FIRST National Advocacy Conference – Washington, DC
Talking Points
June 24 – 26, 2018

Each Person Introduces Themselves (Name, Grade, School, Title/Position)

Introduce your team and where you are from City/School(s)

What is _FIRST?_

- Started 29 years ago by Dean Kamen to inspire kids to become STEM professionals
- Adopted sports model and created four programs (briefly describe each)
  - FLL Jr. (K – 4), FLL (4 – 8), FTC (7 – 12), FRC (9 – 12)
- Describe what *FIRST* means to you, e.g.,
  - Teamwork, leadership, communication skills, STEM interest/career, making classroom work real, etc.
  - Tell your personal and team story
- *FIRST* works
  - Longitudinal Study from Brandeius University based on 10 years of Data say *FIRST* Students:
    - 2x more likely to major in engineering or science (41% in engineering)
    - 87% more interested in doing well in school
    - 87% plan to take a more challenging math or science course
    - 89% more interested in going to college
    - 93% increase conflict resolution skills, 95% time management skills, 98% problem solving skills, 76% communication skills
    - 75%+ of Alumni are in STEM field as a student or professional
    - 3x more likely to show gains in STEM interest
    - 2.2x more likely to show gains in STEM Activity
    - 3x more likely to soh gains in STEM Career Interest
    - 1.6x more likely to show gains in STEM Identity
    - 2.4x more likely to show gains in STEM Knowledge
- Last year over 530,000 students participated in some 61,000 *FIRST* teams with 255,000 coaches/mentors/volunteers though 2,900 events
  - Growing every year
  - Over 69,000 people attended the Championship events in Houston and Detroit in April
- Major corporations supporting *FIRST* and teams (examples of corporate support for your team)

Personal Experiences on Your Team (Customize to your team and program)

- Each year, *FIRST* publishes a game challenge and each team has six weeks to design and build a robot that accomplishes the game challenge.
- Students can participate in design, manufacturing, electrical, strategy, business, media, or any number of other areas to make this happen.
- Each team then competes at Regional or District competitions with their robot and for judged awards hoping to ultimately make it to one of the World Championship events (Houston or Detroit).
- During the off season, we do presentations within our community and participate in parades and festivals.
- We hold camps for younger students to get them involved and excited about STEM.
- Our team creates and mentors elementary and middle school *FIRST* Teams to keep these students excited about STEM and to act as a Feeder system for our team.
- We hold trainings year round in engineering, programming, safety, communications, resume writing and about a dozen others.
- We are also now getting more involved with Advocacy to make sure that everyone has a chance to be exposed to STEM regardless of their background or where they live.

US STEM Challenges

- Even with *FIRST's* success, two problems remain:
  - Not enough US STEM graduates
  - Diversity
- President's Science Council projected a need of 1 Million Additional STEM workers by 2022
  - Even with *FIRST's* healthy growth, we will not achieve that goal
- Not Just an Education Issue
  - Workforce development, national economic security and defense security issue
  - To compete in the world economy, we need workers with 21st Century skills
    - Robotics, programming, leadership, teamwork, etc.
    - In an economic competition where a nation with 19th Century skills will lose
  - Some of the enterprises very interested in *FIRST* students are the Air Force, NASA, Aerospace, etc.
    - Why?
    - Need STEM, particularly robotics experts and cyber warriors

***FIRST* is not looking for Federal funds for itself, but we want funds for schools to be available to enable and support participation in *FIRST* Programs with an emphasis on under-represented and under-served populations in STEM.**

ESSA Title IV Part A

- The newly enacted bipartisan Every Student Succeeds Act (ESSA) includes a flexible block grant program under Title IV Part A, which is authorized at $1.6 billion in Fiscal Years 2018 through 2020. Title IV, Part A authorizes activities in three broad areas:
  Well-rounded education including programs in STEM
  Safe and healthy students/schools
  Technology (professional development, blended learning, and devices
- Districts(LEA's) can use Title IV Part A grants to provide students with a well-rounded education and improve instruction and student engagement in STEM by:
  Expanding high-quality STEM courses;
  - Increasing access to STEM for underserved and at risk student populations;
  - Supporting the participation of students in STEM nonprofit competitions (such as robotics, science research, invention, mathematics, computer science, and technology competitions);
  - Providing hands-on learning opportunities in STEM;
  - Integrating other academic subjects, incl. the arts, into STEM subject programs;
  - Creating or enhancing STEM specialty schools;
  - Integrating classroom based and afterschool and informal STEM instruction; &
  - Expanding environmental education.
- This program was funded at $400M in FY17 and now $1.1B in FY18 out of the $1.6B authorization.
- THANK YOU FOR INCREASING THE FUNDING OF THIS PROGRAM.

Can we count on you for your support to continue to fund ESSA Title IV, Part A Student Support and Academic Enhancement Grants at or above the current $1.1 billion either through regular appropriation bills or through a CR process. Could you write a letter/call on our behalf to SENATE: Chairman Shelby and Vice Chairman Leahy, LaborH Subcommittee Chairman Blunt and Ranking Member Murray OR HOUSE: Chairman Frelinghuysen and Ranking Member Lowey and LaborH Subcommittee Chairman Cole and Ranking Member DeLauro to request continued funding at $1.1B or increased funding for Title IV, Part A? Would you send us a copy of that letter?

Career & Technical Education – Perkins Reauthorization

- Last re-authorized in 2006, expired in 2012, Provides more than $1B to schools
- HR 2353 Passed the House last June, Awaits action in the Senate
- HOUSE ONLY: Thank you House Member for passing the reauthorization.
- Increase access to, and support of, career counseling for all CTE students;
- Maintain CTE as a formula program;
- Align with ESSA [the Every Student Succeeds Act] and the Workforce Innovation and Opportunity Act (where applicable) to improve the efficiency and effectiveness of the education and workforce development programs;
- Support the expansion of public/private collaborations with secondary and postsecondary programs, including alignment with state or locally determined in-demand industries and occupations;
- Support efforts to integrate into and strengthen career pathways at the state and local levels;
- Address unfunded programs (such as programs to increase participation in STEM related programs of study); and,
- Improve evaluation and research to support innovation and best practices.

Can we count on you to support a full reauthorization of the Perkins Act? SENATE**:** Could you write a letter to Chairman Alexander and Ranking Member Murray to let them know how important this reauthorization is for your constituents and send us a copy of that letter? HOUSE: Could you help us by writing a letter to INSERT YOUR TWO SENATORS NAMES HERE to let them know how important this reauthorization is for your constituents and send us a copy of that letter?

Thank them for their past support and support on the issues you have previously discussed with them. Thank them for their time.

Offer to be a STEM resource for them. Leave materials behind on FIRST and your Team.

Invite them (Member/Senator and Staff) to Tues Reception 5pm to 7pm in Rayburn 2068
Invite Senator or Member to your school/build site. Get contact information/business card of district scheduler to make that happen.