1. Record Nr. UNINA9910794587803321 Autore Vasquez Jo Anne <1943-> Titolo Integrating STEM teaching and learning into the K-2 classroom / / Jo Anne Vasquez, Michael Comer, Jen Gutierrez Pubbl/distr/stampa Arlington, Virginia:,: NSTA Press,, [2020] 2020 **ISBN** 1-68140-621-7 Descrizione fisica 1 online resource (xvii, 116 pages): illustrations Collana Gale eBooks Disciplina 372.35044 Science - Study and teaching (Elementary) - United States Soggetti Technology - Study and teaching (Elementary) - United States Engineering - Study and teaching (Elementary) - United States Mathematics - Study and teaching (Elementary) - United States Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Creating a blueprint for building your K-2 STEM house -- Pioneering into STEM integration -- Unpacking the integrated STEM classroom --Tackling the core instructional time -- Using the W.H.E.R.E. model template -- Developing a STEM unit with math as the driver--straw bridges -- Developing a STEM unit with engineering as the driver-baby bear's chair -- Developing a STEM unit with science as the driver--a pond habitat -- Moving students from inquiry to application--shade structure -- Transforming to a successful STEM school. "It's time to ramp up science, technology, engineering, and Sommario/riassunto mathematics (STEM) in the K-2 classroom. Benefits of early learning in science and math include the following: (a) It leads to social-emotional development and fewer challenging behaviors; (b) it supports the development of a mind-set that includes curiosity, communication, persistence, and problem solving; (c) it contributes to gains in other subjects by supporting literacy and language development and better reading comprehension and writing skills; and (d) it includes subjects that can engage students from varying backgrounds, including English

language learners. But delivering quality early STEM information

requires expertise on the part of the teacher in scaffolding the lessons. Research shows that quality STEM teaching and learning is critical in early childhood education; however, it is also points out that the teachers themselves need support as they learn how to facilitate STEM learning in their classrooms. Professional learning experiences are needed to cover how teachers can make connections between STEM topics and the everyday activities they are already doing with their students. STEM teaching and learning does not need to become one more add-on to the K-2 classroom. STEM learning should be a natural extension to what teachers are already teaching. It was with this in mind that we set out to write this book. We wanted to focus on how to naturally integrate STEM learning into K-2 classroom experiences"--