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# EVALUATING THE IMPACT of Nebraska's School Improvement Grants

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## **CONTENTS**

<b>Executive Summary</b>	<b>1</b>
<b>Introduction</b>	<b>1</b>
<b>Nebraska Grantee Descriptions</b>	<b>3</b>
<b>Overview of Evaluation Plan</b>	<b>4</b>
Evaluation Questions	5
CIPP Model	5
Methodology	8
Data Analysis Plan	8
Reporting and Dissemination Plan	8
Timeline	8
<b>Baseline Study</b>	<b>10</b>
Baseline Evaluation Question	10
Methodology	10
Data Analytic Approach	10
Results	10
Discussion	15
<b>Summary</b>	<b>15</b>

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## EXECUTIVE SUMMARY

This white paper summarizes the development of an evaluation plan to measure the educational improvement in Title I schools that have received School Improvement Grants (SIGs). In developing this plan, a baseline study was conducted to provide comparisons of seven schools representing six districts in Nebraska's Cohort 1 SIGs awarded in 2010. Longitudinal school level data was examined to compare five categories of schools: (1) Title I: Needs Improvement; (2) Title I: Not Needs Improvement; (3) Non-Title I: Needs Improvement; (4) Non-Title I: Not Needs Improvement; and (5) SIG Funded Schools. Each school is a member of one, and only one, of these five categories and their membership throughout all data years examined is based on their status in 2010-2011. The primary outcomes of interest in the baseline study were NeSA Math and Reading proficiency, AYP decisions, student attendance rate, number of discipline incidents, four-year cohort graduation rate and dropout rate.

In preceding evaluations of school improvement programs in Nebraska, qualitative methods were used to examine the implementation of the school improvement plans for improving student achievement. However, as the Cohort 1 SIGs have come to an end, the focus of study has shifted to the effectiveness of the Transformation model in improving student achievement. The proposed evaluation plan contained within this report is designed to represent an innovative mixed methods approach to evaluating the impact of SIG grants on academic outcomes for students in Nebraska schools.

The University of Nebraska-Lincoln's Educational Administration Department (EDAD) and the Nebraska Center for Research on Children, Youth, Families and Schools (CYFS) worked collaboratively with Nebraska Department of Education (NDE) personnel to accomplish the primary purposes of this evaluation, which were: (1) identify alternative approaches for evaluating the impact of SIG funding on student outcomes; (2) develop an innovative comprehensive evaluation plan for assessing the impact of SIG funding in Nebraska Title I: Needs Improvement schools; and (3) conduct a baseline study consisting of comparisons of SIG funded schools with schools in other pre-determined categories.

## INTRODUCTION

As a condition of receiving federal funds under No Child Left Behind (NCLB), all states are required to define a process for identifying groups of students, schools and districts as being in need of improvement. This requirement, termed Adequate Yearly Progress (AYP), is an annual status check of identified data elements to determine whether or not buildings and districts are meeting state AYP progress goals. If a school with a Title I program does not make AYP progress goals in two consecutive years, the school is designated as "needs improvement." In the first year of designation, "needs improvement" schools must provide students with the option to transfer to another school within the same district. In the 2nd year of designation, "needs improvement" schools must provide students with supplemental education services (e.g., tutoring) in addition to the option to transfer. Additional sanctions apply the longer a Title I school does not meet AYP requirements (Nebraska Department of Education, 2013).

In an effort to turn around the nation's lowest performing schools, \$3 billion of the American Recovery and Reinvestment Act (ARRA) of 2009 was allocated to the United States Department of Education (U.S. DoE) to provide adequate resources to raise the achievement of students in Title I: Needs Improvement schools in order to meet AYP and exit "needs improvement" status. The SIGs, authorized under section 1003(g) of Title I of the Elementary and Secondary Education Act of 1965, are competitive grants designed to increase student achievement in the lowest performing schools demonstrating the greatest need. To be considered for SIG funds, during the application process the state education agency (SEA) and the local education agency (LEA) are required to be responsive to the following key areas: (1) demonstrate a substantial need for funding; (2) selection of a SIG model appropriate for improving a specific school; (3) a strong commitment to implement the model with fidelity; (4) a budget supporting and explaining the use for the funds; and (5) specific activities which will take place in order to assist with raising student achievement. The use of SIG funds are expected to improve student proficiency, increase the numbers of schools that make AYP, increase use of data to inform decisions and create a system of continuous

feedback and improvement (Nebraska Department of Education, 2013).

School districts awarded funding are required to implement one of four school improvement models: Closure, Restart, Turnaround or Transformation. Each model consists of specific requirements for principals,

teachers, providers and school operators. These models differ in start-up and ongoing operating costs and vary in how they impact key stakeholders within the community and school. However, all of the models are designed to improve student achievement. A brief description of each model is provided in Box A below.

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### BOX A. School Improvement Models

Federal guidance requires schools receiving section 1003(g) SIG funds to use one of the following school improvement models:

- **Transformation:** Implement each of the following strategies: (1) replace the principal and take steps to increase teacher and school leader effectiveness; (2) institute comprehensive instructional reforms; (3) increase learning time and create community-oriented schools; and (4) provide operational flexibility and sustained support.
- **Turnaround:** Replace the principal and rehire no more than 50% of the staff, and grant the principal

sufficient operational flexibility (including in staffing, calendars/time and budgeting) to fully implement a comprehensive approach to substantially improve student outcomes.

- **Restart:** Convert a school or close and reopen it under a charter school operator, a charter management organization, or an education management organization that has been selected through a rigorous review process.
- **School closure:** Close a school and enroll the students who attended that school in other schools in the district that are higher achieving.

*Source: U.S. Department of Education, 2011*

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Nebraska Cohort 1 SIG recipients overwhelmingly opted for the Transformation model. This choice is consistent with findings by O'Brien & Dervarics (2013), which suggest the Transformation model is the most popular among SIG grantees due to the flexibility it offers. The U.S. Department of Education (2011) reported that the Transformation model was chosen by 74% of first-round grantees. Research conducted by the Centers on Education Policy (2012) suggests the Transformation model has a positive impact, with more than half of 45 states implementing this model reporting varying levels of improvement in student achievement. This study also concluded that 25 of the 45 states utilizing this model indicated that replacing the principal is a key element to improving student achievement.

### NEBRASKA GRANTEE DESCRIPTIONS

In 2010, over \$12 million in SIG funds were allocated to 7 of the 16 Title I: Needs Improvement schools applying for funding. The range of funding for these schools was between \$1.2 million to \$3.3 million for the duration of three years. The selected schools were located in six districts; with one district having two schools. Six of the schools are located in rural communities and

one of the schools is located in an urban community. Tables 1 through 3 provide background descriptive information for Nebraska's Cohort 1 SIG recipients. Key characteristics of each school include:

**Crawford Elementary School** is a pre-K through 6 elementary school serving 125 students in the community of Crawford, Nebraska. The community of Crawford consists of approximately 1000 people and is located in the far northwestern corner of the state. Ethnic diversity is very limited with approximately 95% of the student population being White.

**Santee Community School** is a K-12 public school district serving 149 students. The district is within the confines of the Santee Sioux Nation Reservation in Northeast Nebraska and located in the village of Santee. The village has approximately 500 people. The student population is nearly 90% Native American, the majority of whom are from low socio-economic families. Approximately 50% of Santee students live in a single-parent or grandparent as caregiver home.

**Elliott Elementary School** belongs to the Lincoln Public School district, the second largest public school district in Nebraska. Elliott's strength lies in its diversity. The

ethnic breakdown does not capture the cultural and linguistic diversity of the school. There is a growing population of children, new to the United States from the Middle East and Europe, reflected in the ethnic code of white. There are 26 first languages spoken by the children at Elliott.

**Madison Elementary School** is located in the community of Madison, Nebraska. The community of nearly 2400 people is situated in Northeast Nebraska. Madison Elementary School serves a high proportion of Hispanic students.

**Minatare Elementary School** is a rural school located in the far western Nebraska community of Minatare. The Minatare community has a population just over 800. Approximately 80% of the students are designated with free or reduced lunch status and over 44% are minority students.

**Winnebago Public High School** is located in northeastern Nebraska in Winnebago, a village of less than 800 residents. The student body is approximately 93% American Indian. The majority of the students are members of the Winnebago Tribe of Nebraska.

**TABLE 1. SIG Allocations for Cohort 1 SIG Schools: 2010-2011**

District Name	School Name	Tier	Total Sig. Allocation
Crawford Public Schools	Crawford Elementary School	1	\$1,259,970
Santee Community Schools	Santee High School	1	\$1,616,492
Santee Community Schools	Santee Elementary School	1	\$1,527,551
Lincoln Public Schools	Elliott Elementary School	1	\$3,348,743
Madison Public Schools	Madison Elementary School	1	\$1,508,750
Minatare Public Schools	Minatare Elementary School	1	\$1,440,547
Winnebago Public Schools	Winnebago High School	1	\$1,961,423
	<b>Total</b>		<b>\$12,663,446</b>

**TABLE 2. School Characteristics for Cohort 1 SIG Schools: 2010-2011**

School Name	Grade Range	FRL	ELL	Mobility	Enrollment	Teachers w. Master's	Avg. Years Experience
Crawford Elementary School	PK-6	39.8%	*	9.6%	104	14.3%	17.9
Santee High School	9-12	80.4%	*	37.5%	56	28.6%	9.4
Santee Elementary School	K-6	79.8%	*	22.6%	93	20.0%	9.9
Elliott Elementary School	K-5	93.0%	33.5%	28.1%	388	27.5%	8.9
Madison Elementary School	PK-5	59.1%	13.3%	22.9%	188	38.1%	19.3
Minatare Elementary School	K-6	73.9%	18.9%	26.1%	111	0.0%	14.0
Winnebago High School	9-12	77.9%	*	42.0%	131	44.4%	13.9

\*Data has been masked to protect the identity of students using one the following criteria:

- Fewer than 10 students were reported in a group. Fewer than 5 students were reported at a performance level.
- All students were reported in a single group or performance category.

**TABLE 3. Student Race/Ethnicity for Cohort 1 SIG Schools: 2010-2011**

School Name	Hispanic	American Indian/Alaskan Native	Asian	Black or African American	Native Hawaiian or other Pacific Islander	White	Two or More Races
Crawford Elementary School	1.9%	2.9%	0.0%	0.0%	0.0%	95.2%	0.0%
Santee High School	7.1%	92.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Santee Elementary School	11.8%	88.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Elliott Elementary School	29.9%	3.4%	10.3%	16.2%	0.0%	28.4%	11.9%
Madison Elementary School	80.3%	0.5%	0.5%	1.6%	0.0%	17.0%	0.0%
Minatare Elementary School	42.3%	2.7%	0.0%	0.0%	0.0%	55.0%	0.0%
Winnebago High School	6.1%	93.1%	0.0%	0.0%	0.0%	0.8%	0.0%

## OVERVIEW OF THE EVALUATION PLAN

Previous evaluation efforts contracted by NDE have focused primarily on administrator and teacher perceptions of the implementation of school improvement plans in Title I: Needs Improvement, Title I: Not in Need of Improvement and Non-Title I: Needs Improvement schools (Isernhagen & Florendo, 2011, 2012, 2013; Isernhagen, 2010). These studies provided recommendations for the effective implementation of Title I School Improvement plans based on qualitative data collected from administrators and teachers through interviews and surveys (Isernhagen & Florendo, 2011, 2012, 2013; Isernhagen, 2010). The current evaluation builds upon these efforts through the development of a comprehensive evaluation plan using a theoretical evaluation framework to determine the impacts of SIGs on receiving districts and schools. The availability of administrative data from the Nebraska State Longitudinal Data System (SLDS), as well as data from other sources, will be leveraged to implement innovative quantitative methods suitable for a rigorous impact evaluation.

The current evaluation plan was informed through an intensive literature review focused on the impact of SIG funding in schools across the nation. The most comprehensive of the evaluation studies reviewed was conducted in SIG funded schools in Michigan. The evaluation, conducted by WestEd (Coscarella et al., 2012), serves as a model for evaluating the implementation and impact of SIG funding. The methodological rigor used by WestEd represents

an innovative, mixed methods approach sufficient for addressing the impact of SIG funding on student achievement. The proposed evaluation for Nebraska schools builds upon the WestEd evaluation through the use of comparable methodology in the context of the widely utilized and effective Context-Input-Process-Product (CIPP) evaluation model put forth by Stufflebeam (2003). In addition, the Utilization Focused Evaluation (UFE: Patton, 2008) approach will be adopted to facilitate use within each element of the CIPP model.

The use of the CIPP and UFE models requires frequent stakeholder input during each step of the evaluation process, including the development of the evaluation plan. Therefore, the proposed plan will require critical feedback from leaders within NDE prior to being finalized. As a precursor to full implementation of the proposed evaluation plan, a baseline study was conducted to examine the impact on a limited set of outcomes contained in the Nebraska SLDS.

**Evaluation Questions.** The proposed evaluation plan will focus on three primary questions:

- (1) How are the schools and districts implementing the Transformation model?
  - a. How was the Transformation model intended to be implemented within each school?
  - b. To what extent are the schools implementing the Transformation models as intended?
- (2) What impact does SIG funding have on student and teacher outcomes in Title I: Needs Improvement schools receiving SIGs?

- a. What impact does SIG funding have on student academic achievement?
  - b. What impact does SIG funding have on student participation in school (i.e., attendance, behavior, retention, graduation)?
  - c. What impact does SIG funding have on teacher retention?
- 3) What is the relationship between the implementation of the Transformation model and outcomes in schools that receive SIG funding?

**CIPP Model.** The CIPP model consists of evaluation activities focused on context, input, process and product evaluations. The collection of these four types of evaluation data will allow the evaluation team to: (1) determine the impact of the Transformational model on academic achievement; (2) develop a process for measuring fidelity of implementation to the Transformation model; and (3) examine the relationship between implementation fidelity and academic achievement.

The *context* evaluation will be used to assess needs, assets and problems within the Title I: Needs Improvement schools receiving SIGs. While the Transformation model was adopted for each of these schools, the contextual issues inherent to each school vary to some degree. For instance, schools with a high proportion of American Indian students experience different issues than schools with a high proportion of Hispanic students. The impact of context on the implementation of the Transformation model can be examined during this stage of the evaluation. Likewise, addressing the context of each school is essential for providing important information for the other elements of the CIPP model. An extensive review of documentation related to each school's application for school improvement funds will be conducted to identify if a particular area of need should be a focus of the evaluation in each school. Structured interview data will be collected from key stakeholders on a biannual basis to supplement the document review. This data will be used in a formative manner to provide feedback to key stakeholders.

The *input* evaluation will be used to assess the key components of the Transformation model within each school. Various types of data will be collected from stakeholders. Brief, electronic surveys will be administered to select staff members within each school to determine their perception of the various strategies implemented as part of the Transformation model. Staff members will also be asked to participate in focus

groups gauging their experiences implementing different elements of the Transformation model.

The *process* evaluation will monitor, document, and assess the activities implemented in each school through the Transformation model. This will require an evaluation team member to monitor and observe implementation of model based activities on a regular basis. This individual will work closely with key school staff members to document these activities for the purposes of continuous improvement (i.e., formative feedback) and adherence to the Transformation model components. Structured interviews will be conducted with key personnel and program beneficiaries (i.e., teachers, students, parents) to gauge their perception of the implementation of the Transformation model. The evaluation team member engaged with the schools on a regular basis will also have the opportunity to begin collecting information which can be used to develop a means for measuring implementation fidelity.

The *product* evaluation will assess the impact of the transformation model on school, teacher and student level outcomes, particularly those directly related to academic achievement. The Nebraska SLDS will be used along with supplemental district level information to address questions related to teacher retention as well as student behavior, attendance, retention and graduation rates along with academic performance on the NeSA in select subject areas. In addition, district specific measures, such as the Northwest Evaluation Association's (NWEA) Measures of Academic Progress (MAP), will be obtained either through the district.

School level indicator data will also be utilized within each element of the CIPP model. A number of indicators have been identified to monitor the effectiveness of the SIGs in recipient schools. Certain indicators are required to be reported by the LEA as outlined by the U.S. DoE (2012):

- An LEA must monitor each Tier I and Tier II school that receives SIG funds to determine whether the school . . .
- (1) . . . is meeting annual goals established by the LEA for student achievement on the State's ESEA assessments in both reading/language arts and mathematics.
  - (2) . . . is making progress on the leading indicators described in the final requirements.

In addition to the required indicators, Table 4 identifies additional outcome indicators, many of which are currently collected in the Nebraska SLDS. These indicators will also be monitored longitudinally to track improvements in key areas related to SIG funding.

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**TABLE 4. Core Components and Outcome Indicators of the CIPP Evaluation Framework**

**CONTEXT**

Analysis of school demographics and assessment of achievement gaps by subgroups

Identification of program goals

Examination of stakeholder needs and assets

**INPUT**

\*Which intervention the school used (i.e., turnaround, restart, school closure, or transformation)

Review of planned implementation procedures against evidence-based strategies

**PROCESS**

Review of LEA grant applications

Interviews with state, district, and school level administrators

Site observations

Teacher surveys

**PRODUCT**

\*Leading Indicators; number of minutes in school year, student participation rate on state assessments, dropout rate, student attendance rate, advanced coursework, discipline incidents, truants, teacher performance, teacher attendance rate.

AYP status and AYP targets met and missed

School improvement status

Percentage of students at or above each proficiency level on state assessments in reading/language arts and mathematics (e.g., Basic, Proficient, Advanced), by grade and by student subgroup.

\*Average scale scores on state assessments in reading/language arts and in mathematics, by grade, for the “all students” group, for each achievement quartile, and for each subgroup.

Percentage of limited English proficient students who attain English language proficiency

Graduation rate and college enrollment rates

District specific measures (e.g. local formative assessments)

*\*Required reporting metrics for all SIG schools*

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The development of the “Accountability for a Quality Education System, Today and Tomorrow” (A QuESTT) framework will require the evaluation team to reconsider the selected indicators. The evaluation team will work collaboratively with NDE leadership and personnel to ensure the SIG evaluation framework, and identified outcome indicators, align with the core tenets of A QuESTT.

**Methodology.** A longitudinal mixed-methods quasi-experimental design will be utilized to determine the impact of the SIG funding on student outcomes. The inability to implement the gold standard randomized control trial necessitates the use of an innovative approach for creating a comparison group to most accurately gauge the impact of the Transformation model in Nebraska schools. The innovative approach chosen for this evaluation is the propensity score (PS) method (Rosenbaum & Rubin, 1983). The PS method is useful in studies where a treatment is not (or cannot) be randomly assigned, which is the case in this study where SIG schools are systematically chosen based on multiple factors. The PS method will be used to empirically identify a group of comparison schools which are as similar as possible (at baseline) to the Title

I: Needs Improvement schools which have received SIG funding. The group identified via the PS method will be included in futures analyses and compared to groups identified by NDE and the evaluation team to extend the baseline study included in this evaluation plan.

**Data Analysis Plan.** The relatively small number of schools awarded SIG funds limits the analyses that can be conducted at the school level to non-parametric statistical approaches. While non-parametric approaches provide meaningful information, a more powerful statistical method commonly employed in educational contexts is multi-level modeling (MLM; Snijders & Bosker, 1999). Also known as hierarchical linear modeling (HLM; Raudenbush & Bryk, 2002), this approach takes into account the nesting which naturally occurs in education settings. In the context of the Nebraska SIG evaluation plan, taking into consideration the nesting of students within schools will lead to a stronger understanding of the true impact of SIG funds on student outcomes. Student level data will be sought from districts and NDE in order for the MLM approach to be implemented.

### Reporting, Dissemination Plan and Timeline.

The evaluation team will contribute reports and disseminate information consistent with the timeline provided in Table 5. A report will be provided to NDE for each element of the CIPP model. Corresponding to each report, a meeting will be held with NDE personnel to discuss the findings and determine the

appropriateness of disseminating information to other stakeholders (i.e., school and/or district personnel). These reports will be formative so it is essential for the evaluation team and NDE to discuss results in a timely manner. A final summative report and presentation will be provided to NDE and other key stakeholders at the conclusion of the evaluation.

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**TABLE 5. Timeline for Evaluation Activities**

<b>ACTIVITIES</b>	<b>DATES</b>
<b>Context</b>	
Review school documentation and SIG proposals	Nov 14 – Dec 14
Meet with NDE – finalize evaluation plan	Nov 14
Identify/interview key stakeholders	Dec 14 – Feb 15
Devise a system to monitor school environment	Dec 14, Jan 15, Feb 15
Prepare/deliver report on school environment	Feb 15
Engage key stakeholders in feedback workshop	Feb 15
<b>Input</b>	
Assess SIG strategy against school needs	Nov 14 – Dec 14
Assess SIG budget to meet school needs	Nov 14 – Dec 14
Assess SIG work plan/schedule	Nov 14 – Dec 14
Devise surveys, collect/analyze data from key stakeholders	Dec 14 – Feb 15
Prepare/deliver report on school environment	Feb 2015
Engage key stakeholders in feedback workshop	Feb 2015
<b>Process</b>	
Engage evaluation team members to continuously monitor SIG implementation	Nov 2014 – Mar 2015
Collect data pertinent to SIG implementation	Dec 2014 – Mar 2015
Structured interviews with key stakeholders	Dec 2014 – Mar 2015
Prepare/deliver report on implementation of SIG	Feb 2015 – April 2015
Engage key stakeholders in feedback workshop	Feb 2015 – April 2015
Finalize measure of implementation fidelity	Feb 2015 – April 2015
<b>Product</b>	
Identify and record groups served	Nov 2014 – Feb 2015
Obtain access to key data sources	Nov 2014 – April 2015
Conduct analyses of extant data sources	April 2015 – July 2015
Structured interviews/focus groups with key stakeholders	Jan 2015 – Mar 2015
Prepare/deliver impact evaluation report	Aug 2015
Engage key stakeholders in feedback workshop	Aug 2015
Prepare/deliver final summative report	Aug 2015 – Oct 2015
Present final summative report to key stakeholders	Oct 2015

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## BASELINE STUDY

For the baseline analyses, NDE provided the evaluation team with aggregated data collected through the Nebraska Student and Staff Record System (NSSRS) for the academic years, 2010-2011, 2011-2012, and 2012-2013. The following analyses serve as a foundation for the continued monitoring of student and school level outcomes. In particular the pilot analyses below use select leading indicators and academic outcomes as a model for showing the impact of SIG funding on student and school outcomes.

**Baseline Evaluation Question.** The baseline study will address the following evaluation question:

What impact does the SIG funding have on student outcomes in Title I: Needs Improvement schools which have received SIG funding?

**Methodology.** A longitudinal quasi-experimental design with pre-determined comparison groups was used in the baseline study. All Nebraska schools were included in the study with groupings based on Title I

and School Improvement status. The groups included: (1) Title I: Needs Improvement; (2) Title I: Not Needs Improvement; (3) Non-Title I: Needs Improvement; (4) Non-Title I: Not Needs Improvement; and (5) SIG Funded Schools.

**Data Analytic Approach.** Descriptive and non-parametric statistical analyses were used to address the baseline evaluation question. Specifically, the Kruskal-Wallis H test was used to test for group differences on NeSA Mathematics and Reading scores. This test was used as an alternative to traditional Analysis of Variance (ANOVA) techniques given the small number of schools receiving SIG funds.

**Results.** Tables 6 and 7 display AYP for SIG Cohort 1 schools over three academic years. For an in-depth description of how AYP determinations are made, please refer to the NDE document AYP guidance, diagrams, and instructions (NDE, 2013). In Table 7, “AYP Other” represents the state writing goal for elementary schools and state graduation rate goal for high schools.

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**TABLE 6. Federal Accountability Rating by Year**

School Name	2010-2011	2011-2012	2012-2013
Crawford Elementary School	MET	MET	NOT MET
Santee High School	NOT MET	NOT MET	NOT MET
Santee Elementary School	NOT MET	NOT MET	NOT MET
Elliott Elementary School	NOT MET	NOT MET	NOT MET
Madison Elementary School	NOT MET	MET	NOT MET
Minatare Elementary School	MET	NOT MET	NOT MET
Winnebago High School	NOT MET	NOT MET	NOT MET

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**TABLE 7. Student Performance Rating by Year**

School	AYP Math Performance			AYP Reading Performance			AYP Participation			AYP Other		
	2010-2011	2011-2012	2012-2013	2010-2011	2011-2012	2012-2013	2010-2011	2011-2012	2012-2013	2010-2011	2011-2012	2012-2013
Crawford	MET	MET	NOT	MET	MET	MET	MET	MET	MET	MET	MET	*
Santee	NOT	NOT	NOT	NOT	NOT	NOT	MET	*	*	*	*	*
Santee	NOT	NOT	NOT	NOT	NOT	NOT	MET	MET	MET	*	*	*
Elliott	MET	NOT	NOT	MET	MET	NOT	MET	MET	MET	MET	MET	MET
Madison	MET	MET	NOT	NOT	MET	NOT	MET	MET	MET	MET	MET	MET
Minatare	MET	NOT	NOT	MET	MET	NOT	MET	MET	MET	MET	MET	MET
Winnebago	NOT	NOT	MET	NOT	NOT	NOT	MET	MET	MET	*	NOT	MET

\*Data has been masked to protect the identity of students using one the following criteria:

- Fewer than 10 students were reported in a group. Fewer than 5 students were reported at a performance level.
- All students were reported in a single group or performance category.

Table 8 displays the attendance rate and number of discipline incidents for SIG Cohort 1 schools. The attendance rate shows the ratio of the total number of days students are actually in school compared to the number of days they could have been in school. The

number of discipline incidents is calculated by adding together the number of suspensions and expulsions reported for the school through the Nebraska Department of Education's Consolidated Data Collection (CDC) system.

**TABLE 8. Attendance Rate and Discipline Incidents by Year**

School Name	Attendance Rate			Number of Discipline Incidents		
	2010-2011	2011-2012	2012-2013	2010-2011	2011-2012	2012-2013
Crawford Elementary School	95.7%	95.8%	95.4%	*	*	*
Santee High School	85.9%	81.9%	79.3%	*	*	16
Santee Elementary School	88.9%	90.2%	89.0%	*	29	24
Elliott Elementary School	94.1%	94.7%	94.4%	30	55	68
Madison Elementary School	95.7%	96.1%	95.2%	*	*	*
Minatare Elementary School	96.6%	94.0%	95.8%	*	*	*
Winnebago High School	91.7%	90.6%	91.1%	11	*	11

\*Data has been masked to protect the identity of students using one the following criteria:

- Fewer than 10 students were reported in a group. Fewer than 5 students were reported at a performance level.
- All students were reported in a single group or performance category.

Table 9 displays the four-year cohort graduation rates and dropout rates for SIG Cohort 1 high schools. The Cohort Four-Year Graduation Rate is calculated by dividing the number of students in a cohort who graduate with a regular high school diploma in four years or less by the number of students in the

Graduation Cohort, including students who graduate in the summer of the Expected Graduation Year (NDE, 2013). A district dropout rate is calculated by dividing the total number of 7th-12th grade students who dropped out by the official fall enrollment for grades 7-12 (NDE, 2013).

**TABLE 9. Graduation and Dropout Rates by Year**

School Name	Four-Year Cohort Graduation Rate			Dropout Rate (district)		
	2010-2011	2011-2012	2012-2013	2010-2011	2011-2012	2012-2013
Santee High School	*	*	*	*	*	*
Winnebago High School	88.9%	90.2%	89.0%	*	*	*

\*Data has been masked to protect the identity of students using one the following criteria:

- Fewer than 10 students were reported in a group. Fewer than 5 students were reported at a performance level.
- All students were reported in a single group or performance category.

Tables 10 through 15 and Figures 1 and 2 compare SIG Cohort 1 schools to aggregated groups of schools based on Title I eligibility and School Improvement status. Because these classifications can vary from year to year, the schools' status in the baseline year of 2010-2011 were used to assign them to the same group for all data years. This allows for a longitudinal examination of the outcome indicators. Schools that opened, closed or underwent a merger during the three data years presented are not included in the analyses. The number of schools that comprise each comparison group is

provided in Table 10. Please note that the sample size for the SIG Funded Schools group is considerably smaller than the other comparison groups. To address this consideration, a nonparametric statistical approach was used for each comparison to determine if differences between the means of a specific group and the means of the SIG Funded group were significantly different. Significant mean differences are indicated with an asterisk and suggest that the there is less than a 5 percent probability that the observed differences are due to chance.

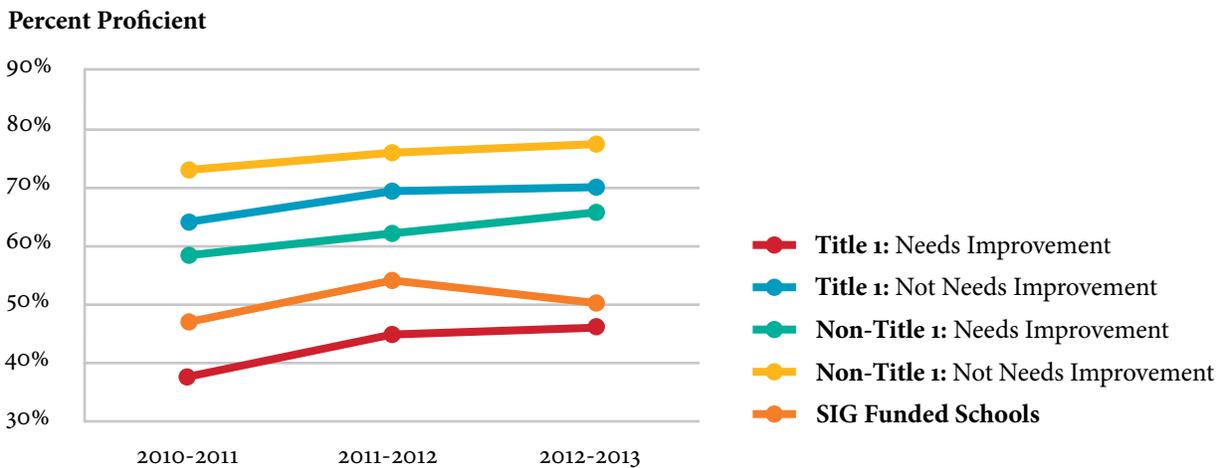
**TABLE 10. Sample Size for School Groupings**

Comparison Group	Number of Schools
<b>Title 1:</b> Needs Improvement	77
<b>Title 1:</b> Not Needs Improvement	401
<b>Non-Title 1:</b> Needs Improvement	55
<b>Non-Title 1:</b> Not Needs Improvement	380
<b>SIG Funded Schools</b>	7

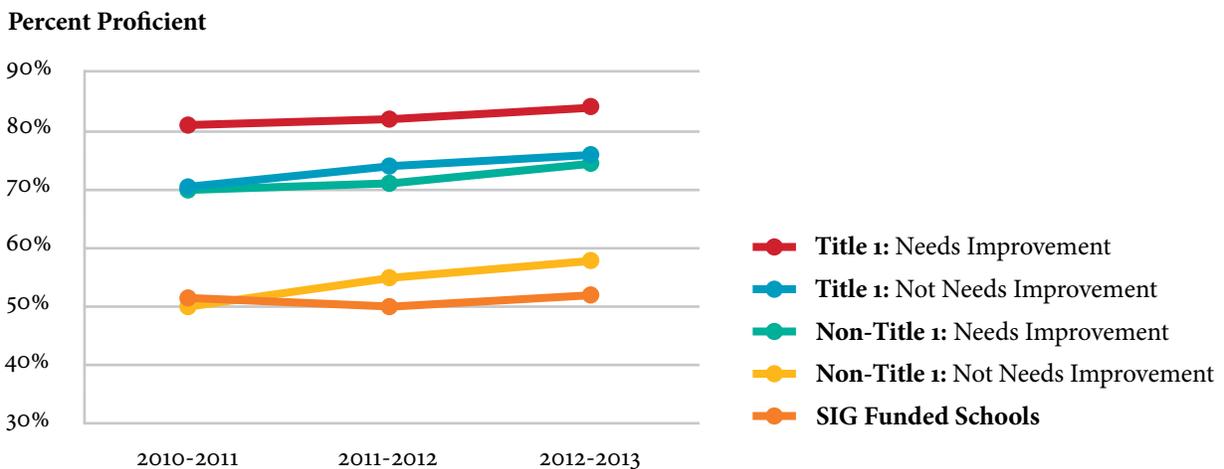
**TABLE 11. NeSA Math and NeSA Reading Proficiency by Year (All Grades)**

	NeSA – Math Proficiency			NeSA – Reading Proficiency		
	2010-2011	2011-2012	2012-2013	2010-2011	2011-2012	2012-2013
<b>Title 1: Needs Improvement</b>	37.2%	44.5%	45.6%	49.7%	54.9%	58.2%
<b>Title 1: Not Needs Improvement</b>	63.7%	69.2%	70.2%*	70.7%*	74.4%*	76.4%*
<b>Non-Title 1: Needs Improvement</b>	58.1%	62.1%	66.0%	70.7%	71.4%	74.8%
<b>Non-Title 1: Not Needs Improvement</b>	73.0%*	76.2%*	77.8%*	81.0%*	82.3%*	84.3%*
<b>SIG Funded Schools</b>	46.5%	53.3%	49.5%	51.6%	50.4%	52.2%

**FIGURE 1. NeSA Mathematics Proficiency by Group (All Grades)**



**FIGURE 2. NeSA Reading Proficiency by Group (All Grades)**



**TABLE 12. NeSA Math and NeSA Reading Proficiency by year (GRADE 03)**

	NeSA – Math Proficiency			NeSA – Reading Proficiency		
	2010-2011	2011-2012	2012-2013	2010-2011	2011-2012	2012-2013
<b>Title I:</b> Needs Improvement	44.9%	53.7%	56.8%	51.3%	59.1%	60.5%
<b>Title I:</b> Not Needs Improvement	65.9%	70.2%	72.0%	69.4%	75.5%	76.6%
<b>Non-Title I:</b> Needs Improvement	59.8%	75.2%	74.2%	66.1%	76.9%	76.5%
<b>Non-Title I:</b> Not Needs Improvement	82.0%	83.9%*	86.2%	83.9%	87.2%*	86.8%*
<b>SIG Funded Schools</b>	52.6%	52.5%	57.2%	58.5%	56.8%	59.4%

**TABLE 13. NeSA Math and NeSA Reading Proficiency by year (GRADE 04)**

	NeSA – Math Proficiency			NeSA – Reading Proficiency		
	2010-2011	2011-2012	2012-2013	2010-2011	2011-2012	2012-2013
Title I: Needs Improvement	45.5%	51.4%	53.1%	53.6%	61.1%	63.2%
Title I: Not Needs Improvement	66.1%	70.4%	71.5%	74.7%	76.4%	77.5%*
Non-Title I: Needs Improvement	56.2%	60.0%	69.2%	72.3%	72.0%	76.6%
Non-Title I: Not Needs Improvement	81.5%	84.4%	84.2%*	87.8%*	87.2%	89.1%
SIG Funded Schools	57.8%	71.3%	51.8%	58.9%	63.3%	50.4%*

**TABLE 14. NeSA Math and NeSA Reading Proficiency by year (GRADE 05)**

	NeSA – Math Proficiency			NeSA – Reading Proficiency		
	2010-2011	2011-2012	2012-2013	2010-2011	2011-2012	2012-2013
<b>Title I:</b> Needs Improvement	43.4%	55.9%	55.5%	50.1%	59.4%	61.2%
<b>Title I:</b> Not Needs Improvement	65.1%	73.9%	74.6%	68.7%	74.2%	77.8%
<b>Non-Title I:</b> Needs Improvement	59.4%	69.2%	71.6%	65.8%	72.7%	74.3%
<b>Non-Title I:</b> Not Needs Improvement	78.2%*	85.2%*	83.9%	81.6%*	85.7%*	87.4%*
<b>SIG Funded Schools</b>	47.8%	57.9%	65.4%	43.3%	52.1%	56.5%

**TABLE 15. NeSA Math and NeSA Reading Proficiency by year (GRADE 11)**

	NeSA – Math Proficiency			NeSA – Reading Proficiency		
	2010-2011	2011-2012	2012-2013	2010-2011	2011-2012	2012-2013
Title I: Needs Improvement	24.8%	31.1%	32.1%	43.0%	44.2%	49.2%
<b>Title I:</b> Not Needs Improvement	56.3%	60.9%	64.7%	66.8%	65.8%	69.8%
<b>Non-Title I:</b> Needs Improvement	51.1%	52.0%	54.9%	65.2%	60.7%	63.6%
<b>Non-Title I:</b> Not Needs Improvement	64.0%*	65.7%*	68.6%	75.8%*	73.7%*	75.1%
<b>SIG Funded Schools</b>	8.1%	7.1%	10.9%	40.7%	16.7%	53.2%

\* Indicates group mean is significantly different than SIG Funded group mean at  $p = 0.05$  level.

## **DISCUSSION**

The baseline study provides a precursor to future comparisons designed to assess the impact SIG funding has on various student outcomes. Superficially, there is little change observed over time in the indicators with SIG funded schools performing below the comparison groups on most outcomes. These results, however, do little to inform the impact SIGs have on school (or student) outcomes. Two important and necessary components of an impact evaluation are an appropriate experimental or quasi-experimental design preceded by an implementation evaluation providing evidence of sufficient implementation fidelity. The CIPP evaluation framework, outlined above, contains both of these components and can be utilized to determine the impact of SIG funding on recipient schools. The baseline analyses are limited by the small number of SIG Funded Schools and the non-parametric approach. Full implementation of the evaluation plan put forth in this document will provide a rigorous evaluation suitable for identifying the impact of SIGs.

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## **SUMMARY**

Few evaluation studies have been adequately designed to address the impact of SIGs on student achievement and other important academic outcomes. The SIGs have the potential to positively impact a number of school and student level outcomes but more rigorous evaluation efforts are needed to further inform those interested in the impact of SIGs. This is especially the case in Nebraska, where the majority of schools receiving SIG funds are located in rural communities with ethnically diverse populations. Such situations create unique challenges for evaluation studies and, more importantly, the implementation of strategies the SIGs require. The evaluation plan put forth in this document overcomes many of these challenges through the use of rigorous mixed methodologies. For instance, important contextual effects can be examined in the initial stages of the evaluation. These contextual effects can be used to further inform the later stages of the evaluation, particularly those related to implementation and impact. Tying together the implementation and impact pieces of the evaluation is essential for realizing the full impact SIG funding can have on schools and students with the greatest need for a quality educational environment.

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