David Morse

Executive Vice President & Chief Technology Officer
Corning Incorporated

Corning Incorporated is one of the world's leading innovators in materials science. For more than 160 years, Corning has applied its unparalleled expertise in specialty glass, ceramics, and optical physics to develop products that have created new industries and transformed people's lives. Corning succeeds through sustained investment in R&D, a unique combination of material and process innovation, and close collaboration with customers to solve tough technology challenges. Corning's businesses and markets are constantly evolving. Today, Corning's products enable diverse industries such as consumer electronics, telecommunications, transportation, and life sciences. Corning is a four-time National Medal of Technology winner thanks to technology leadership from decades of investment in research and development – all of which attracts and enables the best scientific minds in the world. This pipeline of talent has delivered life-changing innovations for more than 160 years.

Dr. David Morse has served as Corning's executive vice president and chief technology officer since May 2012. Morse is responsible for leading over 2,000 scientists and engineers, managing Corning's innovation portfolio and creating new growth drivers for the company. Prior to his current position, he served as senior vice president and director, Corporate Research.

Morse joined Corning in 1976 as a composition scientist in glass research. In 1985, he was named senior research associate and charged with establishing the Optical Components

Research department. In 1987, Morse was named manager of consumer products development. He became director of materials research in 1990, and then moved through a series of technology leadership positions in inorganic materials and telecommunications before joining Corporate Research in 2001.

Over the course of his many functional leadership responsibilities, Morse has been an exemplary leader for cultural, gender and racial diversity – initiating diversity affinity groups, serving as a long-time sponsor and champion of several - and taking executive action to improve diversity balance. He has extended his diversity leadership now to STEM education advocacy and pipeline leadership for Corning.

Morse graduated from Bowdoin College magna cum laude in 1973 and earned a doctorate from Massachusetts Institute of Technology in 1976. He is a member of the MIT chapter of Sigma Xi and the National Academy of Engineering.

Morse chairs the McDonnell International Scholars External Advisory Committee at Washington University in St. Louis, and is a member of the Board of Industry Advisors of International Materials Institute for New Functionality in Glass (MI-NFG), the Dow-Corning Board of Directors, the Corning Museum of Glass Advisory Board of Trustees and the Corning Foundation Board.

For our nation to reach its full potential, our economy must be robust. America must be able to invent and manufacture quality products and provide services as good, or better, than any other nation in the world. That requires a highly-skilled and well-educated workforce that can innovate and thrive in a high-tech, automated, fully-connected work environment: a workforce that is STEM-skilled.

Corning Incorporated is acutely aware that there is a significant gap in the number of skilled workers who can fill STEM-related jobs. This a major concern for Corning as the vast majority of our positions require STEM skills.

At Corning, our strategy focuses on aggressive recruiting, developing homegrown talent, and collaborating with local educational institutions to enhance STEM curriculum and programs.

This approach helps Corning develop a talent pipeline that allows a 160-plus year-old company work toward another 160 years while simultaneously enhancing education for all students in the communities where we have a presence.

With some exceptions, the country's K-12 education system is struggling to provide a STEM-based curriculum that adequately prepares our children to succeed in an increasingly complex world. Many school districts are dealing with a serious funding crisis that impacts staffing and core curricula, making it difficult to enhance educational programs. That's why partnerships between businesses and schools are so important to help provide a high-quality education as a building block for success.

Corning has a long tradition of investing in education, from pre-K through the college ranks, and particularly in locations where we have operations. Corning likes to hire within the local communities, so it makes sense to build the strongest educational system possible for future hires.

The principal way Corning supports education is through the Corning Foundation, which has provided $154 million in contributions since 1952. Approximately half of the money has gone toward educational programs with an increasing emphasis on STEM.

We also support a broad range of initiatives in individual school districts such as the International Baccalaureate program, the Full Option Science System, and Partners in Education, which sends scientists and engineers into classrooms to provide demonstrations and bring science concepts to life. In 2004, Corning sponsored the opening of the Alternative School for Math and Science, a middle school in Corning, N.Y., with a STEM-based curriculum that now has an enrollment of 130.

This commitment to elevate our educational institutions is key to developing homegrown talent, along with attracting the best and brightest from other areas. Our Technology Pipeline Program has also been effective in developing local talent to fill existing technology jobs.

Selected students spend at least one day a week in Corning labs and undertake a rigorous two-year course of scientific and engineering study at a local community college. When their study is complete, successful students then are offered Corning jobs. The program has accounted for approximately 25 percent of our technician hires since 2010.

Without question, an effective strategy to address workforce needs is collaborating with both two- and four-year colleges to develop curricula, provide resources, and offer mentoring and internship programs.

At Monroe Community College near Rochester, N.Y., an optics technology program was developed for students with the help of a $500,000 grant from Corning Foundation. Graduates in this specialized field are in high demand and are filling workforce needs for companies like Corning.

We recognize that Corning's ability to remain at the forefront of global innovation in materials science, optical physics and process engineering relies on the contributions of diverse Corning employees – those who are here today as well as the workforce of tomorrow. This is why Corning is a long-term sponsor of MIT's MITES program – Minority Introduction to Engineering and Science. MITES is a six-week residence program for rising high school seniors from across the country, from which about 70% go on to graduate with a STEM college degree.

Corning is also a long-term industry partner with GEM – the National Consortium for Graduate Degrees for Minorities in Engineering and Science. Since 1976 GEM has helped more than 3,000 minority students earn masters and doctoral degrees in STEM fields.

For 13 consecutive years Corning has been nationally recognized by the engineering deans at the nation's top historically black colleges and universities as a leading supporter of STEM education. Corning's support includes financial aid for scholarships, internships, collaborative research opportunities, and full-time employment.

Our Talent Management strategy is focused on attracting, developing, and retaining diverse talent with deep science, engineering and commercial knowledge. For example, Corning's Sullivan Park R&D Center in upstate New York is a destination for top scientific and engineering professionals in materials science, optical communications, display technologies and life sciences. Over 40 countries are represented at the center and 25% of the technical staff are ethnic, gender, and racial minorities.

These employees are also parents of children in the local schools who have an expectation of a strong STEM-based curriculum. Without such, talent retention can become a significant risk factor for the Corning R&D enterprise.

At Corning, we know our future depends on our ability to attract, develop and retain the best minds possible. Today, and for years to come, those with the strongest grasp of STEM will be the drivers of not only Corning, but the American economy as a whole.