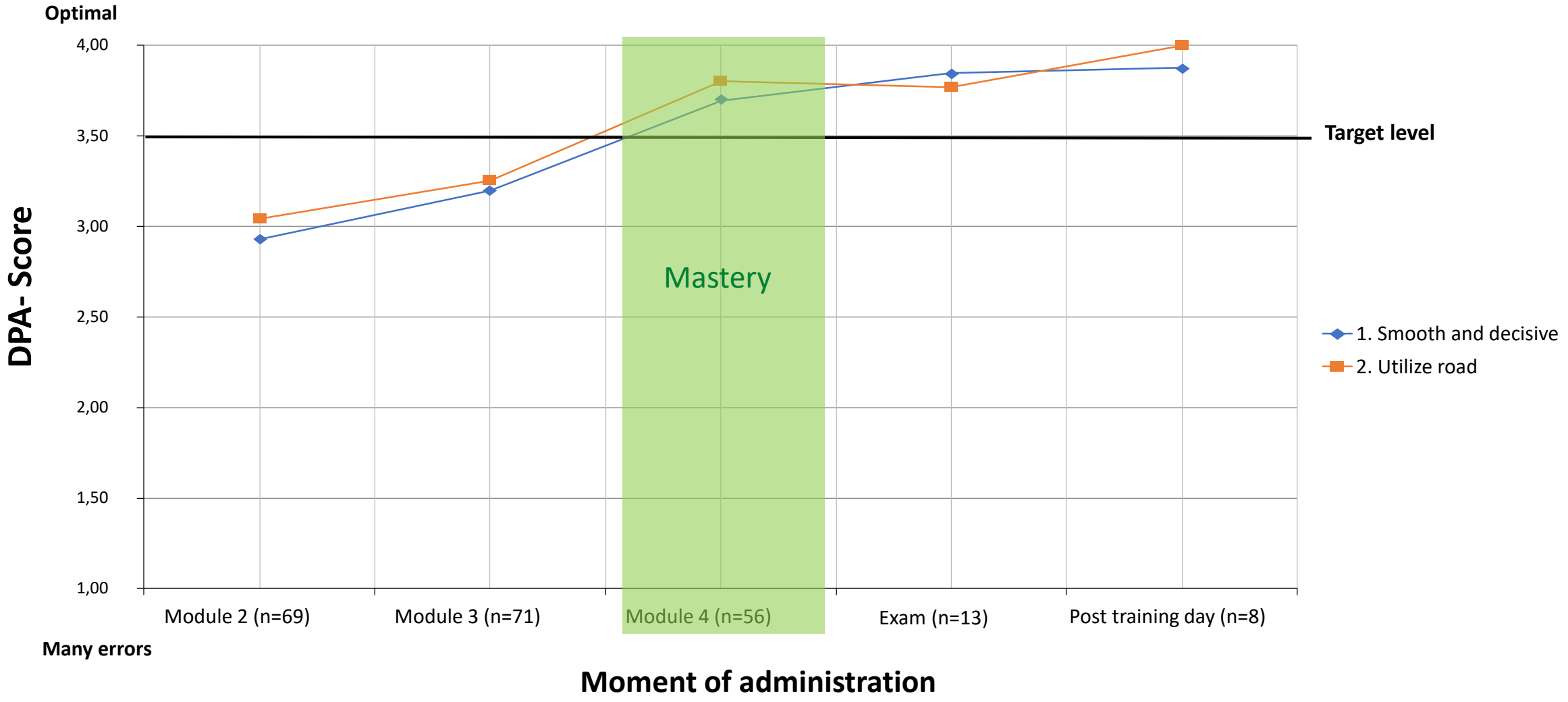
Some objective statistics

	Reference group (n=1000)		DADE group (n=60-112)		Effect
	Gem	SD	Gem	SD	D
Length of training in weeks	37	27	31	12	0.23
Number of lessons	39	16	40	15	-0.09
Total cost in euros	2.270	1039	2.523	576	-0.25
# of Needed attempts for license	1.69	1.10	1.23	0.50	0.46

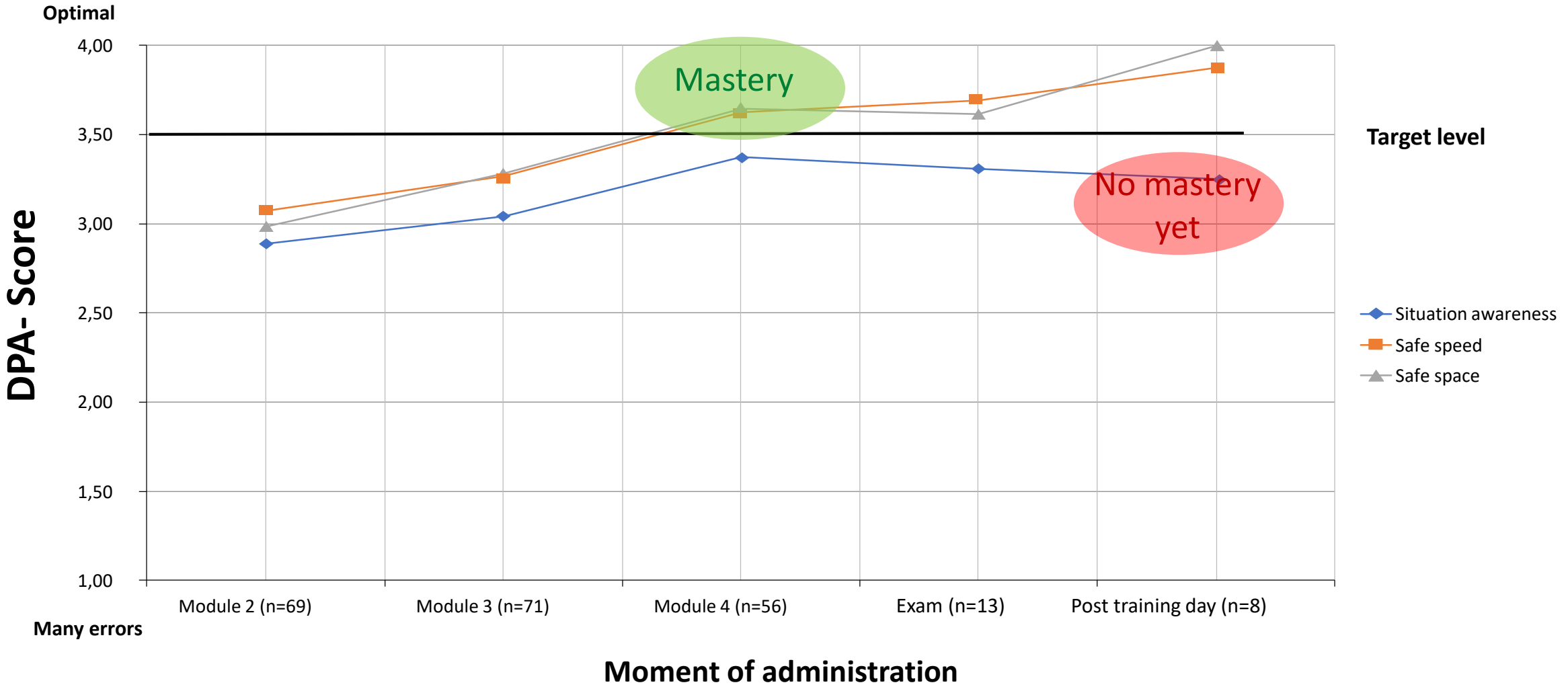
Driving style after 6 months of driving

	Ref-group (n=371)		DADE group (n=38)		Effect
	Gem	SD	Gem	SD	D
Kilometers driven (extrapolated to 1 year)	7260	24403	6236	18901	0.04
# Active collisions per million km	66	274	12	56	0.23
# Passive collisions per million km	5	67	9	54	-0.06
# fines # per million km	80	309	74	203	0.02
# Degree of exceedance of speed limits	0.08	0.10	0.07	0.05	0.19

Development driving performance: traffic flow

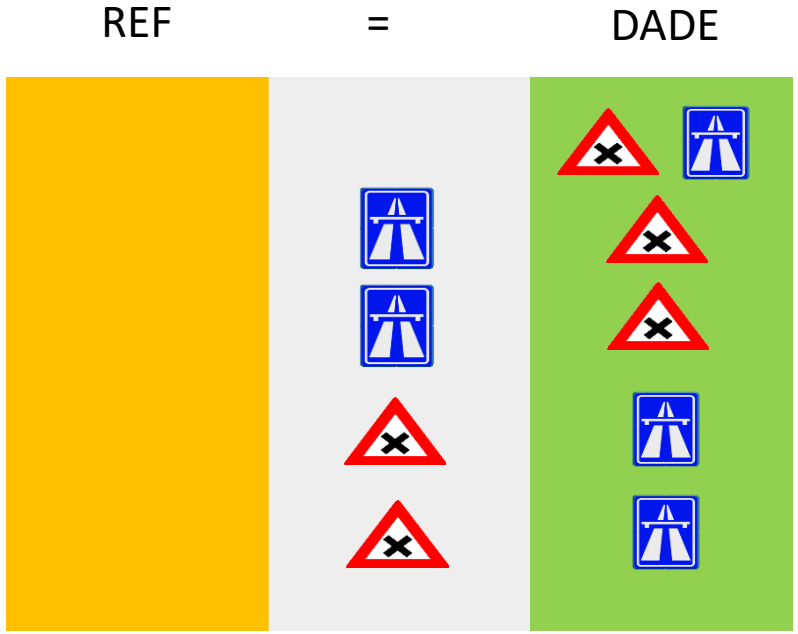


Development driving performance: safety



Learner driver ratings of instruction and coaching

Which group rated higher?



Did you study traffic theory?

Attention to active scanning

Opportunity to practice

Clarity about strong and weak points

Attention to safety margins around the own vehicle

Self-regulated learning

Setting personal learning goals

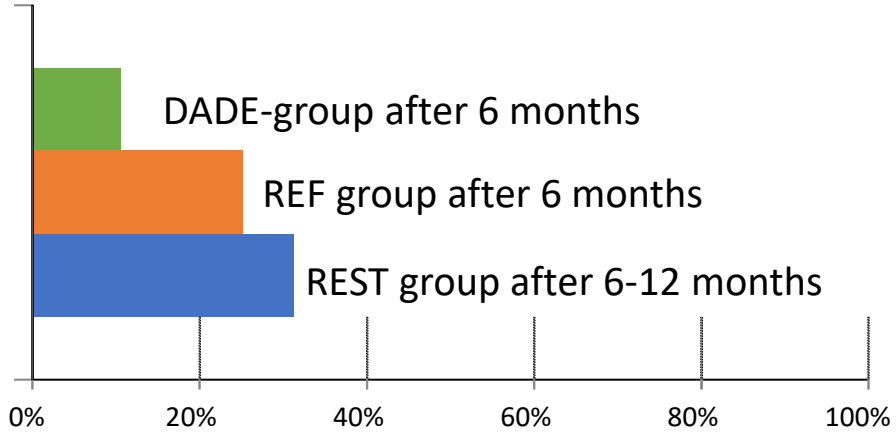
Reflection on progress assessment results

Opportunity to personalize driving lessons

Which group rated higher?

Driving attitude after first driving experience

Cognitive distortion type 1:
Self-centered reasoning as justification of violating behavior



5 How to move on?

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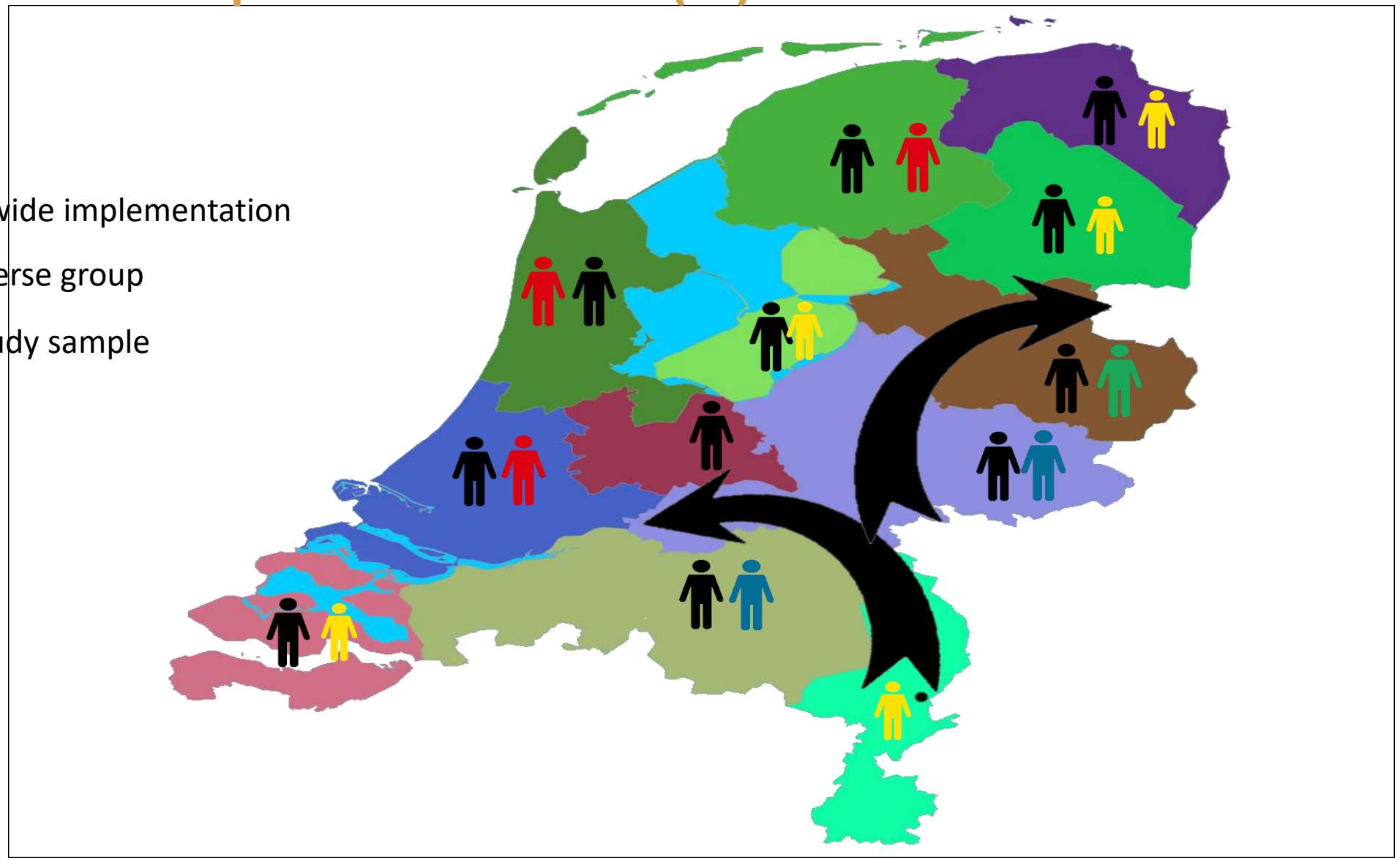
Follow-up intentions (1)

Country wide implementation

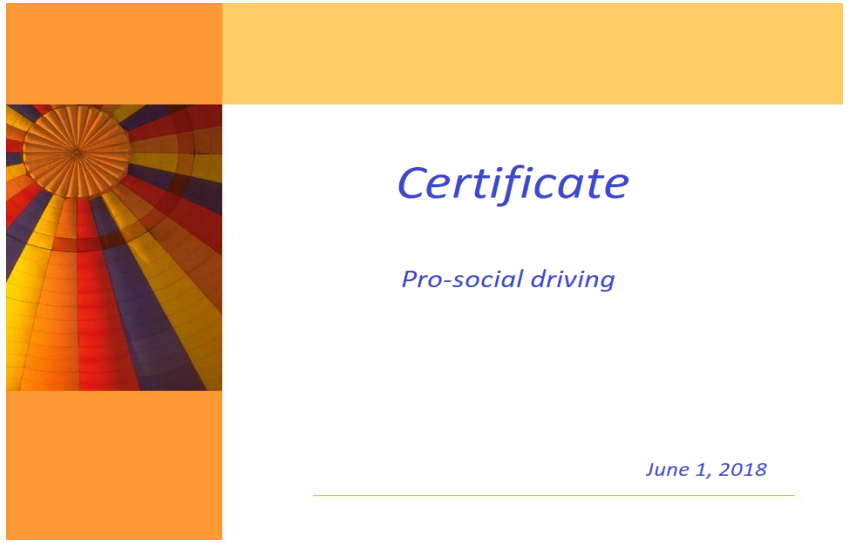
More diverse group

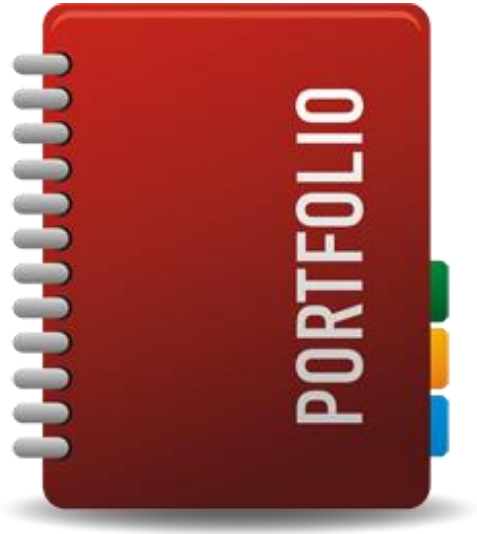
Larger study sample



Follow-up: broader view on driving competence

- **View:** Driving is more than getting your license!
- **Purpose:** stay competent for all multiple traffic roles in which life-level tasks are combined with traveling
- **Context:** Safe and social driving as part of citizenship education
- **Civil effect:** Part of a personal portfolio





Innovation of driving examination

- Exams for licensing: multi-stage assessments combining school exams with a centralized exam

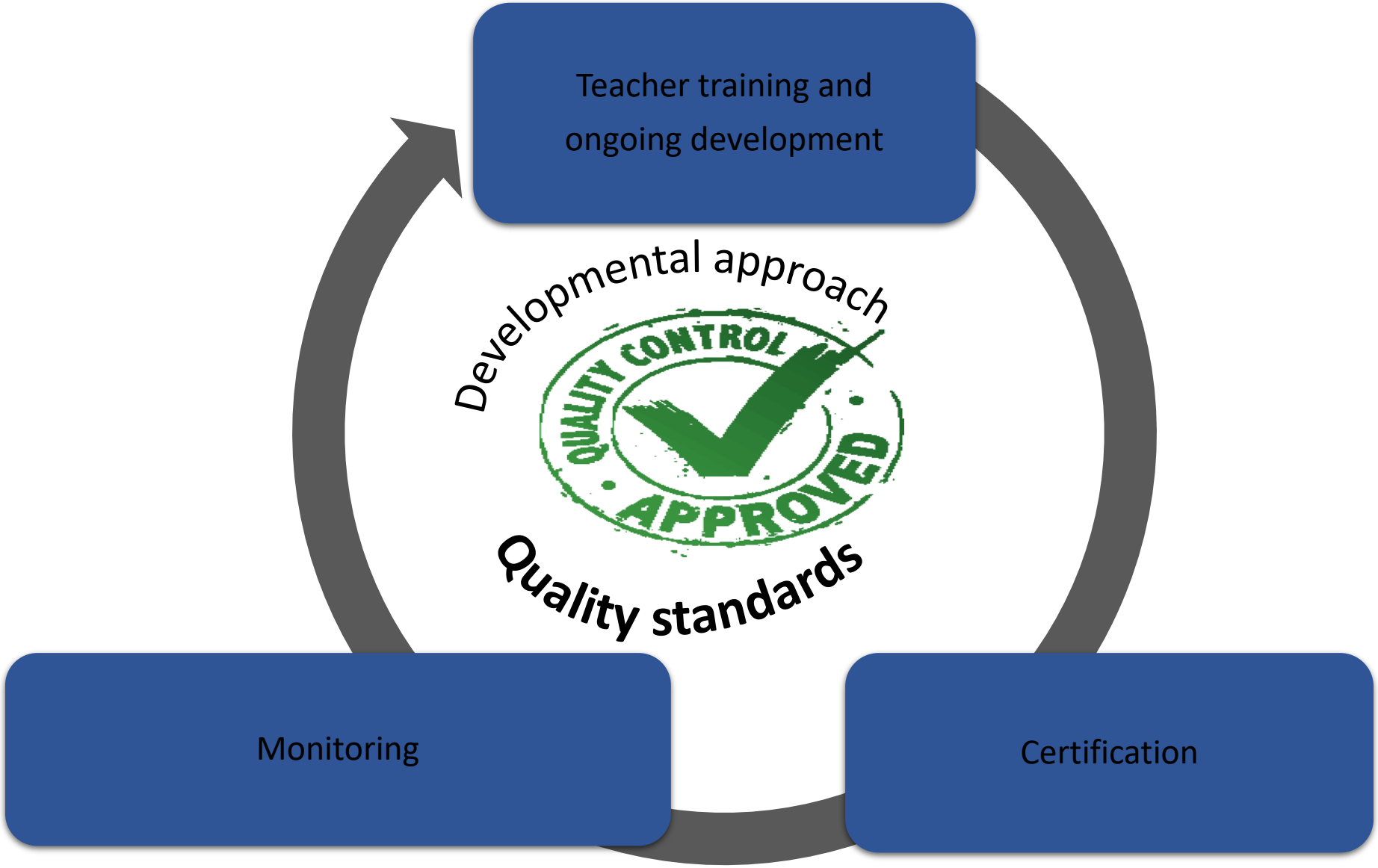
Module 1

Module 2

Module 3

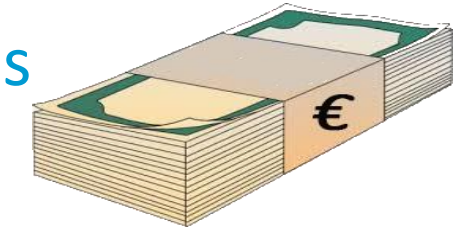
Module 4

Quality of driving schools



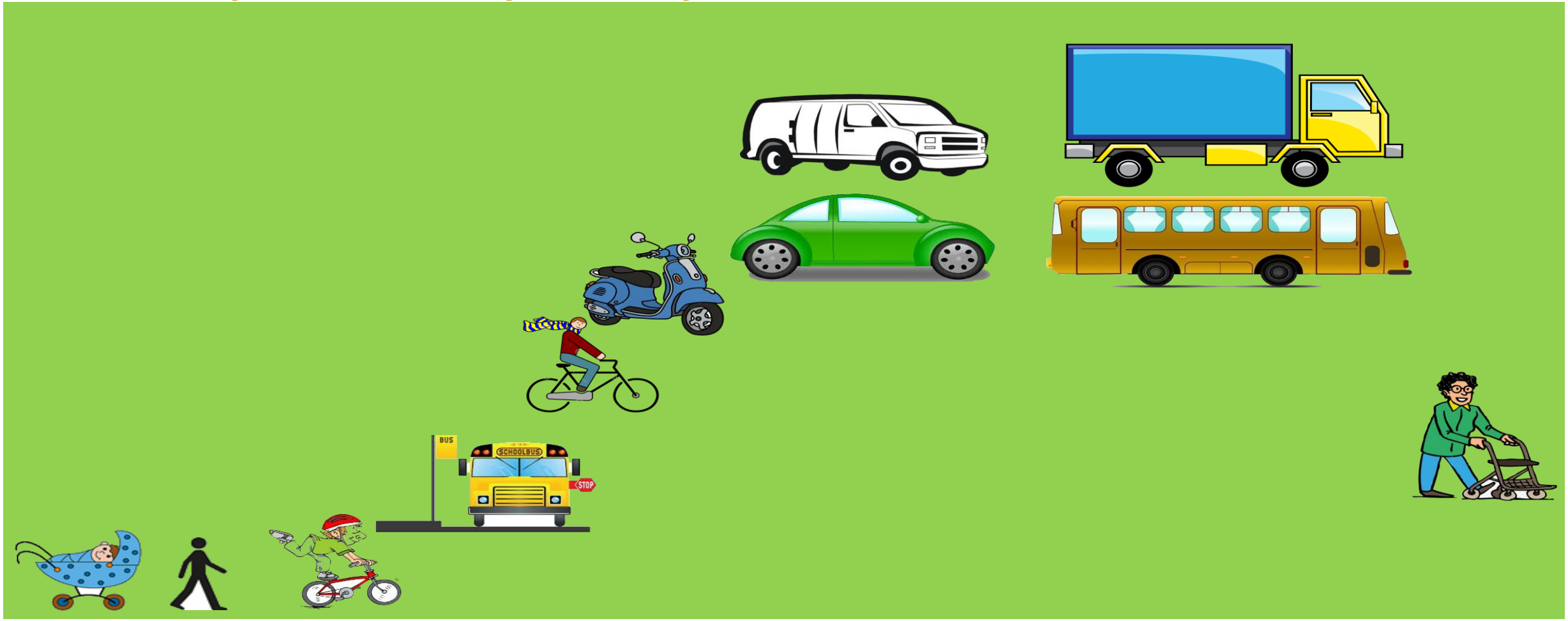
Quality or cost?

- Not money but safety should be the first to choose a driving school
- Problem: unequal opportunities due to income differences



- Out of box idea:
  - Funding – Driver training scholarship
  - To be spent at certified driving schools

Developmentally competent!!



0 → 80+

Thanks for your attention!

- Erik Roelofs: erik.roelofs@cito.nl
- Jan Vissers: jan.vissers@rhdhv.com
- Peter van Wijlick: peter@rmonoordlimburg.nl