ARTICLES

McClure, Elisabeth R., Lisa Guernsey, Doug H. Clements, Susan Nall Bales, Jennifer Nichols, Nat Kendall-Taylor, and Michael H. Levine. 2017. "STEM Starts Early: Grounding Science, Technology, Engineering, and Math Education in Early Childhood." *The Joan Ganz Cooney Center at Sesame* Workshop. http://joanganzcooneycenter.org/wp-content/uploads/2017/01/jgcc_stemstartsearly_final.pdf.

This report describes research and the important roles of teachers and family engagement in early STEM learning. The authors provide recommendations for improving STEM learning during early childhood.

Hadani, Helen Shwe and Elizabeth Rood. 2018. "The Roots of STEM Success: Changing Early Learning Experiences to Build Lifelong Thinking Skills." *Center for Childhood Creativity at the Bay Area Discovery Museum.* http://centerforchildhoodcreativity.org/wp-content/uploads/sites/2/2018/02/CCC The Roots of STEM Early Learning.pdf.

This report provides teachers and families with key findings from a review of over 150 research studies on early STEM skills. Each section includes practical tips for supporting STEM learning in young children at home or at school.

WEB RESOURCES

National Center on Early Childhood Development, Teaching, and Learning. 2017. "Making It Work: Implementing Cultural Learning Experiences in American Indian and Alaska Native Early Learning Settings." Office of Head Start, Early Childhood Learning & Knowledge Center. https://eclkc.ohs.acf.hhs.gov/culture-language/article/making-it-work-implementing-cultural-learning-experiences-american-indian.

Making It Work is a suite of products that helps AIAN programs connect traditional cultural skills, values, beliefs, and lifeways to early childhood development and school readiness goals while involving families and community in the process.

National Center on Early Childhood Development, Teaching, and Learning. 2017. "Understanding STEAM and How Children Use It." Office of Head Start, Early Childhood Learning & Knowledge Center. https://eclkc.ohs.acf.hhs.gov/publication/understanding-steam-how-children-use-it.

This resource provides an overview of the STEAM fields and how children ages birth to five engage with STEAM concepts and materials. It also describes how adults can work with children to support the development of STEAM skills.

National Center on Early Childhood Development, Teaching, and Learning. "Using the Scientific Method." Office of Head Start, Early Childhood Learning & Knowledge Center. https://eclkc.ohs.acf.hhs.gov/video/using-scientific-method.

Using the Scientific Method is a 15-minute in-service suite that describes the steps in the scientific method and how teachers can use these steps in daily activities with children.

VIDEO

Ryan, Finn, Lukas Korver, Supaman, Keller Paap, and Brooke Ammann. n.d. "Waadookodaading Ojibwe Language Immersion School," Wisconsin *Public Television* video, 4:45. http://theways.org/story/waadookodaading.

This video features the Waadookodaading Ojibwe Language Immersion School and a cultural practice important to their community—going to sugar bush. This is a great example of incorporating STEAM skills into a cultural practice.

This video is available on The Ways website, which is produced by Wisconsin Public Television Education. The Ways is an educational resource featuring stories from different Native American communities near the central Great Lakes.

