1. Record Nr. UNINA9910810392803321 Autore Stone-MacDonald Angela Titolo Engaging young engineers: teaching problem solving skills through stem / / by Angi Stone-MacDonald [and three others] Pubbl/distr/stampa Baltimore, Maryland;; London, [England];; Sydney, [Australia]:,: Paul H. Brookes Publishing Co., , 2015 ©2015 **ISBN** 1-59857-849-9 1-59857-846-4 1-59857-847-2 Descrizione fisica 1 online resource (270 pages): illustrations Classificazione EDU048000EDU023000EDU029030 Disciplina 507.1 Soggetti Science - Study and teaching (Early childhood) - United States Technology - Study and teaching (Early childhood) - United States Engineering - Study and teaching (Early childhood) - United States Mathematics - Study and teaching (Early childhood) - United States Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references and index. Sommario/riassunto "This title provides instruction on how to teach problem solving and critical thinking to young children (birth to 5) using engineering, science, and routines as a framework. The engineering process is an ideal framework for designing learning experiences that support science, technology, engineering, and mathematics (STEM) learning and cognitive development for young children. Young children problemsolve in their daily play, and teachers and caregivers can promote the development of problem solving and critical thinking skills through intentional activities that support young children's brain development and prepare them for kindergarten. Key activities are outlined for each age group, with information on how each activity teaches young children to be curious, persistent, flexible, reflective, and collaborative. This title also provides specific guidance for supporting problem solving and science learning in inclusive classrooms using the universal

design for learning (UDL) model, and it helps teachers to prepare

children to work towards the Common Core State Standards (CCSS) for kindergarten math and the Next Generation Science Standards (NGSS) for kindergarten science. This title can serve as a supplemental text for early childhood curriculum or instructional methods courses"--