



**Umbrella Family and
Child Centres of Hamilton**

2.8 SCIENCE, TECHNOLOGY, ENGINEERING & MATH (STEM) POLICY

MANUAL	Child Care Centre Program Policy Manual
SECTION	2- Engagement
POLICY	2.8 STEM Policy
LAST REVISED	June 19, 2024

RATIONALE

“Children learn by questioning and testing theories in their play” (HDLH 2014). When children explore, build, create, predict, quantify, and collaborate, they are engaging in activities that build their skills in Science, Technology, Engineering, and Math (STEM). These experiences occur throughout the Umbrella program day when children have opportunities to explore materials both indoors and outdoors with the encouragement and support of staff.

RESPONSIBILITY

All staff.

PROCEDURE

Building with blocks or rocks, comparing the way water flows indoors and out, measuring and counting are some examples of how children’s experiences support the development of STEM skills across the curriculum. Umbrella staff build these opportunities into the daily routines and program plans, responding to and encouraging children’s natural curiosity.

These are some ways that Umbrella programs support the development of STEM skills:

1. Exploring natural environments
2. Block building
3. Observing, recording, and comparing weather patterns
4. Using calculators and iPads to solve problems
5. Stopping to listen to outdoor sounds
6. Providing materials such as “loose parts” that can be used to build
7. Using natural materials as opportunities to classify, count or compare
8. Setting up the environment to encourage problem solving
9. Talking about simple tools and machines within the children’s environment
10. Bringing natural materials indoors
11. Integrating children’s inquiries into future program planning
12. Ongoing project work

Policy Attachments: N/A

All policies and procedures are reviewed regularly to reflect Umbrella’s most current practice.