

Preschool Outcomes in Iowa's SPDG

The Preschool Strandⁱ of Iowa's SPDG is aimed at "ensuring preschool teams are confident and competent in providing high quality Specially Designed Instruction (SDI)"ⁱⁱ in order to improve outcomes for young children with disabilities in inclusive preschool settings. Participating preschool sites engage in a three-year professional learning process depicted in **Figure 1**. Each "cog" of the process is explained in the bulleted statements below the figure.

Figure 1
Iowa SPDG Preschool Strand Professional Learning Process



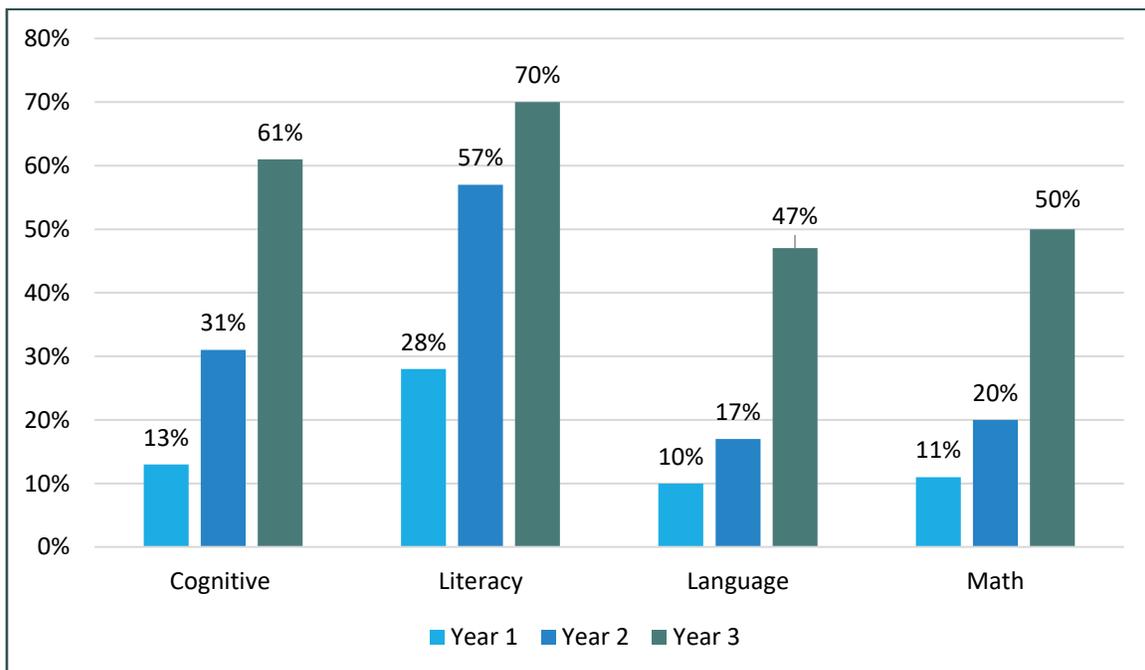
Source: <https://sites.google.com/view/preschoolsdi/home>

- Monthly training – participants learn to apply the SDI Framework and the DEC Recommended Practices using a variety of protocols, assessments, and tools
- Coaching – educators meet bi-monthly or more frequently with designated SDI Coaches to follow up on use of training content and materials, and to receive additional supports including the modeling of practices
- Action Planning – teachers, with the SDI Coach's support, create Action Plans for outlining and monitoring their SDI implementation progress
- Teaming – SDI teams, which include teachers, the SDI Coach, para-educators, support service providers, and administrators, meet regularly to discuss SDI implementation, data, and instructional plans for children
- Fidelity measures - members of the SDI teams use implementation measures to track their progress and ensure that they are implementing the various components of the SDI Framework with integrity

This issue of the *SPDG Spotlight* examines preschool outcomes for children with disabilities in sites that participated for one to three years in the Preschool Strand’s professional learning process. The study used the GOLD assessment to measure child development outcomes in six areas including literacy, language, cognitive, mathematics, social-emotional, and physical. Educators completed the observation-based assessment in the fall of 2018 and the spring of 2019. Children’s performance in each area of the assessment was compared to widely held expectations to determine if “knowledge, skills, and abilities [were] below, meeting or exceeding their age or class/grade’s expected range of knowledge, skills, and abilities.”ⁱⁱⁱ The percentage of 4-year-old children with disabilities who met or exceeded widely held expectations in each outcome area was compared across the three Preschool Strand participation groups (i.e., one, two and three year sites).^{iv}

Figure 2 displays the percentage of 4-year-old children with disabilities who met/exceeded widely held expectations on the spring GOLD assessment in sites that participated in the SDI grant for one to three years. The GOLD assessment content areas displayed in the figure include cognitive, literacy, language, and math.^v

Figure 2
Spring GOLD Data: Percentage of 4-Year-Old Children with Disabilities Meeting/Exceeding Expectations
Comparison between Preschool Sites in Years 1-3 of the Grant



Source of data: GOLD Assessment; see endnote for sample sizes

As seen in the figure, the percentage of 4-year-old children with disabilities who met or exceeded widely held expectations in the spring of 2019 was higher in sites that participated in the Preschool Strand for three years compared to sites that participated for one or two years. In several outcomes areas, the percentages were nearly double (or more) in year three sites compared to the percentages in year one and two sites. For example, 61% of 4-year-old children in year three

sites met/exceeded widely held expectations on the cognitive subtest compared to 31% in year two and 13% in year one. In the area of language, 47% of children in year three sites met/exceeded widely held expectations compared to 17% in year two and 10% in year one. A similar pattern of performance was seen in math. Percentage differences were statistically significant after factoring out children's performance in the fall and several other characteristics that were found to be related to spring performance.^{vi}

In addition to higher preschool outcomes, the study also found higher SDI implementation levels in year three sites. For example, between 70-82% of teachers in year three sites reported the highest levels of implementation across the three components of the SDI Framework. By comparison, between 43-59% of teachers in year one and two sites reported the same. Prior studies conducted on the grant have shown significant relationships between SDI implementation and student outcomes at the elementary school level.^{vii} The current study also confirmed positive associations between SDI implementation and outcomes at the preschool level.

Summary

This issue of the *SPDG Spotlight* demonstrates the benefits of three years of grant participation on preschool outcomes. Specifically, a higher percentage of 4-year-old children with disabilities met/exceeded widely held expectations in four developmental areas in three-year sites compared to year one or two sites. The differences were statistically significant after factoring out fall scores and other variables related to children's performance on the GOLD assessment. Teachers in year three sites also reported higher implementation of SDI practices compared to teachers in year one and two sites, which was related to preschool outcomes.

Future studies will examine the long-term impact of the grant on kindergarten outcomes for children who participated in the Preschool Strand sites.

About Iowa's SPDG and the Evaluation

In October 2015, the Iowa Department of Education received a five-year SPDG funding award from the Office of Special Education Programs, called *Ensuring Effective Specially Designed Instruction* (SDI). The project will develop a statewide system to effectively implement and support personnel preparation and professional development in the area of specially designed instruction. The goal is to build the capacity of educators to effectively implement SDI and improve literacy outcomes for learners with disabilities.

Measurement Incorporated was contracted by the Iowa Department of Education to conduct a 5-year, independent evaluation of the SPDG grant. The evaluation is designed to provide both formative and summative data to support decision making on the development and implementation of grant activities. For further information about the Spotlight or about the evaluation, please contact Dr. Shelly Menendez at (630) 857-9592 or smenendez@measinc.com.

ⁱ Preschool is one of four instructional focus areas (strands) that comprise Iowa's SPDG. It is led by Betsy Lin, Education Consultant in the Bureau of Learner Strategies and Supports at the Iowa Department of Education.

ⁱⁱ <https://sites.google.com/view/preschoolsdi/home>

ⁱⁱⁱ <https://teachingstrategies.force.com/portal/s/article/What-are-widely-held-expectations>

^{iv} The sample included 9 sites in year 1 with 15 teachers and 38 children, 6 sites in year 2 with 13 teachers and 31 children; and 11 sites in year 3 with 19 teachers and 52 children. The study attempted to identify non-participating sites to serve as a comparison group but was unable to find reasonable matches using a combination of district size, percentage of white students, and fall performance.

^v GOLD assessment also includes physical and SEL content areas; however, differences between sites were not statistically significant and therefore not included in the figure.

^{vi} ANCOVA analyses were performed with fall performance, district size, and percentage of white students included as covariates.

^{vii} SPDG Spotlight, May 2019, Issue 9