

Research Evidence for the DECA Program
Jennifer Fleming, Research Associate, 2012

Social and emotional competence is a critical factor in children's development and school readiness. In 2002, Drs. C. Cybele Raver and Jane Knitzer published a landmark report that called attention to the importance of early social and emotional development in young children and how it impacts their later success. Dr. Raver, current Vice Provost of Academic, Faculty and Research Affairs at NYU, is an active researcher in the fields of social and emotional development and school readiness. Dr. Knitzer, former Executive Director of the National Center for Children in Poverty at the Mailman School of Public Health at Columbia University, was a leader in the field of early childhood policies and social and emotional issues in young children.

In this report, Raver and Knitzer (2002) highlighted growing evidence that children are more likely to succeed in the transition to school if they possess critical social, emotional, and behavioral skills such as the ability to identify their own and others emotions; relate to peers and adults in positive ways; manage feelings of anger, sadness, and frustration; and work independently and cooperatively. Furthermore, these skills were found to predict academic performance in elementary school, over and beyond their cognitive skills and family background.

However, the number of children who lack these important skills and go on to develop social, emotional, and behavioral problems is troubling. According to the New Freedom Commission on Mental Health (2003) one in every five children has social and emotional or mental health concerns. An estimated two-thirds of all young people with concerns are not getting the help they need (Mental Health America, 2011). These concerns, if left unaddressed, often impact a child's access to preschool and other care services (Gilliam & Shahar, 2006). Additionally, these concerns predict school failure and

more serious mental health problems such as depression, anxiety and conduct disorders which are expensive and difficult to treat (Raver & Knitzer, 2002).

In order to address these social, emotional, and behavioral concerns, early care and education settings are increasingly implementing social and emotional learning programs. The DECA Program, widely used by child care programs across the country, addresses the critical need of assessing children's social and emotional skills and using those results to plan and implement strategies that support children's development and readiness for school. Included below is a summary of research that has been conducted on the DECA, as it relates to school readiness, and in addition, examples from a few of the thousands of programs that use the DECA to prepare young children for school.

1. The Devereux Early Childhood Assessment (DECA) is well supported in early childhood research as a reliable measure of school readiness. Furthermore, research suggests that the predictive ability of the DECA to measure school readiness is at least equal to, if not greater than, academic measures.

- In a recent large-scale, longitudinal study, Dixon and colleagues (2011) with the Mayor's Commission for Children in Missouri examined children's social and emotional development and their readiness to enter kindergarten. In the fall of 2006 and spring of 2007, and later updated in the fall 2010, these researchers collected information on over 1,200 kindergarten children. Two assessments were used-- the DECA, as a measure of social and emotional functioning, and the DIAL-3, as a measure of motor, language, and conceptual development. Results supported the notion that children's social and emotional well-being is crucial for their readiness to enter school and their academic success. Furthermore, it was found that social and emotional skills, as measured by the DECA, were found to be a better predictor of school readiness and achievement

than socioeconomic variables. In a later, related study of 121 Head Start students, Underwood, Thomlinson, & D'Angelo (2008) found that although both are important, the total protective factors scores from the DECA explained more variance (49%) in teacher-rated school readiness than did academic skills (16%) as measured by the DIAL-3.

- De Feyter & Winsler (2009) have emphasized the importance of preschoolers' social-emotional well-being in predicting kindergarten success. Dr. Adam Winsler is a professor and researcher at George Mason University who has published extensively on early childhood education and school readiness. In a 5-year university and community collaborative project in Miami, FL, the DECA was used as a measure of school readiness. The project involved school readiness assessment for children described as "ethnically and linguistically diverse". The sample (n= 5,988) included low-income preschool children who were receiving funding to attend various early childhood programs, including public school and pre-K programs, family-based childcare, and center-based care. Researchers were able to tease out different findings and comparisons by drawing on this large sample. With the DECA used as a measure of school readiness, the authors concluded that social and emotional strengths are even more important for academic readiness than academic knowledge and skills, especially for first-generation immigrants.

2. Several research studies have shown that the DECA Program improves young children's protective factors. As noted above, children with strong protective factors are more likely to be successful in school than children who have low protective factors and/or behavioral concerns.

- In 2000, the Devereux Early Childhood Initiative (DECI, 2000) conducted a pilot study with two preschool sites in the suburbs of Philadelphia. Teachers implemented the DECA Program with

203 children. While teacher ratings in both target and control conditions showed significant increases in protective factors, only the target group showed a significant decrease in behavioral concerns, a critical factor for school success. Data from parent ratings supported the impact of the DECA Program: a greater percentage of children in the target group showed increases in protective factors and decreases in behavioral concerns compared to the control group.

- In 2001, the Devereux Early Childhood Initiative (DECI, 2001) conducted a pilot study with the Audubon Area Head Start Program in Kentucky. Teachers across multiple sites implemented the DECA Program with 342 preschool children. Results showed significant increases in children's Total Protective Factors in both the target (implemented DECA Program) and control sites as rated by teachers. However, children in the target group showed greater gains. For parent ratings, only children in the target condition showed gains in Total Protective Factors. In addition, there were significant decreases in Behavioral Concerns noted by teacher ratings in the target group. Behavioral concerns of control group children were perceived as worsening by both parent and teacher ratings.
- In 2004-2005, the Devereux Early Childhood Initiative (DECI, 2005) conducted another pilot study of the DECA Program, which also provides evidence that teachers implementing the strength-based assessment and planning system perceive significant improvements in children's protective factors and significant reductions in behavioral concerns. In a Head Start setting serving 434 children, the DECA Program was implemented in 24 classrooms. Teachers received initial training, and monthly onsite technical assistance. The teacher mean pre-test T-score on children's Total Protective Factors was 51 and the mean post-test T-score was 59.5, which was a statistically significant improvement across children. At the same time, teachers reported significant decreases in their students' average level of behavioral concerns. Although parents

did not receive direct intervention through the DECA Program, they reported significant improvements across all protective factor scales, implying that the effect of the classroom-based intervention was seen in homes. Furthermore, results also implicate a statistically significant positive relationship between teachers' knowledge of DECA concepts and implementation strategies and an increase in students' Total Protective Factors, further implicating the efficacy of the DECA to influence the social and emotional development of children.

- A study conducted by Dr. Kathy Thornburg and colleagues at the Center for Family Policy and Research of Missouri (personal communication, February 15, 2008) examined the effectiveness of the DECA Program with both quantitative and qualitative research methods. Dr. Thornburg is the past President of the National Association for the Education of Young Children (NAEYC) and the current Director of Early Childhood for Missouri. The Ready for School Program implemented the DECA Program within 19 classrooms and 7 centers. A total of 176 children were rated across at least three time points. Results on children's gains in social-emotional development from the teacher ratings showed that more than half of the children increased their scores on all subscales of the DECA by their last rating, and on some scales, almost two-thirds of children made gains. For the parent ratings, with the exception of the Attachment scale, more than half of children were rated higher by their parents by their last rating, and in some instances almost two-thirds made gains. Qualitative evaluations yielded results attesting to the positive impact of the DECA Program on children, families, and teachers. Teachers reported in focus groups that the program increased their knowledge of social-emotional development and provided them with useful strategies in teaching children to develop resiliency. Teachers, directors, parents, as well as the early childhood specialists reported seeing positive changes in children's behaviors, which are also reflected in the quantitative results described above.

Families who received home visits expressed their appreciation for the information, support, and expertise provided by home visitors as well as all staff associated with the project.

3. **DECA’s research-informed strategies are designed to promote young children’s protective**

factors. Each strategy used by the DECA Program relies on evidenced-based practices and strategies that have been linked to positive outcomes in children. These strategies have been selected based on thorough reviews of the research and practice literature and vetted by a team of researchers and practitioners.

4. **The DECA Program is widely used by early childhood programs to promote school readiness.**

Below is a list of a few examples where the DECA assessment and/or program is being used to promote school readiness:

- In Snohomish County, United Way’s Education Initiative focuses on social and emotional development because teachers have reported only 44% of children are entering kindergarten ready to make a strong start. The United Way is providing the tools and training (including DECA assessments and strategies) for parents, teachers and childcare providers at 54 sites to improve school readiness. Last year 1,300 children were part of their Education Initiative:

Of those assessed:

- 32% showed significant improvement in self-control
- 39% showed significant improvement in initiative
- 27% showed significant improvement in attachment

For more information, go to United Way’s site at <http://www.uwsc.org/education.php>.

- The U.S. Department of Education, Foundations for Learning program, supports projects that help children become ready for school, by focusing on a child's emotional, social, and behavioral development. In its *Promotion of School Readiness through Early Childhood Emotional, Behavioral and Social Development* 2009 grant the Devereux Early Childhood Assessment was one of four assessments chosen to measure school readiness.

For more information, go to: www.ed.gov/programs/learningfoundations/applicant.html.

- Educare Centers are high quality child care programs that focus on supporting children who are at risk of school failure. This is a model demonstration program, funded by the Buffett Early Childhood Fund, that is under evaluation for national replication. Educare views children's social and emotional skill development as critical to school success, and measures social and emotional skills using the Devereux Early Childhood Assessment (DECA).

For more information, go to: www.educareschools.org

References

- Crane, J., Mincic, M. S., & Winsler, A. (2011). Parent-teacher agreement and reliability on the Devereux Early Childhood Assessment (DECA) in English and Spanish for ethnically diverse children living in poverty. *Early Education & Development, 22*, 520-547.
- De Feyter, J.J., & Winsler, A. (2009). The early developmental competencies and school readiness of low-income, immigrant children: Influences of generation, race/ethnicity, and national origins. *Early Childhood Research Quarterly, 24*, 411-431.
- Devereux Early Childhood Initiative. (2000). Pilot study one of the Devereux Early Childhood Assessment Program-Year 2. *Devereux early childhood initiative: Research bulletin #1*. Retrieved December 15, 2007, from http://www.devereux.org/site/PageServer?pagename=deci_research_bulletins.
- Devereux Early Childhood Initiative. (2001). Pilot study two of the Devereux Early Childhood Assessment Program-Year 2. *Devereux early childhood initiative: Research bulletin #5*. Retrieved December 15, 2007, from http://www.devereux.org/site/PageServer?pagename=deci_research_bulletins.
- Devereux Early Childhood Initiative. (2005). Pilot study of the Devereux Early Childhood Assessment Program-Year 2. Unpublished manuscript.
- Dixon, D.J., Duncan Fallone, M., & Martin, J.D. (2011). *Readiness for kindergarten II: A follow-up study*. Mayor's Commission for Children: Springfield: MO.
- Gilliam, W. S., & Shahar, G. (2006). Preschool and child care expulsion and suspension: Rates and predictors in one state. *Infants & Young Children, 19*, 228-245.

LeBuffe, P.A. & Naglieri, J.A. (1999). *The Devereux Early Childhood Assessment (DECA-C): A measure of behaviors related to risk and resilience in preschool children*. Lewisville, NC: Kaplan Press.

Mental Health America (2011). *Children's Mental Health Statistics*. Retrieved from <http://www.nmha.org/go/information/get-info/children-s-mental-health/children-s-mental-health-statistics>.

New Freedom Commission on Mental Health (2003). *Achieving the Promise: Transforming Mental Health Care in America* (DHHS Pub. No. SMA-03- 3832). Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.

Raver, C. C. & Knitzer, J. (2002). *Ready to enter: What research tells policymakers about strategies to promote social and emotional school readiness among three- and four-year-old children (Promoting the Emotional Well-Being of Children and Families Policy Paper No. 3)*. New York, NY: National Center for Children in Poverty, Columbia University Mailman School of Public Health.

Underwood, T., Thomlinson, P., & D'Angelo, S. (2008, February). Social and emotional skills in prediction of school readiness. Poster presented at the 21st Annual Children's Mental Health Research Conference. Tampa, FL.