Chairman and members of the committee, I am Mike McHugh and I reside in rural Mandan, and I have a Master's degree in Instructional Design and Technology as well as 5 children in K-12 education. I am in favor of this bill because I believe that all students deserve access to education which will make them more prepared for the 21st century workplace.

If it wasn't noticed before, we have seen over the last year and a half how the use of computers is not only helpful, but necessary to live and work in today's world. The big question here is "Does current K-12 education equip every student with the requisite skills to become innovators and problem-solvers, to succeed in this world where computers and technology impact nearly every job and every industry?" Schools around the state and nation have been working hard to develop a curriculum that prepares students to be productive citizens in the 21st century. Having a basic understanding of computational thinking is critical to the success of our students as they graduate and become productive members of society in nearly any profession. These computational thinking skills taught through computer science can be utilized in nearly every occupation and also be useful in developing Communication, Collaboration, Critical Thinking and creativity skills, or the 4 C's which are important in many schools today.

I believe that every student should have a foundational knowledge of computer science. Having attended Governor's Summit on Innovative Education, as well as Google's Innovative Education Academy and other study on the topic, I know that the idea of using computer science to help students learn 21st century skills is shared among leaders in the state and nationally. Through the study of computer science students will not only be better prepared to enter the many jobs in IT which exist right here in North Dakota, but also further developing the 4 C's or the skills of critical thinking, collaboration, communication, and creativity. In my own house, as two of my children were exploring starting a business selling fishing lures, it didn't take long before they were asking questions like, "how will I communicate with customers?" and "How can we make our business look good to the public?" They quickly realized they needed a website and an email address. Very quickly they were wishing they had some additional knowledge about how computers work and think, in addition to the many other questions they had about being an entrepreneur. We all wished they had received some basic knowledge of this in their school education.

Not having computer science being offered in our 21st century schools can be compared to handing out textbooks but not requiring students to have a knowledge of reading. Students will be using computers for the rest of their lives. I ask you to consider adding computer science to the curriculum for our students. I understand that you will likely here opposition on this bill from school administrators, but I do not think you will find a parent who opposes adding these critical skills to their child's education, at all levels and all schools in our state. This is not a burdensome requirement for schools, but rather an opportunity to adapt the minimum standard for education in our state to those skills needed by students now and in the future. This curriculum will prepare our students to be career ready in the 21st century, will help fill important jobs in North Dakota in IT as well as many other fields such as unmanned aircraft systems and most importantly these skills will aid our children in learning the Math, science, and literacy skills already needed. This is good for our students and good for our state. Thank you for your time.