

# EARLY NUMERACY



Introducing mathematics at an early age is essential, as children undergo rapid brain development from birth to age five. Exposure to early literacy and numeracy are fundamental components of a high-quality early learning experience. Like early literacy, young children who can understand and work with numbers tend to have better outcomes later in life.

Research suggests that early math skills predict later literacy skills and a child's overall academic success.<sup>1-2</sup> Children who develop numeracy skills early on tend to have higher rates of high school graduation, are more likely to attend college, and generally have successful careers.<sup>3-4</sup>

## Why is Numeracy so Important?

By the time a child enters kindergarten, depending on factors such as their family's financial situation and exposure to quality early learning, they may be as far as two years behind their peers.<sup>8</sup> Intervening early with effective literacy and numeracy opportunities can significantly narrow this learning gap.

Investing in early childhood education ranks as one of the most effective strategies to set kids up for success, providing significant value not only to individual learners but also to the broader community.

## What is Early Numeracy?

Children start learning about mathematics long before they enter school. In fact, the foundational skills of learning numeracy begin as early as 3 months old.<sup>5</sup> As children grow, they develop number sense, shape awareness, and problem-solving skills.<sup>6</sup> Math skills are best taught through structured learning, teacher-led activities, and play.<sup>7</sup>

## DID YOU KNOW?

- **61%** of Montana's 3 and 4-year-olds are not enrolled in any type of early learning or school readiness program prior to entering kindergarten<sup>9</sup>
- **Montana is 1 of 4** states that does not offer publicly funded preschool<sup>10</sup>
- For every \$1 invested in early education, there is up to **\$16 in return**<sup>11</sup>
- **Only 38%** of Montana fourth graders are performing at or above proficient math achievement levels. That means more than 62 percent of students are not meeting a crucial marker<sup>12</sup>

## Montana Legislation

During the 2023 Legislative Session, Montana passed House Bill 352 recognizing the critical role of early literacy in the development of young children. This legislation paves the way for public school districts to offer early literacy intervention programs to 4-year-olds who are identified as at risk for not reading proficiently by the end of third grade. School districts that chose to participate started implementing these targeted interventions in 2024, providing essential support to those children who have been determined to need it.

## RECOMMENDATIONS

- **Maintain and Expand House Bill 352:** HB 352 is a great first step in promoting early learning. It offers the opportunity for school districts to receive funding to support early literacy intervention programming to children as young as 4-years-old and encourages connections between parents, school administrators, and local coalitions. The program should continue and expand to reach more children in need.
- **Incorporate Early Numeracy:** Early numeracy is critical to a child's development and later success. Montana should follow the path of other states such as Alabama, Arkansas, West Virginia, and Utah, and incorporate numeracy into the existing early literacy intervention law.

## Conclusion:

As Montana continues to make strides in developing effective early learning policies, it should consider implementing early numeracy interventions alongside its early literacy interventions. Through incorporating numeracy into early learning settings, providing professional development to early educators, and engaging families, Montana can work towards closing the achievement gap seen in students today.



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