



From an exam-oriented approach to an education-oriented approach

a paradigm shift

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CBR overview



Founded September 1st 1927



55 exam centres,
20 in combination with Theory



1.600+ employees:
635 examiners + 80 examiners professional exams
128 employees theoretical exams
173 medical professionals
166 customer service employees
202 IT employees

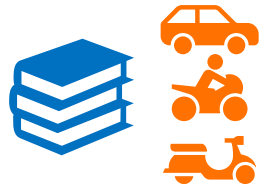
- Hoofdkantoor
- Theorie-examencentra
- Praktijkexamencentra
- AVB-terreinen



CBR overview

2023: more than 1,7 million exams and tests

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791.269 theoretical exams
motorcycle, car and moped



595.760 practical exams car,
motorcycle, trailer, moped and
microcar



157.487 professional theoretical
exams including tractor, taxi, bus,
truck, dangerous goods, inland
shipping, aviation



53.055 professional practical exams
including tractor, taxi, bus and truck



105.966 intermediate tests

948.756 theoretical exams

754.781 practical exams and tests

The Dutch context



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1. 7000 driving schools; average pass rate 50%
2. Regular abuses in the driving license training industry
3. The number of road fatalities among young novice drivers is relatively high
4. 17% of the driving schools have been closed

Main Goal: Better and guaranteed training quality by driving schools, which improves road safety, which increases the chance of success and protects consumers against excesses in the sector.

Every day, 100 people die on the roads because the novice driver drives too dangerously

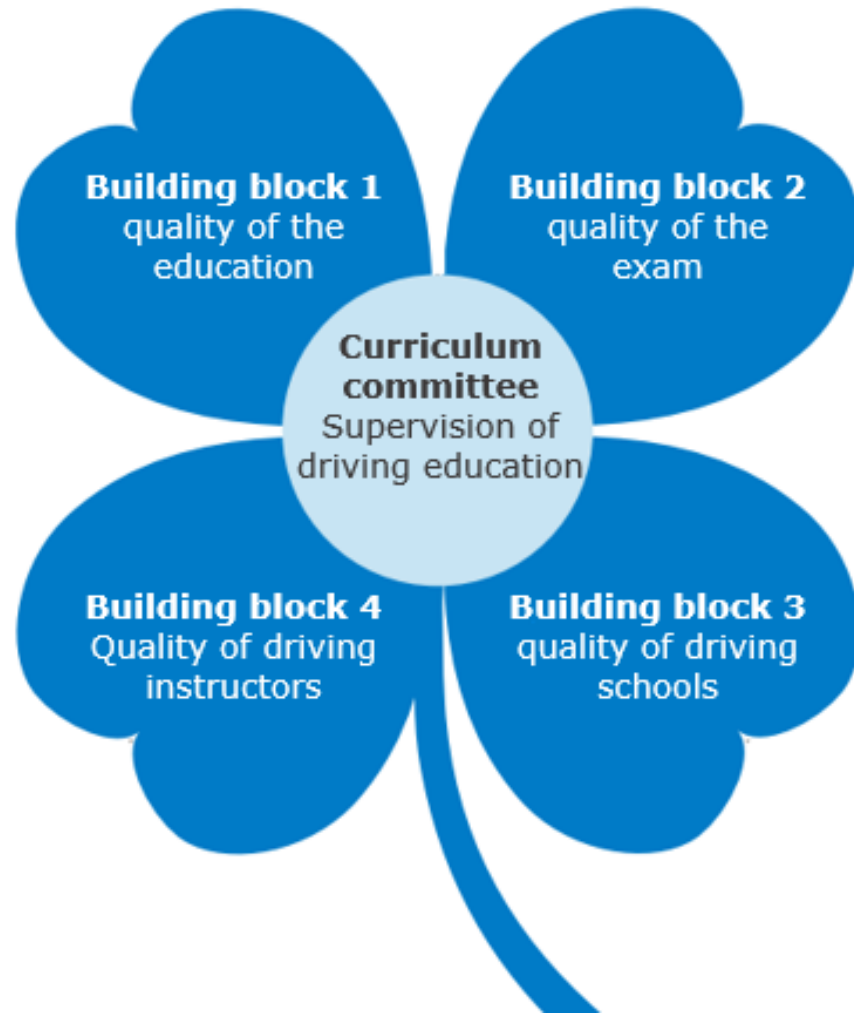


Summary of the Roemer Report, drivers licence B



19 measures summarized in 4 building blocks

What does this mean:



- Compulsory curriculum for driving license B
- Compulsory curriculum for driving instructors
- Modular examination path with multiple exams
- Requirements for the operation of driving schools



What will improve the quality of driving education?

1. A **mandatory** national curriculum, containing the learning objectives on **higher order skills**
2. An **embedded, corresponding** and competence-based assessment program

Teaching to the test -> the test will change the teaching -> Backwash-effect



The challenges when it comes to competence based examination



1. Constructive alignment with the national curriculum (Biggs, 1996)
2. integration theoretical knowledge and practical skills
3. Testing Higher order skills must be part of the assessment program

Higher order skills are part of the competency of a novice driver.

Testing higher order skills cannot be sufficiently done in only one driving examen.

Therefore a competency-based examen program with multiple and different assessments is needed.



Competency profile novice driver B (1)

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Description: The novice driver is able to **independently** participate in traffic with a passenger car in complex traffic situations, **safely, socially, responsibly** and according to the rules. The novice driver knows how to choose the moment of departure and which route is best for him to drive. The novice driver has insight into which personal circumstances, weather conditions and traffic conditions he must take into account.

The **core qualities** of a competent novice driver are:

Driving

1. independently,
2. safely,
3. socially
4. responsibly

For each core quality we formulated
performance standards for driving

Core qualities + performance standards = **competency profile**

Competency profile novice driver B (2)



Performance standards for the driving task

Safe

Traffic rules and signs are known and followed correctly

The vehicle is driven steadily on course

There is sufficient distance from traffic in front of and around the vehicle.

The environment and traffic situation are actively scanned

Potential

There is a timely response to changing weather and traffic conditions

The conditions for determining the most optimal and safe route are known

In case of acute

Performance standards are adhered to

social

The

Disturbances made by others are compensated for

There is adapted driving

independent

The planned route is followed

The planned route is followed with the help of navigation or instructions

There is problem-solving ability to follow a new route or deploy new technology

There is self-awareness of one's own abilities, and it is acted upon

There is problem-solving ability, providing sufficient time to resolve traffic situations

responsible

Fuel consumption and emissions are minimized

The operation of the car is such that occupants travel comfortably

Everyone can keep moving as much as possible; there is smooth traffic flow

core qualities of a competent novice driver

These performance standards are all based on the national curriculum

Assessment rationale behind competency based -examination



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Which testing principles make learning more sustainable so, that it remains internalized after the exam and influences future behavior?

- a) **A competency profile** is the starting point, it is the base for what we want to see in a novice driver, who is ready to hit the road independently.
- b) **Cumulative testing**: assessments building up in complexity and repetition of previously learned
- c) **The 4-eye principle**: testing by both the trainer and the CBR
- d) **A method mix**: theory, practical tests, driving tests by trainer, effort obligations, criterion-oriented interview for feed forward

Proposal: multiple embedded assessments



4 phase driving course

student monitoring system: embedding the summative and formative assessment moments in the driving course

Vehicle operation and vehicle control

Self-reflections, homework assignments and e-learning results

lesson progress

Advisory trip for the next phase

Theory exam on basic knowledge of traffic rules and signs

Simple traffic situations

Self-reflections, homework assignments and e-learning results

lesson progress

Advisory trip for the next phase

Practical driving skills test (vehicle control)

Complex traffic situations

Self-reflections, homework assignments and e-learning results

lesson progress

Theory exam knowledge, application of traffic rules and signs and traffic insight

Advisory trip for the next phase

Feed forward to next phase, based on the advisory trip

Drive independently and responsibly

Self-reflections, homework assignments and e-learning results

lesson progress

Driving in special situations (possibly (partly) with a simulator)

Advisory trip for the exam readiness statement

Exam readiness statement

Final practical driving test

Legend:

student/instructor

driving instructor B

external driving instructor B

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Portfolio: required components

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4 phase
driving course

Components in the Driving Training B **portfolio**

Legend:

driving instructor B

external driving instructor B

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vehicle operation
and vehicle control

confirmation of
completion phase 1

certificate theory
exam 1

Simple traffic
situations

confirmation of
completion phase 2

certificate practical
driving test 1

Complex traffic
situations

certificate theory
exam 2

confirmation of
completion phase 3

Result COI: feed
forward for phase 4

Drive independently
and responsibly

Proof of driving in
special situations

confirmation of
completion phase 4

Exam readiness
statement

Certificate of Driving
Competence

Drivers
license

Why 2 theory exams?

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1. Easier to pass, because it is much more manageable, smaller, we expect a higher pass rate
2. Due to the moment of administration, there is a direct link with the practical lessons,
3. Repetition makes the lesson material stick much better, as retention research* shows.

So even after obtaining a driver's license, it is expected that more knowledge will be retained in the memory.

* Karpicke en Roediger III (2006)



Why 2 practical exams?

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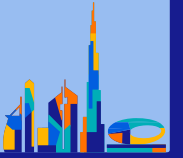
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1. Automated vehicle control is the basis for further driving training, but this is sometimes too easily dismissed in the training
2. the basics are already in order during the 2nd driving test, which makes the 2nd exam less exciting
3. The 2nd driving test clearly emphasizes independent, safe, social and responsible participation in traffic
4. We expect a higher pass rate



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THANK YOU