

Problem Statement: Students should be at the center of learning science, which is grounded in building conceptual understanding across an intentional progression of ideas and skills/processes. Science education that does not provide enough opportunities for hands-on, interactive exploration of scientific concepts and

phenomena often fails to engage students and educators and is less likely to improve students' science outcomes. Science Techbook for Florida provides highly engaging, Florida State Academic Standards for Science-aligned, hands-on, rigorous, and research-based lessons and activities, including rich teacher supports and formative/summative assessment opportunities to monitor student learning

Outcomes **Activities Participants Outputs** Inputs What changes or benefits result... Products of activities: What we do: What we invest: Who we reach: Intermediate Long-term Short-term Students access Science Techbook for Florida platform and/or print materials Students can communicate rich Students access hands-on and online Students are better able to make scientific explanations for real Students increase interest in evidence-based decisions in their content, resources, and activities within world observations, model scientific learning personal, professional, social, and each lesson scientific ideas, and design civic lives solutions Students complete hands-on and online lessons A Florida Students increase self-efficacy standards-aligned core Students explore STEM career content Students increase ability to and ownership of learning about Students increase proficiency curriculum that allows and STEM project starters that connect design and carry out scientific the value of scientific reasoning, using nature of science practices investigations evidence-based thinking, and them to the real world educators and students investigation to experience science Students complete formative and phenomena through Number of unique student, educator, and summative assessments to measure hands-on activities, administrators who access Science science learning and understanding Students demonstrate a growth Techbook for Florida platform and interactives, and Students measurably improve mindset in terms of the skills and frequency of access engaging video and understanding of science content Educators and administrators access practices used to make sense of for their grade level platform usage, outcome, and progress scientific ideas scientific-literacy Number and type of hands-on and online data for students science content, resources, and activities lessons about real-world accessed by students and educators events or scientific Educators observe their peers' use of breakthroughs Number and nature of hands-on and Science Techbook for Florida to reflect on online lessons and assessments best practices either directly or through completed/assigned/administered Professional learning PL conversations (PL) and ongoing Number and type of STEM career content Educators can provide students Educators use resources and activities in and STEM project starters accessed and with timely feedback and support resources incl. Educators increase capability to classroom instruction used Educators encourage student differentiate lessons based on access to Educator meet the unique learning needs of discussion and collaboration increased awareness of their all their students Supports Nature of feedback provided by students students' science skills and Educators assign hands-on and online about relevancy and engagement in Channel¹ and Discovery knowledge lessons for the whole group, small science concepts **Educator Network** groups, or individual students Number and type of usage and outcome $(DEN)^2$ Educators routinely address Educators administer formative and K-12 Students data by lesson, student, and school Educators have access to rich learner variability and increase summative assessments data about their students' science differentiated practices and Frequency of educator peer observations Accessibility features Educators application in their classroom Educators access support resources e.g., e.g., text to speech, Number and type of support resources professional learning, educator supports, accessed by educators Administrators closed captioning, video prep materials, and standards alignment information transcripts and different Frequency of discussion groups established between students and Educators feel professionally Lexile levels, authentic Educators increase participation Educators provide opportunities for educators supported and are more likely to in professional learning Spanish translations, students to participate in group coach others in science opportunities and communities Number and type of professional learning instruction discussions to promote scientific and translation support Educators develop and implement webinars and events attended and engaging and effective science discourse and explanations in 180+ languages completed essons that incorporate research based strategies to increase the Educators and administrators participate Number and nature of PLC teams rigor of scientific discourse and in site/district-led PL webinars and live scientific explanations in the Support via a district Educators have access to classroom Number and nature of communication events communication toolkit, rigorous, research-based science Educators deepen scientific touchpoints between educators and understanding by designing and resources and digital tools that administrators concerning Science partner success team. Educators and administrators participate focus on delivering student-centered, Techbook for Florida implementation, in school-based professional learning Florida standards-aligned lessons and education Florida standards-aligned updates, and professional learning community (PLC) teams³ instructional techniques support support teams Administrators ensure users have access The extent to which Science Techbook for Florida content is embedded within to and awareness of Science Techbook for Integration with district policies and curricula and its use Florida and available training supports Administrators promote and Administrators promote the use Administrators support educator district-wide systems promoted and encouraged by of Florida standards-aligned foster a culture of (Educators Support Channel, Professional professional growth and prioritize administrators instruction to research-based, Florida increasing students' science (e.g. LMS, Google, Learning, DEN) outcomes across their school or improve understanding of standards-aligned science Microsoft, etc) district scientific ideas learning Administrators access, monitor, and drive product usage and engagement with the program on a regular basis Administrators support the development of a scientific Administrators provide relevant resources, growth mindset for students and updates, and ongoing support to teachers educators through district collaboration and communication channels (LMS, PLCs, Email, Social, PL) Administrators have more Administrators direct and allocate Administrators increase their information about students' capability to meet the unique resources and supports for Administrators embed Science Techbook science learning in their school or science instruction for educators learning needs of all students in for Florida content within district policies their school or district district and schools most in need and curricula

³ Professional learning communities (PLCs) are an approach to school improvement where groups of educators and administrators work collaboratively at the school level to improve student outcomes.



¹ The Educator Supports Channel is an online platform that provides school and district leaders with resources on how to share best practices for Discovery Education products/services and empower educators through professional learning

² Discovery Educator Network (DEN) is a global online community that connects educators to teaching resources, learning opportunities, and professional peer networking.