A Conversation with NJ Assemblyman Andrew Zwicker, Chair of the Assembly Science, Innovation, and Technology Committee

February 23, 2018

The NJ Assembly Science, Innovation and Technology Committee, the Assembly’s newest standing committee, is routinely referred to as the STEM committee. Its chair – Assemblyman Andrew Zwicker (D-16) – sees the new committee as having the potential for being the root, stem and blossom for New Jersey’s future. The higher education institutions of New Jersey, according to Chair Zwicker, are key contributors of the flowering of the STEM initiatives and successful innovation projects in the state.

After the committee’s inaugural meeting in January, Assemblyman Zwicker, who is a physicist and head of science education at the Princeton Plasma Physics Laboratory (PPPL), said the following:

“I want to thank everyone who testified today and offered invaluable insight into what New Jersey must do to foster innovation. Today was a great start on what I’m convinced will be exciting work by this new committee.

“Our science and innovation ecosystem is a vital source for jobs and economic development throughout New Jersey, but as we heard today, we must find ways to enable New Jersey to take advantage of its location and talent. We cannot rest on our legacy and allow other states and the rest of the world to outpace us when it comes to science, innovation and technology.

“We have to put science before politics, and make smart policy decisions to create jobs and economic development to help boost our middle-class.
“The informative testimony we heard today will help guide us toward those goals in the weeks and months ahead. I look forward to positioning New Jersey’s science and technology industries for great success.”

As chief science educator at PPPL, Assemblyman Zwicker has worked with hundreds of teachers and students with a goal of engaging as many people as possible in the joys and benefits of science and technology education. The American Association of Physics Teachers named him as one of the country’s top 75 leading contributors to physics education. In an interview with NJASCU, Asm. Zwicker elaborated on what he considers the “invaluable” contribution of STEM education to the health and well-being of New Jersey and society as a whole.

“STEM education has enormous value economically, but we often forget about the immeasurable benefits of science/technology/engineering/math education in fostering critical thinking and quality decision-making. This value may be harder to quantify than numbers of jobs and resultant dollars to the economy, but nevertheless is so important. In a world of alternative facts and a deluge of information, people must be able to think strategically, critically, logically – and this is what STEM education fosters .... We need evidence-based decision making. In science, you start from facts and then draw a conclusion – as opposed to starting with a pre-conceived conclusion and then looking for facts to back up a particular notion. Science literacy fosters an honest and objective thought process that allows creative and innovative projects to flourish.”

When Assembly Speaker Craig Coughlin named Assemblyman Zwicker to chair the newly created Assembly Science, Innovation and Technology Committee, Speaker Coughlin (D-19) noted his intention to make the committee a key part of the Assembly’s efforts to create jobs and economic development and boost the middle-class.

“We must look for ways to make our state vibrant, such as focusing on our science and innovation ecosystem as a source of jobs and economic development for our state,” said Asm. Coughlin. “I created the new Science, Innovation and Technology Committee to enable New Jersey to take advantage of our location and human capital, and I consider New Jersey fortunate to have Andrew Zwicker to chair it. I can think of no more perfect fit than Andrew Zwicker with science and technology. I’m excited to see Andrew use his vast experience, smarts and leadership, but even more excited to see the results of his vital work in the months and years ahead.”

In their first year of service, the STEM committee members will be looking, listening, and learning. “We will go all over the state – to university campuses, to large research companies, to small independent laboratories, hospitals to assess New Jersey’s current innovation environment and what legislators should do to improve the innovative climate,” Asm. Zwicker said.
While engaged in the three Ls, he and his colleagues will be working on a couple of action priorities – the first one being the re-establishment/revival of the New Jersey Commission on Science and Technology. The commission will serve as the hub of support for innovation and a magnet for all innovation activity. It will work closely with EDA, but specialize in embracing, encouraging, and facilitating science and technology innovation projects.

“Return on investment for STEM projects is enormous. The genome project is a good example – for every dollar that was spent, 141 dollars were generated in economic activity,” Asm. Zwicker said.

The Science Innovation and Technology Committee would work with the Commission on Science and Technology to “change the narrative about New Jersey from a state that simply appreciates innovation to one that exuberantly supports innovation. His committee also will be looking how to foster research and innovation through the legislative process. “We need to be smart about how we legislate our innovative initiatives .... Sometimes we just need to get out of the way in order to support science and innovation.”

“New Jersey has a history of being one of the most innovative states in the country (Hamilton – Bell Labs, Edison, Roebling). Thanks to Governor Murphy’s commitment – the innovation economy was a prominent part of his campaign platform – and thanks to the tremendous support from Assembly Speaker Coughlin, I believe that we can restore” New Jersey's legendary reputation as fertile ground for science, technology, and innovation, said Asm. Zwicker, who intends to make the most out of going back to the future.