

1 HB293
2 204198-1
3 By Representatives Collins and Baker
4 RFD: Ways and Means Education
5 First Read: 20-FEB-20

SYNOPSIS: This bill would provide for the creation, membership, and functions of the Alabama STEM Council (Science, Technology, Engineering, and Mathematics) as an independent state entity to advise the Governor, Lieutenant Governor, State Department of Education, and Legislature and provide guidance and specific recommendations on ways to improve STEM-related education, career awareness, and workforce development across the state.

A BILL
TO BE ENTITLED
AN ACT

To create and provide for the purpose of the Alabama STEM Council (Science, Technology, Engineering, and Mathematics); to provide for the membership of the council, including the executive committee of the council, ex officio members, and additional members appointed by the Governor; to

1 provide for meetings; and to provide for the duties of the
2 council.

3 BE IT ENACTED BY THE LEGISLATURE OF ALABAMA:

4 Section 1. For the purposes of this act, the
5 following terms shall have the following meanings:

6 (1) EXECUTIVE COMMITTEE. The executive committee of
7 the council.

8 (2) STEM. Science, technology, engineering, and
9 mathematics.

10 (3) STEM CAREERS. Careers that utilize concepts from
11 the STEM fields including, but not limited to, engineering,
12 life science, astronomy, physics, chemistry, earth science,
13 mathematics and computing, and information science; health and
14 medicine including physicians, nurses, technicians, and
15 psychologists; and social sciences including political science
16 and economics.

17 (4) STEM COUNCIL. The Alabama Science, Technology,
18 Engineering, and Mathematics Council.

19 (5) STEM EDUCATION. Entails more than achieving
20 competency in individual STEM subject areas. Students must be
21 able to integrate concepts from multiple disciplines and use
22 that knowledge to solve complex problems. The term often
23 includes instructional practices that actively engage all
24 students in an interdisciplinary project or problem-based
25 approach, tied to a real world, authentic challenge through
26 which students use various technologies to assist their
27 inquiry, research, and communication.

1 Section 2. The Alabama STEM Council (Science,
2 Technology, Engineering, and Mathematics) is established as an
3 independent state entity within the Alabama Department of
4 Commerce Workforce Division to advise the Governor, Lieutenant
5 Governor, State Department of Education, and Legislature on
6 ways to improve STEM-related education, career awareness, and
7 workforce development across the state. The Deputy Secretary
8 of the Workforce Development Division of the Alabama
9 Department of Commerce shall be responsible for the
10 administrative functions of the STEM Council and, upon the
11 recommendation of the executive committee, shall hire an
12 individual employed by the department to serve as the director
13 of the STEM Council. The director shall serve in that position
14 at the pleasure of the STEM Council. The staff of the division
15 shall provide support to the STEM Council as necessary to
16 fulfill the duties of the STEM Council.

17 Section 3. (a) The membership of the STEM Council
18 shall consist of a designee of the Governor, who shall serve
19 as chair, all appointed and ex officio members of the
20 executive committee as provided in subsection (b), and
21 additional members appointed from the state as provided in
22 subsection (c).

23 (b) (1) The STEM Council shall be under the direction
24 of an executive committee. The executive committee shall
25 consist of 11 members appointed from the state at large and
26 certain specific ex officio members. The at large members
27 shall each have proven expertise in STEM education or

1 workforce development and shall be appointed by the Governor
2 for initial terms of two or four years, as determined by lot,
3 and for four-year renewable terms thereafter. The ex officio
4 members shall include all of the following:

5 a. The State Superintendent of Education, or his or
6 her designee.

7 b. The Secretary of the Department of Early
8 Childhood Education, or his or her designee.

9 c. The Chancellor of the Alabama Community College
10 System, or his or her designee.

11 d. The Executive Director of the Alabama Commission
12 on Higher Education, or his or her designee.

13 e. The Secretary of the Alabama Department of Labor,
14 or his or her designee.

15 f. The Secretary of Commerce, or his or her
16 designee.

17 g. The Chair of the Alabama Workforce Council, or
18 his or her designee.

19 h. The Chair of the Alabama Workforce Innovation and
20 Opportunity Act Board, or his or her designee.

21 i. The Chair of the Alabama Council of College and
22 University Presidents, or his or her designee.

23 (2) The executive committee shall conduct business
24 on behalf of the STEM Council including, but not limited to,
25 launching initiatives, making final recommendations, and
26 addressing issues related to the director of the STEM Council.
27 The executive committee shall also develop operating policies

1 and procedures for the STEM Council, the director, and any
2 staff utilized by the STEM Council.

3 (c) (1) The additional appointed members of the STEM
4 Council shall include all of the following:

5 a. One member appointed by the Governor from each of
6 the seven congressional districts in the state. If the number
7 of congressional districts changes, the number of at-large
8 memberships shall be adjusted, if necessary, so that each
9 congressional district is represented.

10 b. Additional members, as determined necessary by
11 the Governor, appointed by the Governor from the state
12 at-large.

13 (2) The additional appointed members of the STEM
14 Council shall be appointed by the Governor for initial terms
15 of two or four years, as determined by lot, and for four-year
16 renewable terms thereafter, and shall represent STEM
17 stakeholders in the state including, but not limited to,
18 representation from each group of the following STEM industry
19 sectors:

20 a. Advanced manufacturing, aerospace, agribusiness,
21 astronomy, automotive, biotechnology, chemistry, computer and
22 information technology, construction, economics, energy,
23 engineering, geoscience, health care, homeland security, life
24 science, mathematics, nanotechnology, physics, artificial
25 intelligence, and robotics.

1 b. Higher education, postsecondary training
2 institutions, and career and technical education; and pre-K,
3 early childhood, elementary, middle, and secondary education.

4 c. Afterschool, out of school, and informal STEM
5 educational organizations.

6 d. Additional qualifying members as determined
7 appropriate by the Governor.

8 (d) The Governor shall coordinate his or her
9 appointments to the STEM Council and the executive committee
10 so that diversity of gender, race, and geographical areas is
11 reflective of the makeup of this state.

12 Section 4. (a) STEM Council members shall serve
13 until their successors are appointed. A vacancy shall be
14 filled in the manner provided for the original appointment. An
15 individual appointed to fill a vacancy on the STEM Council
16 shall serve only for the remaining unexpired portion of the
17 term.

18 (b) Each member of the STEM Council shall serve in
19 an advisory capacity and shall receive no compensation for his
20 or her services other than reimbursement for traveling and
21 other expenses actually incurred in the performance of
22 official duties. Expenses shall be paid in the same manner and
23 amount as is provided for other state officers and employees
24 and persons traveling on official business for the state or
25 any of its departments, institutions, boards, bureaus,
26 commissions, councils, committees, or other like agencies.

1 Expenses shall be paid out of any funds appropriated to the
2 STEM Council and processed in the manner provided by law.

3 (c) The initial organizational meeting of the STEM
4 Council shall be held within 45 days after the last member is
5 appointed to the STEM Council. At the initial organizational
6 meeting, the STEM Council shall establish procedures and other
7 policies necessary to perform the business of the STEM
8 Council, including the establishment of a quorum. Thereafter,
9 the STEM Council shall meet at least twice a year, and more
10 frequently upon the call of the chair. Members of the STEM
11 Council may participate in a meeting of the STEM Council by
12 means of telephone conference, video conference, or similar
13 communications equipment by means of which all persons
14 participating in the meeting may hear each other at the same
15 time. Participation by electronic means shall constitute
16 presence in person at a meeting for all purposes. A majority
17 of a quorum of the members of the STEM Council, or, in the
18 event of a meeting of only the executive committee, a majority
19 of a quorum of the executive committee of the STEM Council
20 must be physically present at the location noticed and called
21 for the meeting in order to conduct any business or
22 deliberation. Members of the STEM Council, the executive
23 committee, and any subcommittees of the STEM Council may not
24 utilize electronic communications except as in compliance with
25 the Alabama Open Meetings Act. Notice of STEM Council meetings
26 shall be provided in accordance with the Alabama Open Meetings
27 Act, and telephone conference or video conference or similar

1 communications equipment shall also allow members of the
2 public the opportunity to simultaneously listen to or observe
3 meetings.

4 Section 5. The chair or the director, subject to the
5 approval of the chair, may direct the STEM Council to form
6 subcommittees to address particular issues facing STEM
7 education or STEM workforce, or both. The composition and
8 duties of each subcommittee shall be determined by the chair.
9 Each department and agency of the state shall cooperate with
10 the STEM Council. The STEM Council may seek the expertise and
11 services of individuals and entities outside of its membership
12 as necessary to accomplish its mission.

13 Section 6. The STEM Council may establish a
14 foundation to assist in the development and implementation of
15 the programs to promote STEM education, STEM workforce
16 development, and STEM careers. The foundation may solicit and
17 receive contributions from a private organization for
18 objectives described in this act.

19 Section 7. The STEM Council shall do all of the
20 following:

21 (1) Serve as the primary point of contact for
22 communicating with state and national STEM organizations.

23 (2) Oversee and continuously revise the
24 implementation and maintenance of the state STEM strategic
25 plan, developed by the Governor's Advisory Council on
26 Excellence in STEM.

1 (3) Coordinate communication efforts to increase
2 STEM awareness, illustrate the value of STEM learning, and
3 highlight STEM careers, with particular emphasis on reaching
4 underrepresented segments of the population.

5 (4) Develop and implement a Governor's STEM Seal of
6 Approval, utilizing an evidence-based rubric to recognize
7 individual programs or periodic events that advance STEM
8 principles and learning across the state.

9 (5) Work with the office of the Governor to
10 incorporate a STEM Career Exploration and Discovery module
11 into the Alabama College and Career Exploration Tool (ACCET),
12 that allows stakeholders to identify STEM opportunities
13 offered across the state including, but not limited to,
14 afterschool, out-of-school, and summer programs, and
15 professional learning opportunities.

16 (6) Conduct comprehensive, external evaluations, as
17 needed or requested, of STEM-based curricula and educational
18 initiatives that receive funding from the Education Trust
19 Fund, beginning with the Alabama Mathematics, Science, and
20 Technology Initiative (AMSTI) and Alabama Science in Motion
21 (ASIM) program to track the implementation of their continuous
22 improvement plan. Assessment rubrics should incorporate
23 criteria relevant to the goals and outcomes of each initiative
24 including, but not limited to, impact on learning,
25 effectiveness of human capital and organization performance,
26 fidelity of implementation, equitable access, and other
27 criteria. Where appropriate and feasible, evaluations shall

1 include evidence-based interventions including, but not
2 limited to, those defined in the Every Student Succeeds Act
3 (P.L. 114-95).

4 (7) Conduct comprehensive evaluations, as needed or
5 requested, of state preservice preparation and inservice
6 programs for educators teaching STEM subjects including both
7 traditional and alternate pathways.

8 (8) Identify evidence-based and effective STEM
9 initiatives, instructional and professional learning
10 strategies, and scale their utilization across Alabama
11 schools, afterschool programs, and other educational settings,
12 with an emphasis on reaching traditionally underserved
13 populations.

14 (9) Expand opportunities for STEM career exploration
15 and discovery, especially among subgroups that are
16 underrepresented in the STEM professions.

17 (10) Collaborate with the State Board of Education
18 and the deans of two-year and four-year institutions of higher
19 education in the state to develop educational certifications
20 and endorsements related to the STEM fields, as well as
21 incentives for an educator to earn these concentrations.

22 (11) Collect and aggregate relevant STEM data to
23 track progress against the state STEM strategic plan,
24 including data from the ATLAS on Career Pathways, STEM labor
25 market information, measures of STEM achievement, and measures
26 of both STEM and STEM career awareness, attitudes, and
27 perceptions from P-20 learners.

1 (12) Provide annual reports on progress towards
2 implementing the state STEM strategic plan to the Governor,
3 Lieutenant Governor, and Chairs of the Senate Finance and
4 Taxation Education and House Ways and Means Education
5 Committees.

6 (13) Other goals and objectives as requested by the
7 Governor or the Legislature.

8 Section 8. This act shall become effective on the
9 first day of the third month following its passage and
10 approval by the Governor, or its otherwise becoming law.