

# Parent Engagement in Math: Why It Matters

## What is Parent Engagement?

Parent engagement refers to the active role that parents play in their children's education to facilitate learning and success (Ontario Ministry of Education, 2010).

Well-known examples of parent engagement include:



Homework Help



Volunteer Work in the School Community



Parent-Teacher Communication

Equally important subtle forms of parent engagement relate to parental attitudes towards education. They include:

- parental expectations about children's performance;
- parents' educational aspirations for their children;
- parent-child communication about the value of learning; and
- parental encouragement for learning (Fan & Chen, 2001; Jaynes, 2005; Vukovic, Roberts, & Wright, 2013).

## Why is Parent Engagement Important?

Parent engagement has a strong positive impact on student achievement. Studies show that regardless of a student's family background, socioeconomic status, or parents' educational background – parent engagement supports student learning (Harris, Andrew-Powell, & Goodall, 2009; Jaynes, 2005). Parent engagement can promote student success, particularly in challenging subject areas.

Student  
Achievement

## Why is Parent Engagement in Math Critical?

Research suggests that early math skills predict future school success (Duncan et al., 2007). However, Education Quality and Accountability Office (EQAO) math scores in Ontario English-language schools have experienced an eight-year steady decline. Currently, only 63% of Grade 3 students are meeting provincial standards and 50% of Grade 6 students meeting provincial standards.

Despite the importance of math education, parents tend to dedicate time with their children to literacy learning, but not mathematics (Epstein, 1991; Berkowitz et al., 2015). Also, the majority of adults have reported experiencing at least some anxiety with math, making it a challenge for most parents to work with their children on math (Berkowitz et al., 2015). Given the influence of parent engagement on student achievement, Ontario's Renewed Mathematics Strategy identifies parent engagement as an important area for improving student outcomes in math (Ontario Ministry of Education, 2016).

Grade 3 Students Meeting Provincial Math Standards



Grade 6 Students Meeting Provincial Math Standards

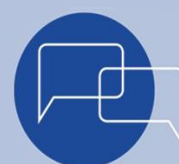


## What is the Bottom Line?

Parent Engagement in Math = Increased Student Math Achievement

### References

- Berkowitz, T., Schaeffer, M.W., Maloney, E.A., Paterson, C.G., Levine, S.C., Beilock, S.L. (2015). Math at home adds up to achievement in school. *Science*, 350, 196-198. doi 10.1126/science.aac7427
- Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., . . . Japel, C. (2007). School readiness and later achievement. *Developmental Psychology*, 43, 1428-1446.
- Epstein, J. L. (1991). Effects on student achievement of teachers' practices of parental involvement.
- Advances in reading/language research: Literacy through family, community, and school interaction (Vol. 5, pp. 261-276). Greenwich CT: JAI Press.
- Fan, X., & Chen, M. (2001). Parent involvement and students' academic achievement: a meta-analysis. *Educational Psychology Review*, 13, 1-22.
- Harris, A., Andrew-Power, K., & Goodall, J. (2009). Do parents know they matter? Raising achievement through parental engagement. London, UK: Continuum International Publishing Group.
- Ontario Ministry of Education. (2005). Parent voice in education project report. Toronto, ON: Queen's Printer for Ontario.
- Ontario Ministry of Education. (2010). Parents in partnership: A parent engagement policy for Ontario schools. Toronto, ON: Queen's Printer for Ontario.
- Ontario Ministry of Education. (2016). Ontario's renewed mathematics strategy [memo]. Retrieved from [http://www.edu.gov.on.ca/eng/policyfunding/memos/april2016/dm\\_math\\_strategy.pdf](http://www.edu.gov.on.ca/eng/policyfunding/memos/april2016/dm_math_strategy.pdf)
- Jaynes, W. (2005). A meta-analysis of the relation of parent involvement to urban elementary school student academic achievement. *Urban Education*, 40(3), 237-269.
- Vukovic, R.K., Roberts, S.O., & Wright, L.G. (2013). From Parental Involvement to Children's Mathematical Performance: The Role of Mathematics Anxiety. *Early Education and Development*, 24, 446-467.



Building Parent Engagement:  
A Project to Support the implementation of  
Ontario's Renewed Mathematics Strategy

