

House Finance Committee Testimony on Sub House Bill 110 Lindsey Queen

April 15, 2021

Chair Oelslager, Vice Chair Plummer, Ranking Member Crawley, and members of the House Finance Committee, thank you for the opportunity to provide testimony on Sub House Bill 110 (HB 110). My name is Lindsey Queen, and I am here on behalf of TECH CORPS Ohio. For more than 25 years, TECH CORPS has worked to ensure K-12 students have equal access to Computer Science (CS) and Information Technology (IT) programs, skills and resources that enhance early learning and prepare them for college, credential or career. TECH CORPS carries out its mission by developing CS and IT programs and then deploying tech-savvy talent to assist K-12 schools and youth-serving community organizations across Ohio and around the US.

There are two components of Sub HB 110 that bring me before you today, with the first concerning the listed initiatives under the spending requirements of disadvantaged pupil aid dollars (Sec. 3317.25). The bill makes several changes to the spending requirements for student wellness and success funds and of course districts and schools must satisfy these requirements. Among the spending initiatives contained within the bill include, but are not limited to mental health services and physical health services, culturally appropriate, evidence-based or evidence-informed prevention education, and adds programs that connect students to community resources. The bill expressly lists the nonprofit, City Connects, that provide these services but does not mention any other organizations. Today I am asking this committee to consider adding TECH CORPS Ohio to this pre-existing list.

Similar to the community organization listed within this section of the bill, TECH CORPS also offers K-12 programming that connects students to their communities, whether it be through afterschool CS or IT programming or through summer camps that offer students opportunities to learn while school is out of session. With the addition of TECH CORPS to this portion of the bill we believe that TECH CORPS' computer science and technology education services will gain important and more than appropriate recognition. I would like to note that this request does not compel additional spending nor will it alter or re-direct any of the existing appropriations by the state.



The second component of Sub HB 110 that I would like to bring before this committee this morning involves an appropriation request for TECH CORPS' E4Tech pilot program. This E4Tech, also called Engaging, Exciting and Empowering Educators through the "T" in STEM, program will help make Ohio a leader in computer science education. TECH CORPS will also be working with the Teaching & Learning Collaborative (TLC) to make this program possible. TLC is also a nonprofit and has a rich history of designing, coordinating, and delivering sustained professional development in mathematics and science.

E4Tech is an innovative professional development model and curriculum focused on the integration of computer science and computational thinking for grades 3-4. Lessons are designed to emphasize mathematics and science content through a computer science focused curriculum in three innovative modules: Robotics, Programming and Circuits, and Computing. I would also like to add that the program's curriculum aligns with the Learning Standards in Mathematics and national K-12 Computer Science Standards.

E⁴Tech Proposal (Two Year Pilot Program):

Recruit, train and support 500 teachers statewide through robust E^4 Tech professional development and curriculum modules designed to provide innovative educational learning experiences to 3^{rd} and 4^{th} grade students. The E^4 Tech program develops and enhances the ability of teachers to creatively use computer science and computational thinking as part of mathematics instruction.

Five Regions Statewide:

- Concentrate program regionally and implement projects in each of the Central, Northeast, Northwest, Southeast and Southwest regions.
- Regional partners will advise project participants; assist with school district and teacher recruitment; identify and set up locations for professional development sessions; and support regional efforts to expand and sustain the project.

Participating Teachers and Students (Impact in the Classroom):

- 500 teachers from rural, urban and suburban school districts
- 12,500 students in 3rd and 4th grade

Proposed Budget:

• \$475,000/year for each FY22 and FY23 (Total: \$950,000 over the biennium)



TECH CORPS has been working to engage students for quite some time in our state and one of the benefits to their experience is their ability to evaluate their effectiveness:

Year 1 Evaluation Results:

The project team focused on collecting teacher and student data to measure the effect of E4Tech professional development and curriculum on student achievement in mathematics. Both E4Tech participants and a corresponding control group (who did not participate) reported data for comparison purposes.

Highlights of Teacher Assessment Results:

- E4Tech teachers had significant gains in all four areas measured by the content assessment and in their total score.
- In comparison, control teachers has significant gains in only one area.
- 90% of E4Tech teachers had significant gains in mathematics content knowledge.

Highlights of Student Assessment Results:

- Upon comparing results of the 196 3rd grade students and 108 4th grade students who completed both the pre- and post- assessment, 3rd graders had the greatest gains.
- E4Tech 3rd and 4th grade students showed significant increases on their post-test scores.
- The greatest gains on a 23-point test were achieved by 3rd grade students, which averaged almost a 7-point increase, while control students averaged only a 4 point gain.

Before I conclude my testimony I would like to thank Representative Manning, Chair of the House Primary and Secondary Education Committee, for her support of TECH CORPS and for her commitment to support expanding the initiatives language to include TECH CORPS and to fund our E4Tech pilot program. Working with her office has, as well as meeting with a portion of the members of this committee, has been such a pleasure.

Thank you Chairman Oelslager for allowing me to testify today. At this time I would be happy to answer any questions you may have.