Prepared For Conferees on H.F. 2887/S.F.3157 in Opposition to Article 8 Section 40 Online Instruction by John W. Palmer, Ph.D. Minnesota Driver and Traffic Safety Eduction Association May 1, 2013

Key Points:

-There has been **no experimental research** conducted that compares the impact of the exclusive use of Programmed Instruction (called online in HF 2887 Section 40 of Article 8) to teacher led instruction in the preparation of young novice drivers.

-Programmed Instruction only addresses the cognitive domain of learning.

Successful driver behavior comes from the cognitive (knowledge) domain, the affective (inclinations) domain and the pyscho-motor (skills) domain of learning.

-The U.S. Department of Education has **drawn no conclusions** regarding computer led **online Programmed Instruction**.

Conclusion

It is **premature** to allow a computer led and managed means of instruction for delivery of the classroom portion of novice driver education (Programmed Instruction). With **no rigorous research**, utilizing random assignment to control and experimental groups selected from a cross section of young novice driver, having been conducted, it is more premature it could be **dangerous**. Before allowing an **unproven and single dimensional method of instruction** to be utilized a research program should be conducted and the findings of that research followed.

Please do not include Section 40 of Article 8 in HF 2887. Minnesota young novice drivers should not become subjects in an uncontrolled experiment. If some providers of novice driver education want to test a Programmed Instruction method for classroom driver education, perhaps a private public approach to funding a pilot test, utilizing a rigorous experimental designed study, of online delivery of classroom driver education is in order.

Supporting Narrative (starting on the next page)

After listening to the testimony of Wilson of AAA at the Senate Transportation committee hearing on March 1, 2023 supporting S.F. 362 (the bill amended into HF 2887) two of her statements were not accurate. Both statements addressed research findings. One from the U.S. Department of Education (USDOE) and the other alluded to research concerning the value of driver education for young novice drivers.

As Chair Emeritus of the Transportation Research Board's Operator Regulation and Education Committee and as a researcher and advocate for driver and traffic safety education for over fifty years the evaluation literature addressing driver education's effectiveness has been and remains central to my research interests and expertise. To refresh my memory on contemporary driver education's effectiveness research a search of the National Highway and Traffic Safety Administration's(NHTSA) research data base was conducted.

The focus of the search was effectiveness of young novice driver education using this i<u>https://www.nhtsa.gov/book/countermeasures/a6-young-drivers/21-pre-licensure-driver-education</u> webpage as starting point. Nothing at NHTSA's website related to the use of computer led and managed program learning (called online driver education in Section 40 of Article 8 in HF 2887). Nothing in the research literature supports the use of computer managed and led driver education as a counter measure to traffic crashes.

To address the reference made to the USDOE a search of the research database of the USDOE was conducted. This search found no citations that addressed the effectiveness of online program learning. The term online learning can be used to refer to a wide range of programs that use the Internet to provide instructional materials and facilitate interactions between teachers and students and in some cases among students. Unfortunately, a review of the available research that examined the impact of online learning on educational productivity for secondary school students was found to be lacking. <u>https://tech.ed.gov/files/2013/10/implications-online-learning.pdf</u>

The use of online learning during Covid-19 provided an unplanned experiment allowing f an examination of broad student achievement during wide spread use of online teaching. "Learning during COVID-19: An update on student achievement and growth at the start of the 2021-22 school year" had these key findings:

Student achievement at the start of the 2021-22 school year was lower compared to a typical year, with larger relative declines in math (9 to 11 percentile points) than reading (3 to 7 percentile points).

Achievement was lower for all student groups in fall 2021; however, historically marginalized students and students in high-poverty schools were disproportionately impacted, particularly in the elementary grades studied.

Student gains across the pandemic (from fall 2019 to fall 2021) lagged norms for pre-pandemic growth, especially in math.

Clearly the wide scale use of online instruction harmed student achievement. (<u>https://nces.ed.gov/programs/coe/indicator/tcb?tid=300</u>)

A common definition of Programmed Instruction, computer managed online instruction falls into this category of instruction, makes it clear that only one domain of learning is addressed by this method:

Program instruction method of teaching is an autocratic and individualized strategy. It is based on psychological principles of operant conditioning. The responses of the learner are strictly controlled by the programmer. Its main focus is to bring desirable change in the cognitive domain of the learner's behavior. Physical presence of the teacher is not necessary. Students are left for learning at their own pace. <u>http://studylecturenotes.com/programmed-instruction-method-meaning-advantages-disadvantages/</u>

Contact Information:

John W Palmer

John W. Palmer, email palmertss@cloudnet.com, phone 320-291-4482