February 1, 2017

To the Joint Legislative Oversight and Sunset Committee:

I am a mathematics educator at the University of Delaware and have been designing and implementing professional development for K-12 teachers for more than twenty years. Thank you for this opportunity to testify about the guidance and support that the Delaware State Board of Education has provided with regard to research-based data-driven educational innovations during those years.

I would like to cite a recent example of the impact of the SBE’s support. As Director of UD’s Math & Science Education Resource Center, I collaborated with Prof. John Jungck, the Director of UD’s Interdisciplinary Science & Engineering (ISE) Lab, to write a Math & Science Partnership grant. That project, funded by the Delaware Department of Education, is now beginning its fourth year with more participating schools, teachers and energy than ever before. When we first received the grant, I sent an email to the State Board of Education to share our vision for increasing and diversifying the STEM workforce in Delaware. The President of the State Board wrote back immediately and has been a supporter of our work ever since!

Here is a quick overview of our project: Monday & Tuesday of this week, 60 math, science, engineering, technology and communications teachers from 12 Delaware schools, public, private and charter, came to the ISE Lab and together dug into challenging interdisciplinary STEM investigations. This spring, these school-based STEM teams will pilot interdisciplinary STEM lessons in their own classrooms. In June, they will come together again in the ISE Lab to teach their lessons to students from the partnership schools, students who previously might not have considered a career in STEM.

Responses from students who have attended our Student STEM Summer Academy have been quite gratifying: 86% said that attending the STEM Academy increased their “interest in pursuing a career in science.” One student said, quite dramatically, “Now, I see my future.” Followup studies have shown that these students have opted to take more, and more challenging STEM courses after attending our Summer Academy.

Teachers too have testified to the power of this project. Their cross-curricular content knowledge has increased, as has their use of STEM teaching practices. As
our evaluator wrote, “teachers highlighted how proud they felt working as a school team to create a lesson that incorporated aspects from each . . . content area.” They say this models for students the kind of collaborative effort needed to succeed in the workplace.

Last June, the President of the State Board of Education made a point to drop in on our Summer Academy. Dr. Teri Quinn-Gray spent the morning observing lessons and talking to students about their experiences. Then she extended her visit and engaged in a town hall style meeting with participating teachers. Having a member of the State Board of Education interact with teachers on the ground makes them feel as if the system is working with and for them and insures that our state’s educational policy is “grounded” in the best possible sense.

Sincerely,

Jon Manon, Associate Director for Mathematics
Professional Development Center for Educators