

State CTE Directors' Guide to Funding your Engineering byDesign™ STEM Curriculum and Professional Development through Perkins V

"The Strengthening Career and Technical Education for the 21st Century Act, which amended the Carl D. Perkins Career and Technical Education (Perkins IV) Act of 2006, was signed into law on July 31, 2018. The amended Act, now Perkins V, brings changes to the \$1.2 billion annual federal investment in career and technical education (CTE). The U.S. Department of Education is looking forward to working with states to implement the new legislation, which goes into effect on July 1, 2019 and provides new opportunities to improve CTE and enables more flexibility for states to meet the unique needs of their learners, educators, and employers." <https://cte.ed.gov>

The Engineering byDesign™ Program is built on the belief that the ingenuity of children is untapped, unrealized potential that, when properly motivated, will lead to the next generation of technologists, innovators, designers, and engineers.

SUPPORTED BY NEARLY TWO DECADES OF IMPLEMENTATION AND RESEARCH

- [EbD™ research focus is on integrative STEM education and data-driven discovery](#)
- [Student growth on pre- to post- assessments indicates increased student learning and achievement in T and E](#)
- [Teachers' grasp and depth of key STEM concepts when proposing optimized solutions increase with the use of EbD curriculum](#)
- [The design experiences offered through the EbD™ curriculum can positively impact student self-efficacy beliefs for design and creative thinking](#)

Flexible and cost-effective, [EbD™ State Consortium](#) membership (\$23,990 annually) provides Pre-K - Grade 12 EbD™ Standard Edition curriculum access to ALL teachers in the state at no additional cost. *State departments of education, regional centers, districts, IHEs, and combinations thereof are eligible to serve as Consortium entities and to administer access.

[CTSO alignment:](#) EbD™ curriculum is aligned with the Technology Student Association's NASSP-Approved competitive events, including the TEAMS (Tests of Engineering Aptitude, Mathematics, and Science) competition.

[National Career Clusters](#), and [Industry Certification](#) pathways identified for Autodesk AutoCAD, Inventor, and Revit.

College and Career Readiness and Workforce Development: EbD™ secondary level courses are aligned with [All Aspects of Industry framework](#).

Increase CTE Concentrators: Articulation and Dual Enrollment Pathways established in many states with support available for new development.

Responsive to States' Needs and Goals: EbD™ State Directors meet five times annually for strategic planning and to review Consortium products and services.

[NASA](#)-developed enrichment content.

[Computational Thinking:](#) Pre-K - Grade 12 alignment with ISTE characteristics, attitudes, and dispositions for CT.

Design-based **[Computer Science, Robotics, and Coding](#)** experiences in elementary, middle, and high school courses.

Teacher leadership opportunities: Develop your cohort of Authorized Teacher Effectiveness Coaches to lead local professional development.

[Assessment data analytics](#) for EbD™ Network Schools: Real-time granular tracking of standards-aligned formative and summative assessments; national pre- and post assessments.

Build **[group/school memberships](#)** and **[professional development](#)** into your Perkins state plan.

ITEEA's STEM Center for Teaching and Learning™ (STEM CTL™) has developed the only standards-based international model for Grades K-12 that delivers technological literacy in an Integrative STEM Education context. The model, Engineering byDesign™, is built on the international *Standards for Technological Literacy* (ITEEA) and is mapped to *Next Generation Science Standards*, the National Academy of Engineering's Grand Challenges for Engineering, and Common Core State Standards (ELA and Mathematics).

Learn more by joining our free informational webinar:

**December 5, 2019
2:00pm EST:**



www.iteea.org/ebd_perkinsV.aspx

