

## What Do We Know About STEM Learning for Young Children (ages birth to five years) with Disabilities?

We conducted an extensive review of the research – called a scoping review – to see what research evidence existed on STEM learning with young children with disabilities.

The scoping review found that the vast majority (92.6%) of the 486 references were related to children of preschool age (3-4 years old). Very few discussed infants (1.9%) or toddlers (1%). We also wanted to know if these 486 references covered young children with disabilities. We allowed the search to cover STEM learning in all early care arrangements (e.g., home, childcare, preschool, Head Start, etc.) for all children with and without disabilities, ages birth to five years.

We searched 102 different sources such as databases, direct searches of journals, reports, conference proceedings, master's theses, presentation transcripts, films, and dissertations) with 20 search terms. This yielded 1,407 unique references, which two-person teams independently reviewed for exclusion based on age and topic. We ended up with 486 unique references, which we categorized in several ways.

**Only 6% (n=29) of the references we found referred to children with disabilities.**

This review process showed STEMIE that evidence-based practices in STEM learning with young children with disabilities is a growing field and that there is an urgent need for additional knowledge development.

What's out there on STEM learning with children ages birth to 5 years with disabilities?

1407 UNIQUE REFERENCES



DOUBLE-RATER EXCLUSION FOR AGE AND TOPIC



486 REFERENCES ANALYZED

6%

CHILDREN WITH DISABILITIES

(unspecified, speech/language, visual impairment, autism, emotional disability, intellectual disability, multiple disabilities)



92.6%

PRESCHOOL AGE

2.9% Infants/ Toddlers

4.5% Other

102 Sources • 20 Search Terms  
January 24 to April 2, 2019

[stemie.fpg.unc.edu](http://stemie.fpg.unc.edu)