


State of Iowa
Executive Department

IN THE NAME AND BY THE AUTHORITY OF THE STATE OF IOWA

EXECUTIVE ORDER NUMBER FOURTEEN

WHEREAS, the Governor's STEM Advisory Council's activities have made significant progress toward the ambitious goal of raising student interest and achievement in STEM since the original Executive Order was established in 2011 and subsequent Executive Order in 2013; and

WHEREAS, it is now time to build on the established track record of success and create the next phase of the Governor's STEM Advisory Council's work to address emerging needs; and

WHEREAS, establishing career-connected learning as a critical component of the K-12 educational program is essential for students to connect classroom instruction to STEM employment opportunities; and

WHEREAS, work-based learning fosters partnerships between educators and STEM employers to provide students with sustained project-based learning, simulated work experiences, pre-apprenticeships, student learner programs, internships, and apprenticeships in STEM work environments that bridge the gap between academic concepts and real-world applications; and

WHEREAS, early exposure to career exploration in elementary and middle school is essential to provide students with opportunities to explore a wide variety of STEM career paths, connect learning in the classroom to their future, and discover new areas of interest; and

WHEREAS, high school graduates are entering a rapidly changing job market with increasing demand for a strong basis of STEM knowledge and skills; and

WHEREAS, Iowa's economic development is closely tied to the state's ability to cultivate a highly skilled STEM workforce, which will drive innovation, attract businesses, and foster entrepreneurship in high demand industries; and

WHEREAS, rapid changes in technology, including advancements in artificial intelligence (AI) and information, will impact every career Generation Z and Generation Alpha will pursue, making it essential to equip them with the skills and adaptability needed to navigate and thrive in a constantly evolving technological landscape; and

WHEREAS, the role of AI is changing the nature of all jobs, thus, the need to establish foundational knowledge and ethical use of AI in schools is imperative to equip both students and educators to navigate this emerging technology responsibly and effectively; and

WHEREAS, the development of useful work habits begins in the K-12 school experience and includes applied academic skills, critical thinking, resource management, problem solving, information use, communication, systems thinking, technology use, and interpersonal skills including responsibility, resiliency, self-discipline, flexibility, and integrity; and

WHEREAS, consistent and high-quality classroom instruction provides the foundation of knowledge in STEM disciplines and understanding the integrated nature of science, technology, engineering, and mathematics; and

WHEREAS, the Governor's STEM Advisory Council has established meaningful strategic partnerships between education and STEM employers in the private and public sectors to prepare students for the challenges and opportunities of the future job market, foster innovative collaboration, and expand the pipeline for Iowa's strong workforce into the future.

NOW, THEREFORE, I, KIMBERLY K. REYNOLDS, Governor of the State of Iowa, by virtue of the power and authority vested in me by the Constitution and statutes of the State of Iowa, do hereby **DECLARE** that science, technology, engineering and mathematics education should be strengthened as part of promoting innovation, connecting STEM in school and in the workplace, and enhancing economic development. I hereby **ORDER** and **DIRECT** that the next phase of the Governor's Science, Technology, Engineering, and Mathematics initiative is to ensure that every Iowa student in every geographic location and from every background has access to cutting-edge educational opportunities.

1. **Purpose:** The Governor's STEM Advisory Council shall advise the Governor on ways to connect classrooms and the workplace through STEM innovation, improve instruction and student achievement in STEM subjects, and enhance STEM career connected learning to develop a future-ready workforce.
2. **Organization:** The Council shall be composed of members appointed by the Governor. Each member will serve at the pleasure of the Governor without compensation and in an advisory capacity. The Council shall be led by an Executive Committee. In addition to the Executive Committee, the Governor may appoint to the Council:
 - a. representatives with STEM qualifications from the following sectors, including but not limited to trades / advanced manufacturing, agribusiness, biotechnology, clean energy, financial / insurance, engineering, healthcare and information technology, higher education, postsecondary training institutions, early childhood, elementary and secondary education, and vocational-technical education.
 - b. additional qualifying members, including representatives of national STEM organizations as appropriate.
 - c. two members of the Iowa Senate to serve as non-voting, ex-officio members, one majority party member and one minority party member.
 - d. two members of the Iowa House of Representatives to serve as non-voting, ex-officio members, one majority party member and one minority party member.

The Council shall be co-chaired by the Lieutenant Governor of Iowa. The other co-chair shall be selected by the Governor for a two-year term. After that, the Lieutenant Governor will continue as co-chair with the other co-chair position to be selected by the Governor and to rotate on a biennial basis.

The co-chairs, or the STEM Bureau Chief of the Iowa Department of Education, with the approval of the co-chairs, may direct the Council to form subcommittees to address issues facing STEM education and other STEM matters in the State of Iowa. The makeup and nature of each committee shall be determined by the co-chairs.

Administrative operations of the Council shall vest with the STEM Bureau Chief in the Iowa Department of Education. The Bureau Chief will be housed in the Grimes Building unless otherwise transferred to another location by the Governor. The Department of Education shall provide staff support to the Council, as needed, to enable the Council to fulfill its responsibilities.

3. **Executive Committee:** Membership for the Governor's Science Technology, Engineering and Mathematics Advisory Council Executive Committee may include the following members appointed by the Governor, or their respective designees:
 - a. Lieutenant Governor of the State of Iowa
 - b. Director of the Iowa Department of Education
 - c. One regent university president
 - d. One community college president
 - e. One independent college president
 - f. Two representatives of preschool, elementary or secondary education
 - g. Two representatives of private employers who hire job candidates with STEM skills
 - h. Any other individuals that the Governor may appoint.

The Executive Committee may conduct business on behalf of the Council and such business can include, but not be limited to, launching initiatives, making final recommendations and scheduling meetings.

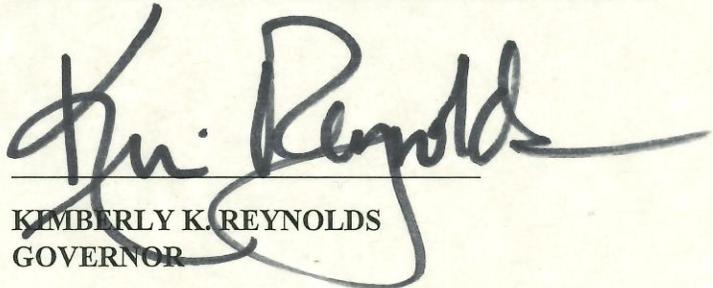
4. **Goals:** The Council shall undertake the following objectives:
 - a. build on the existing strong partnerships to foster collaboration between high school educators with the private and public sectors to meaningfully connect STEM classroom content with structured work-based learning experiences.
 - b. advocate for a state-wide career exploration initiative for students in elementary and middle school grades to empower students to discover new areas of interest through awareness of STEM jobs.
 - c. identify strategies to equip teachers and students with the knowledge and skill to use AI ethically and effectively in today's classrooms and tomorrow's workplaces.
 - d. build a state-wide strategy to promote integration of transferable employment habits including applied academic skills, critical thinking, resource management, information use, communication, systems thinking, technology use, and interpersonal skills of responsibility, resiliency, self-discipline, flexibility, integrity, and initiative in every Iowa classroom.
 - e. equip educators with the most current knowledge and tools to strengthen K-12 STEM instruction in every Iowa classroom to ensure strong foundational skills and knowledge are developed from kindergarten through high school.

5. **Activities:** The Council shall undertake the following actions:
 - a. map regional partnership assets and opportunities to advance the newly established Council goals.
 - b. commission reports on Iowa's growing STEM economy and the knowledge, skills, and attributes that Generations Z and Alpha will need to drive innovation.
 - c. recommend policy changes that will accelerate the connection between classroom learning and STEM careers, integrate employability habits into classrooms, and strengthen K-12 STEM instruction.
 - d. Undertake other activities as requested by the Office of the Governor.

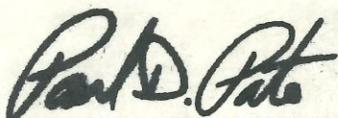
All agencies, departments and boards of the State of Iowa shall cooperate fully with the Council. The Council may seek the expertise and services of individuals and entities outside its membership for research, advice and other needs, as required to accomplish its mission. Executive Order Number 81, dated May 15, 2013, issued by Governor Terry E. Branstad, shall be rescinded because this order expands and replaces Executive Order Number 81.



IN TESTIMONY WHEREOF, I HAVE HEREUNTO
SUBSCRIBED MY NAME AND CAUSED THE
GREAT SEAL OF THE STATE OF IOWA TO BE
AFFIXED AT DES MOINES, IOWA THIS
SEVENTEENTH DAY OF AUGUST IN THE YEAR
OF OUR LORD TWO THOUSAND TWENTY-FIVE


KIMBERLY K. REYNOLDS
GOVERNOR

ATTEST:



PAUL D. PATE
SECRETARY OF STATE