Children with fetal alcohol syndrome (FAS) and other disorders on the fetal alcohol spectrum (FASD) have a number of learning issues, but the most common academic problem is with Math. Many studies in different parts of the country report that both children and adults have a weakness in this area (e.g., Howell, et al., 2006). It is likely that prenatal alcohol exposure affects some of the brain systems that support the development of early math skills. These systems include motor skills and processing of visual/spatial information. Difficulties with working memory and planning are also believed to be important.

The Fetal Alcohol and Drug Clinic at the Marcus Institute in Atlanta, with the support of the Centers for Disease Control and Prevention (CDC), has developed a model program suitable for children, ages 3 to 9 years old, who are at risk for math problems. The first 4-year phase of this project has just ended. During that phase, the Clinic developed a model for educating parents and teachers about FAS and for tutoring children. This involved creating teaching methods and manuals for caregivers, teachers and tutors focusing on FAS facts, Caregiver Advocacy, Behavior Management, and Mathematics. The investigators found that children who received the 6-week intervention showed significant improvement in math skills and in graphomotor (handwriting) skills in comparison to a randomly assigned group who did not. Parents who participated in the program were well satisfied with it and reported that their children’s behavior had improved significantly.

The second 4-year phase of the program, which is called MILE (Math Interactive Learning Experience), will make the materials and activities of the intervention more accessible to families and other professionals. While services will continue to be provided at the Marcus Institute, in this second phase, WEB-based learning materials are being developed to allow parents and teachers to learn skills over the internet that will help in promoting learning in alcohol-affected children. Tutors at remote sites will have access to learning material to guide their interactions with students. Materials will be available at www.do2learn.com, a website dedicated to the education of children with disabilities, including those with FASD.

You can learn more about this program or volunteer to be a participant or a tutor by calling Kristen Mitchener, Ph.D. at 404-419-4253.

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References