Inquiry and exploration remain the premise behind the philosophical approach of STEM curriculum in early childhood education. Children are inherently inquisitive, and curiosity is deepened through educational opportunities that exist beyond classroom walls. Multidisciplinary research projects suggest that the benefits of outdoor pedagogy are boundless, yet we are witnessing a decline in children’s engagement with the natural world.

The Pumpkin Patch Project entails a comprehensive science, technology, engineering, and mathematics curriculum centered upon hands-on experimentation and collaborative inquiry. The STEM curriculum involves an array of activities that allow children to enhance existing knowledge while heightening conceptual understanding of the world in which they reside.

The goal-oriented project follows a sequential process with defined objectives where interrelated discipline skills are fostered though age-appropriate activities that encapsulate all senses. Children are able to comprehend complex life-cycle processes through active involvement in each of the stages from researching local species of pumpkins to identifying nutrients for soil fertility. Educators are encouraged to approach the activities through an emergent lens, in which children’s interests determine project direction, while adapting experiences based on the physical environment.

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