ABSTRACT TITLE

The German approach to implementation of the CIECA-RUE recommendations: Driving standards, competence measurement and training reforms

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ABSTRACT

In Germany, driver training and driving licence testing, as components of an overall system of novice driver preparation, first emerged more than 100 years ago. At that time, (traffic) pedagogy and in particular (traffic) psychology were still in their infancy and thus unable to contribute a conceptual foundation. The control of both partial systems was based instead on traffic legislation concerns, though relatively little value was attached to the aspect of driver training: Where any form of mandatory driving school training was prescribed, the stipulations remained somewhat general and at the same time oriented to technical content rather than traffic behaviour. Furthermore, strict institutional separation was maintained between the two partial systems. Driver training – which is today mandatory – is conducted by private enterprises, whereas the responsibility for driving licence testing is assigned to state-mandated test organisations.

Institutional separation of the training and testing systems is on the one hand – and that is still the case today – an important foundation for the objectivity of the driving test, though it does also entail certain disadvantages. The differently structured contents of training and testing, which are furthermore anchored in different legal foundations, hinder the further development of novice driver preparation. The recommendation to elaborate common competence-based standards for training and testing, along with correspondingly referenced curricula and test procedures, as expressed in the CIECA-RUE project, offers a solution to the historical dilemma. This is a long road which poses many challenges, but Germany has achieved important progress in 2016: It has been possible (1) to establish driving standards (demand standards in the form of competence definitions, driving tasks and assessment criteria) and to implement these standards in (2) electronic means for the documentation of learning progress by driving instructors and (3) an electronic test report for use by driving test examiners. The newly developed standards and the handling of the associated electronic instruments were then anchored in (4) a reform of driving instructor training and (5) optimised examiner training. These five steps are outlined below and explained by way of corresponding examples in the presentation.

re (1): The starting point for the development of standards for "good driving" was derived from the action and traffic psychology analyses conducted by McKnight et al. in the 1970s¹. Together with scientists and other experts from the field, the standards were updated to reflect the nature of modern road traffic, restructured and compared with current practice in other EU countries². Subsequently, they were subjected to instrumental

validation in conjunction with an optimised practical driving test and proven over the course of almost 10,000 actual driving tests³. In their entirety, the standards constitute the German catalogue of driving tasks, and as such a nucleus of common standards for the training and testing systems.

re (2): To facilitate documentation and systematic monitoring of the learning progress of novice drivers, a means for "electronic learner assessment"⁴ was developed for driving instructors. With this instrument, they are able to document the training content which has been covered and maintain systematic assessments of the learner's current status; at the same time, self-assessments of driving competence by the learner can be compared with the opinion of the driving instructor. The documentation of learning progress is completed with (positive) confirmation that the driving licence applicant is adequately prepared to proceed to the driving test.

re (3): In the driving test, candidates must demonstrate that they have acquired sufficient competence within the framework of driving school training to enable safe participation in road traffic. In similar manner to the driving instructor previously, the examiner must therefore reach an assessment of the candidate's competence, albeit now under the specific conditions of a test situation (requiring, for example, the selection of suitable demand situations along the test route). To this end, the examiner can make use of an electronic test report, which differs in certain aspects from the similar tool used for learning progress diagnosis (e.g. information on the application procedure is included). The test performance documented in the electronic test report forms a basis firstly for the examiner's criterion-referenced test decision and secondly for individual feedback to the candidate. The pedagogical-psychological concept for this feedback is also adapted to the candidate's media consumption behaviour and prerequisites for learning (e.g. learning hints in the form of video sequences, which can be viewed on a smartphone)⁵.

re (4): As a basis for the reformation of driving instructor training⁶, the content of the existing framework curriculum of 1999 was updated and expanded to include new technical features (e.g. driver assistance systems) and above all traffic-related psychological and pedagogical aspects (e.g. quality criteria for professionally demanding driving instructor training). The technical and pedagogical-psychological knowledge (regarding methods of teaching and learning) required by the profession was described in the form of 19 areas of competence, and the minimum knowledge to be conveyed was defined for each area. The overall scope of driving instructor training has increased from 700 to 910 training hours (the proportion of psychological content now lies above 50%, compared to only approx. 33% in the past). The decisive point is that the elaborated competence standards are measurable and thus suitable as foundations for evidence-based control in driving instructor training.

re (5): Further development of the foundations for both the original qualification and later further training of driving test examiners is realised in small steps. This ensures that innovations relating to the technical or pedagogical and didactic aspects of examiner knowledge and skills can be implemented relatively quickly in the system of testing. Training is based on a framework curriculum, which is in turn anchored in corresponding legislation. Furthermore, a working group has been set up with representatives of the technical examination centres, monitoring organisations and relevant government ministries to discuss continuous further development of the system of qualification testing and further training.

Each of the five steps described here is in itself merely a small puzzle piece in the further development of novice driver preparation – together, however, they represent a significant advance along the road to ideally trained driving instructors and test examiners. As contributions to the international debate, furthermore, they serve as examples of how the recommendations of the CIECA-RUE project can be transferred into daily practice.

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References:

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