HANDS-ON COMPUTER SCIENCE

PREPARING STUDENTS FOR THE FUTURE

THE DIGITAL EVOLUTION IS CHANGING HOW WE LIVE

Our world is becoming more technology-driven every day as new innovations make computer science skills increasingly critical. By teaching the subject at the earliest grade levels, we can prepare students for a future where computer science knowledge and skills are in demand across every industry.



EDUCATORS UNDERSTAND HOW CRUCIAL COMPUTER SCIENCE IS



71% of teachers believe computer science is "just as important as required courses like math, science, history, and English"³

BUT STUDENTS AREN'T CONVINCED



77% of students don't currently expect to pursue a job in computer science⁴



SPARK STUDENTS' PASSION FOR COMPUTER SCIENCE EARLY ON THROUGH HANDS-ON, PURPOSEFUL PLAY

Presenting students with computer science at "earlier stages in their educational careers," makes it **"accessible and interesting"** increasing their engagement and confidence while preparing them for the future.⁶



90% of students who thought their computer science class was fun want to learn more⁵

LET'S BUILD CONFIDENCE IN COMPUTER SCIENCE LEARNING

LEGO® Education makes abstract concepts more tangible with hands-on, playful STEAM learning experiences. Educators can use the familiarity of the LEGO® system of bricks to build every student's confidence in computer science learning. And by engaging these students early through purposeful play, we can give them the computer science skills needed to thrive in any job influenced by technology, regardless of industry.





LEGO® Education offers a range of hands-on, playful STEAM learning experiences based on the LEGO® system of bricks. Encouraging creativity, collaboration and critical thinking, LEGO® Education solutions help learners build resilience and confidence in learning through the power of purposeful play.



1 Bureau of Labor Statistics (2022), https://www.bls.gov/ooh/computer-and-information-technology/computer-and-information-research-scientists.htm 2 Bureau of Labor Statistics (2021) – Employment Projections, https://www.bls.gov/emp/tables/emp-by-detailed-occupation.htm 3 Gallup/Google (2016), https://services.google.com/fh/files/misc/trends-in-the-state-of-computer-science-report.pdf 4 Gallup / Google (2020) – Computer Science Education in US K-12 Schools 2020, https://services.google.com/fh/files/misc/computer-science-education-in-us-k12schools-2020-report.pdf 5 GGallup / Amazon (2021) – Developing Careers of the Future: A Study of Student Access to, and Interest in, Computer Science, https://www.gallup.com/file/analytics/355139/Amazon_ Future_Engineers_Report_2021.pdf 6 Hamlen, Karla & Sridhar, Nigamanth & Bievenue, Lisa & Jackson, Deblee & Lalwani, Anil. (2018). Effects of Teacher Training in a Computer Science Principles Curriculum on Teacher and Student Skills, Confidence, and Beliefs. 741-746. 10.1145/3159450.3159496. https://www.researchgate.net/ publication/323328631_Effects_of_Teacher_Training_in_a_Computer_Science_Principles_Curriculum_on_Teacher_and_Student_Skills_Confidence_and_Beliefs LEGO, the LEGO logo, the Minifigure and the SPIKE logo are trademarks and/or copyrights of the LEGO Group. @2022 The LEGO Group. All rights reserved.