HOW TEACHERS CONSTRUCT AND MAKE USE OF STUDENT GROWTH DATA

By

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ABSTRACT OF THE DISSERTATION

How Teachers Construct and Make Use of Student Growth Data

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This case study of a New Jersey school district explored the experience of teachers as they implemented student growth objectives (SGO) into their practice for the first time as part of the new requirements under ACHIEVE NJ. The case study was examined through the lens of the developing framework around data-driven decision making (DDDM), with a focus on how teachers perceive and apply these new data-based practices (Ikemoto & Marsh, 2007; Jimerson, 2014; Mandinach, Honey, & Light, 2006).

Research findings indicated that the teachers largely viewed the work around the SGOs as lacking value for their practice. Pre-existing beliefs that the SGO data held minimal value were affirmed and perpetuated as the teachers went through the process over the first two years of the requirement. Feedback from school leaders helped reinforce these beliefs and conclusions. A few instances of teachers changing beliefs and practices around student growth data were identified in the case study. These examples provide some avenues for increasing the meaningfulness of the work required around DDDM practices for teachers.

This study can contribute to school leaders' knowledge base by providing further insights into the factors that can constrain or promote teachers' use of student growth data. As SGOs

continue to be a requirement for all teachers in New Jersey, school leaders may want to identify

ways to make this work more meaningful for teachers.

Keywords: data-driven decision making (DDDM), student growth objectives (SGO),

beliefs about data, data-based practices, compliance

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Dedication

To my wife, with you, I can do anything.

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Chapter 1: Introduction

Since the passing of the No Child Left Behind Act in 2001, data use has become a fixture in many school reform policies and programs. The use of data in school reform and policies is not a novel concept. Incorporating business and military management philosophies based on data based decision making became a popular approach to education reform in the 1960s and 1970s. As Tyack and Cuban (1995) note, these programs soon faded away when it became clear that schools did not have the resources, skills or willingness to faithfully apply them. Perhaps just as important, there was little evidence that these programs would yield the intended results.

From a more recent policy perspective, data (typically standardized assessment scores) can provide evidence of school performance and drive decisions related to accountability, leadership, school closures, and funding. At the school level, education leaders are increasingly using different types of data to inform their decision-making process. This includes decisions about resource allocation, instructional program selection, and the evaluation of personnel. Teachers have also begun to engage in more data-based practices, particularly teachers who teach subjects tied to standardized assessments. These growing practices around data are based on the belief that data-driven decisions are better informed decisions that will produce improved outcomes in comparison to decisions based on assumptions or less objective criteria. Increasingly, education practitioners are expected to demonstrate how they are using data to inform their decisions. The term data-driven decision making (DDDM) is increasingly referenced in practice and in research. It can be defined as the process by which schools use data or evidence to inform decisions (Halverson, Grigg, Prichett, & Thomas, 2007).

While the concept of data-driven decision making has gained popularity among policymakers and practitioners, several factors can influence the process and limit the impact.

For example, school practitioners often lack experience engaging in rigorous evidence-based decision-making (Honig & Coburn, 2008). Many schools lack the resources and skills to properly collect and analyze student performance data (Newton, Darling-Hammond, Haertel, & Thomas, 2010). Due to the interpretive nature of the DDDM process (Coburn & Turner, 2011; Spillane, 2012), users can reach different conclusions about the data (Jimerson, 2014). Interpretations of data can depend on the types of data and analysis that are used (Farrell & Marsh, 2016; Ikemoto & Marsh, 2007; Jennings, 2012), how data are framed for the user (Horn, Kane, & Wilson, 2015), and users' different mental models about how to interpret data (Bertrand & Marsh, 2015). Finally, the strong association between student performance data and accountability systems can create a climate of threat perception that may limit the effectiveness of data-driven policies and programs (Daly, 2009; Griffith, 2004; Hazi, 1994; Leithwood, Steinbach, & Jantzi, 2002).

Despite these challenges, numerous local, state and federal policies continue to attempt to promote and ensure that educators use data to inform their practice (Firestone, Nordin, Shcherbakov, Kirova, & Blitz, 2014). A driving force behind such policies is the idea that DDDM practices are beneficial for schools, teachers, and students. Access to more student performance data could facilitate more effective school decisions about programs, professional development, and personnel. Teachers could more effectively monitor student progress and make adjustments in their practice to support student learning. Finally, students could be afforded higher quality instruction based on the premise that teachers would make better-informed decisions about their practice.

One example of this policy trend is the significant changes that the New Jersey Department of Education made to its teacher evaluation system under the TEACH NJ Act of

2012 and subsequent ACHIEVE NJ program in 2013 (New Jersey Department of Education, 2019). These changes included a new requirement that all teacher evaluations would be based in part on student performance data. This differs significantly from past practice where teacher evaluations were mainly based on administrators' subjective review of teacher practice. Under ACHIEVE NJ, student performance data would account for a portion of every teacher's summative evaluation. Teachers in grades 4 - 7 who taught mathematics and grades 4 - 8 who taught language arts would be evaluated, in part, in relationship to state standardized assessments. All other teachers would need to develop or select existing assessment tools to measure student growth. In short, the new ACHIEVE NJ program required increased use of data as part of the teacher evaluation process.

As DDDM practices continue to be a significant part of school reform policies and programs, how teachers engage in these new practices and the supports required to do this work, present a problem of practice for education leaders. The ACHIEVE NJ requirement that all teacher evaluations should be based, in part, on student growth data is just one example. Education leaders will need to provide teachers with guidance, resources, and support throughout the DDDM process. This may be particularly true for teachers who do not have a history of formally tracking student progress and interpreting that data to make decisions about their practice. Teachers without experience analyzing data, such as those working in grades and subjects that are not directly tied to state assessments, may lack the necessary skills and need additional supports to effectively engage in data-driven decision making. Education leaders need to be able to anticipate the struggles educators will have with DDDM and how to provide the necessary guidance and supports.

Purpose of This Study

The purpose of this study was to understand how teachers engage in data-driven decision making (DDDM) so that education leaders might better guide and support educators' data use. Without adequate support, education reforms and initiatives meant to improve education outcomes may have limited effects. To examine teachers' engagement with DDDM, this study investigates one such instance of data use: the development of student growth outcomes (SGOs) as part of New Jersey's ACHIEVE NJ teacher evaluation program. The overarching questions that guided this study included:

- In fulfilling the SGO requirement, what types of data did the teachers collect and how did the teachers interpret the data?

- What factors promoted or constrained the teachers' use of the SGO data?

- How did teachers perceive the value of SGOs for their practice?

Using a comparative case study methodology, I conducted a total of 27 interviews with teachers and administrators in three different schools within the same school district. The data collected provide a detailed portrayal of how teachers engaged in DDDM practices to complete the SGO requirement. Teachers largely viewed the work around the SGOs as lacking value for their practice. Pre-existing beliefs about the SGO data influenced how teachers engaged in DDDM practices with those data. Feedback from school leaders helped reinforce these negative beliefs and conclusions. A few teachers reported instances where their beliefs and practices around student growth data changed to become more positive. These examples provide insight for how education leaders might support teachers and increase the meaningfulness of the work associated with DDDM practices.

This study extends and deepens what we know about the challenges that teachers face when mandated to use data to inform their decisions. In studying the experiences of teachers in untested grades and subjects, this study adds to the existing body of research on teachers' data use by exploring a subset of teachers that were typically not included in previous studies. The lessons learned from this study of teachers' experiences with ACHIEVE NJ can be applied to other initiatives that similarly require DDDM practices. Education leaders can use the study results to better support teachers' data use and more fully realize the potential benefits of data-driven decision-making.

Chapter 2: Study Context: Literature and Policy

Early approaches to using data in education focused on data from a broad perspective, such as school- or district-level performance. This makes sense considering many of these data practices are tied to monitoring, influencing, or demonstrating progress toward broad-based goals set by policy, such as adequate yearly progress (AYP) with No Child Left Behind. As a result, many studies in the literature examine topics like interpreting data use policies (Datnow & Castellano, 2001; Hatch, 2001; Newmann, Smith, Allensworth, & Bryk, 2001; Spillane, Parise, & Sherer, 2011), types of data systems adopted by schools (Sharkey & Murnane, 2006; Supovitz & Klein, 2003), and how school practices are influenced by accountability systems (Daly, 2009; Griffith, 2004; Hazi, 1994; Leithwood et al., 2002).

As the use of data continues to increase in schools, researchers have begun to engage in more fine-grained analysis of data usage. This includes examinations of different data-based practices, types of data, and how teachers think about data (Bertrand & Marsh, 2015; Farrell & Marsh, 2016; Ikemoto & Marsh, 2007; Jennings, 2012; Jimerson, 2014). Additionally, researchers have explored the different factors that influence teacher data use, including how administrators intervene to try and support data practices and increase capacity for data practice (Marsh, 2012; Marsh & Farrell, 2015; and Spillane, 2012). The literature review for this study focuses on a few key studies that have developed frameworks and lenses for understanding how teachers engage in the data-driven decision making (DDDM) process.

Data-Driven Decision Making (DDDM) Process

Data-driven decision making (DDDM) can be defined as the process by which schools use data or evidence to inform decisions (Halverson et al., 2007). Policies and programs that promote the use of DDDM in schools are rooted in the logic that better informed decisions,

based on data or evidence, will yield better education outcomes. As part of a National Science

Foundation grant aimed at examining how schools used different technology-based tools around

data and decisions researchers Mandinach, Honey, and Light (2006) developed a conceptual

framework to portray the DDDM process (see Figure 1).

Figure 1

Framework for Data-Driven Decision Making Process (Mandinach et al., 2006)
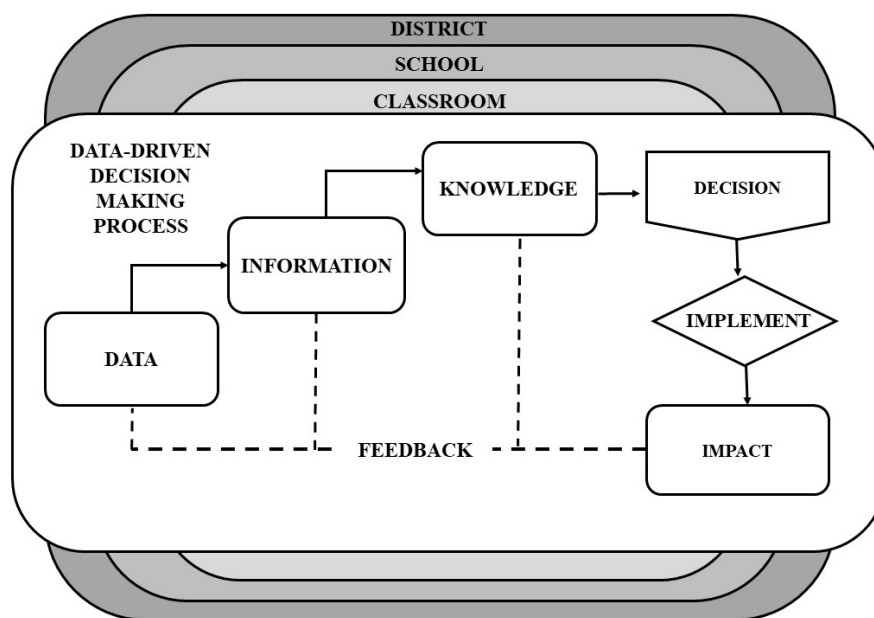
In this framework data-driven decision making (DDDM) is portrayed as a multistep

process that can be applied at different levels, depending on the user or context (e.g., district,

school, teacher). The process begins with the collection and organization of raw data (e.g., test

scores), which then must be converted into information based on context and user expertise. For

example, a teacher might interpret that benchmark assessment scores show that some students

did poorly on multi-digit subtraction problems. At that point, users must apply professional

knowledge to make decisions about how to address the information revealed by the data. For

example, teachers migh consider the instructional strategies that could assist students who are

struggling with the skill of multi-digit subtraction. They must also decide which students need

help with this. Finally, they might consider if after school help is a feasible option. Whatever

decision or action is implemented will produce an impact or outcome. This provides a new

feedback loop of data for the user to consider.

The dotted feedback lines are meant to demonstrate that the impact of the decision may

inform any step in the decision making process. Meaning, the perceived impact of the decision

making process may lead the user to revisit the original decision (e.g., choose a different

strategy) or the interpretation of the initial data. Perhaps the students scored poorly on the

benchmark because of a weak understanding of number sense or number reversals, rather than

the steps of multi-digit subtraction. This would lead the user to select a different approach, which

would produce a new feedback loop on that decision.

Researchers have applied the DDDM framework to examine different aspects of the data-

driven decision making process, including the types of data and analysis used in the process and

the interpretative nature of the process (See: Ikemoto & Marsh, 2007; Jimerson, 2014;

Mandinach, 2012; Marsh, 2012; Marsh & Farrell, 2015).

Types of Data and Analysis

When examining how the DDDM process occurs in districts, schools, and classrooms, it

is important to consider the types of data and analysis applied by the users. In terms of data,

educators may have access to many different types. Those data options can vary by design,

purpose, utility, and complexity. Certain types may be more relevant to some situations than

others. The kinds of a data used for the DDDM process may be prescribed by policy or

administrators. It may also be selected by the user based on comfort level or ease of access.

Educators may also use multiple sources of data in the DDDM process. This variability in

practice makes it worthwhile to explore how different types of data might influence different

approaches to the DDDM process.

In a similar way, educators can apply different approaches to analysis during the DDDM

process. Data analysis can be a solo exercise or involve multiple people sharing different

perspectives that can influence their conclusions. Analysis can take place over different time

spans, reviewing the data in a single meeting or conducting ongoing discussions and

examinations about the meaning of the data. Educators may base their analysis on their own

background knowledge and expertise or they might incorporate the assistance of external

programs or consultants. These different approaches to analysis can have an impact on the

outcome of DDDM process.

Numerous studies examine the different types of data and data-based analysis used by

educators (Halverson et al., 2007; Hazi & Rucinski, 2009; Kerr, Marsh, Ikemoto, Darilek, &

Barney, 2006; Sharkey & Murnane, 2006; Supovitz & Klein, 2003). Taking a closer look at how

educators use different data (Farrell & Marsh, 2016; Jennings, 2012) and approaches to analysis

(Ikemoto & Marsh, 2007) can provide greater insight into the DDDM process.

Different types of data can be seen as more useful for different decisions or practices. In a

qualitative comparative case study of three school districts with a history of following initiatives

that used a variety of data and interventions, Farrell and Marsh (2012) used extensive interview

and observation data to draw conclusions about how certain types of data influence teacher

practice in different ways. Overall, teachers were most likely to use data to inform decisions

about what to teach and how to organize students. For example, teachers in the study viewed

state assessment data as a valuable tool at the beginning of the year when making decisions about

how to group students. Teachers did not have a positive association with the benchmark data

they were required by the district to collect at certain points in the year. However, teachers did

provide descriptions of how those data were used to inform their decisions to re-teach certain

topics to improve student performance. Re-teaching topics and re-grouping students were also

the most common responses to reviews of student work or classroom assessments, though

teachers reported finding those types of data to be the most valuable to their practice. This may

explain why when teachers did share examples of making significant changes to how they taught

(compared to what they taught), it was most often inspired by data from classroom assessments

or student work. The authors suggest that local control of student performance data may inspire

more meaningful use by teachers.

Just as different types of data can inform different approaches, data can be applied

differently by teachers as a way to understand practice and inform decisions. In a review of the

literature on teachers' use of test score data, Jennings (2012) classified five different types of

data use. Teachers may use data as a *lens* to make inferences about school performance.

Generally speaking, teachers may determine that their school is doing well, struggling or failing

based on test data, without unpacking the meaning of the actual scores. Data can also be used as

a *diagnostic tool* to identify areas for growth or emerging problems. Teachers may notice that

students performed poorly on particular skills or standards. Somewhat related, teachers may use

the data as a *compass* to guide them on changing their instructional strategies or maintaining

existing practices. When teachers are provided specific goals, data can be used as a *monitoring*

tool for determining successful achievement of those goals. Finally, data can be a *legitimizer*,

affirming for teachers that they are making the correct instructional choices with their students.

By describing different ways that teachers might interpret and apply the same type of data,

Jennings (2012) provides further insight into the complexities of the DDDM process.

Understanding how these different types of data and approaches to data analysis interact can help deepen our understanding of the DDDM process. Seeking to provide a framework for understanding different types of data and analysis, Ikemoto and Marsh (2007) reviewed ways educators described DDDM practices, using interview, focus group, and survey data from ten districts across four states from two of their previous studies. From their larger data set, the authors identified 36 examples of DDDM practices from seven districts where there were sufficient details and explanations to include in their conceptual study.

In examining these examples, Ikemoto and Marsh (2007) determined that there were different dimensions of data and analysis being used by educators. Each dimension existed along a continuum from simple to complex (see Table 1).

Table 1

Dimensions of Simple Versus Complex Data and Analysis/Decision Making (adapted from Ikemoto & Marsh, 2007)

Simple Versus Complex Data			Simple Versus Complex Analysis/Decision Making		
Dimension	**Simple data**	**Complex data**	**Dimension**	**Simple analysis /decision making**	**Complex analysis /decision making**
Time frame	One point data	Trend data	**Basis of interpretation**	Use of assumptions	Empirical evidence
Types of data	One type	Multiple types	**Reliance on knowledge**	Basic	Expert (use of advisor)
Source of data	One source	Multiple sources	**Type of analysis**	Straight forward	Sophisticated
Source of collection	Secondary	Primary	**Extent of participation**	Individual	Collective
Level of detail	Aggregate	Disaggregate	**Frequency**	One-time	Iterative

For example, using state testing data may be classified as a simple use of data because it is data taken from one point in time, from a single, external source. Whereas, a more complex use of data might be collecting different samples of student work throughout the year, including classwork, quizzes, tests, and online assessment tools. Similarly, a simple approach to analysis and decision making may involve an educator making conclusions about data with minimal involvement of other perspectives or expertise. Simple analysis and decision making typically takes place in a short time frame and is based on assumptions. More complex approaches involve deeper looks at the data over time, with the collaboration of different stakeholders with varying expertise.

Ikemoto and Marsh (2007) applied these dimensions of simple and complex data and analysis to their 36 DDDM exemplars and identified four models of DDDM practice: *Basic* (simple data, simple analysis), *Analysis-focused* (simple data, complex analysis), *Inquiry-focused* (complex data, complex analysis), and *Data-focused* (complex data, simple analysis). The authors illustrated the relationship between these four models as quadrants, with the x and y axis representing the continuum for simple and complex data and analysis, respectively (See Figure 2).

Figure 2

Models for DDDM Practices (Ikemoto & Marsh, 2007)
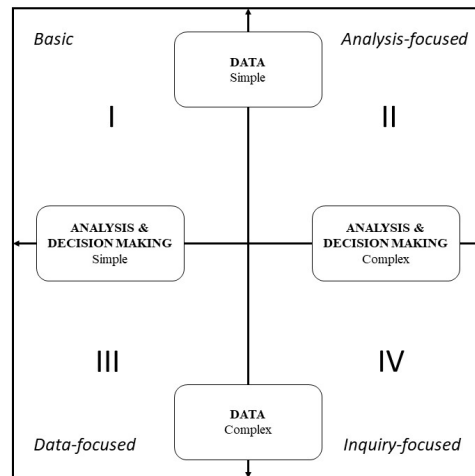
Nearly half (15/36) of the studies reviewed by the authors were determined to be *Basic* models of DDDM practices (quadrant I). For example, a principal reviewed test scores and chose to make math a focus of future professional development days, because math was the subject where the students, on average, scored the lowest. The principal made this decision on his own, based on the assumption that professional development would lead to improved student performance in math. There was no explanation as to why the principal identified a particular professional development option as the best way to address his interpretation that math instruction was an area of weakness for his school. This is a prime example of an educator using data to inform his practice, but not in a particularly sophisticated manner. Ikemoto and Marsh (2007) point out that many educators claim to use data in a similar, superficial way, which can limit their openness to new data-based initiatives, policies, or approaches because they believe they are already doing those things.

In one of the nine examples of *Analysis-focused* (quadrant II) DDDM practices, a central office administrator routinely met with school leadership to review benchmark data and discuss

possible interventions or actions to support the needs they identified in the data. School leadership would conduct follow-up meetings with teachers around the same data and topics. While the users were only using one data point (benchmark data), involving multiple people with different areas of expertise in ongoing conversations around the topic fostered a more analytical approach to the decision-making process.

Of the seven examples considered to be *Data-focused* models (quadrant III), one depicted a school leadership team collecting data from various sources (test scores, survey data, discipline records) to inform their decision about how to spend additional funding. After reviewing the data in a meeting, the team concluded that reading instruction was a priority and agreed to use the money on new reading specialists. The authors considered this to be simple analysis because the team based its decision on the assumption that hiring additional staff would be the solution to the problem.

The least common model identified by the authors was the Inquiry-focused model (quadrant IV) that includes complex uses of data and analysis in the decision-making process. As Ikemoto and Marsh (2007) explain, "these examples represented a significant investment in time and resources to probe a particular problem of practice" (p. 117-118). School districts not only collected a variety of data from different sources, they engaged in ongoing collaborative work around that data, often involving outside consultants or companies for additional insight and evaluations.

The models for DDDM practices outlined by Ikemoto and Marsh (2007) provide a lens through which to evaluate and understand the different approaches used in schools. The authors are careful to point out that no model is meant to be portrayed as better than the other. Devoting the level of attention and capital for an inquiry-based approach to decision making may be

beyond the capability or resolve of many districts, schools, and educators. Similarly, limited

resources and skills may create a barrier for schools exploring more complex forms of data or

analysis. It is also entirely possible that a basic model of DDDM practices may be the most

practical and appropriate approach for many of the decisions that are made in the typical district,

school, or classroom. Ultimately, Ikemoto and Marsh's (2007) study provides a lens for

examining and better understanding different dimensions of data and analysis and their

application in DDDM practices.

The Interpretive Nature of the DDDM Process

As illustrated in Mandinach, Honey, and Light's (2006) conceptual framework (see

Figure 1), there are many steps in the DDDM process that require user input and interpretation.

This can include which types of data to collect, how to organize the data, what information to

draw from the data, how to prioritize conclusions, what actions to take based on those

conclusions, and how to interpret the effectiveness of those actions. Each step in the process

presents an opportunity for a different interpretation. The interpretive work required of teachers

throughout the DDDM process can be influenced by a range of factors, including teachers' pre-

existing mental models around data and data use, how data-driven tasks are framed for teachers,

and teachers' perceptions of the causes of student performance.

Pre-existing beliefs or understandings teachers might hold about data and data use can

also influence their interpretations of those practices. Jimerson (2014) explored this concept,

using the term mental models to conceptualize the "assumptions, definitions, and beliefs around

a concept" (p. 6) that teachers might have prior to engaging in the DDDM process. Using

responses from 154 surveys and 46 interviews with administrators and teachers throughout one

district in Texas, Jimerson identified different mental models that educators revealed when

discussing data and data use. Overall, Jimerson (2014) found that the educators in the study lacked common language or definitions about data and data use, which could lead to them talk "past one another" when using data (p. 12). While teachers sometimes described data in positive terms when discussing classroom-based improvement efforts, they were more likely than administrators to have a negative association with data. Teachers' mental models about data and data use were strongly influenced by a few factors, including how leaders framed the data and their own personal experience with data. These findings from Jimerson (2014) provide further evidence that data use in education is not a straightforward process but is highly situated and influenced by a number of factors. The findings further suggest that education leaders should… By considering how teachers' mental models about data and data use might shape their approach to DDDM practices, education leaders can try to frame these practices in a more positive and productive way for teachers.

The kinds of conversations educators have about data can also influence how the data are interpreted and translated into information. For example, as part of a larger research project examining efforts to improve the quality of instructionin middle schools, Horn et al. (2015) analyzed teacher conversations around benchmark data. The authors identified four teacher workgroups in the same district and observed each of the meetings in which they discussed recent student performance on a district-made benchmark assessment. Despite working around similar types of data, each of the workgroups had significantly different conversations about how to interpret the data.

In one discussion of student performance, the principal provided teachers with a chart that listed African American students' scores on the district benchmark and their score on the state assessment the prior year. Improving performance on the state assessment for this subgroup

(African Americans) was one of the school's goals for that year. The teachers were directed to review this chart and determine which students would most benefit from remedial instruction or additional assistance. This principal's approach presumes that the best way to interpret the benchmark data was to use it as a tool for identifying students who need additional help. The principal's framing of the conversation around improving the performance of African American students influenced the conversation the teachers had and how they interpreted the benchmark data.

In a separate meeting within the district, the teachers took a different approach to interpreting the benchmark data by examining specific questions and trying to determine why students got them wrong. In this meeting, the teachers worked together to analyze the test data and draw conclusions about student performance that would shape their actions moving forward. In some cases, the teachers determined that a question just needed to be worded better in order for the students to do well on it. In one case, the teachers decided that the students' overall performance on a question revealed that the teachers had not sufficiently taught them a particular term. This led to the teachers agreeing to revisit and re-teach that term to help with future performance. Examples from this study help illustrate that teacher conversations around data and how they translate data into information can vary significantly depending on who participates in the process and how the work is framed by the participants.

Another opportunity for interpretation in the DDDM process is when teachers try to determine the context or cause of the collected data. As part of a larger, year-long comparative case study about language arts teachers increasing capacity for data use, Bertrand and Marsh (2015) explored different ways that 19 teachers in six schools across two districts made sense of student performance data. Drawing from interviews, focus groups, observations, and surveys, the

authors identified 62 instances of the teachers attributing student performance to particular

causes. After analyzing these instances, the authors developed four mental models of

sensemaking: *instruction, student understanding*, *nature of test*, and *student characteristics*. The

authors determined these were the mental models the teachers applied when interpreting the

potential causes of student performance. In some cases teachers applied multiple mental models

to the same instance. Three of the four models (*instruction*, *student understanding*, and *nature of

the test*) were perceived as controllable causes by the teachers. Meaning, teachers believed they

could take steps to address these factors that led to the student outcome. This might include re-

teaching a topic or teaching it in a different way (*instruction*), providing extra help (*student

understanding*), and rewording questions on a test or eliminating questions unrelated to

instruction (*nature of the test*). It should be noted that teachers' perception of control with the

nature of the test was directly tied to if they created the assessment. Tests from external sources,

such as a state assessments, were not viewed in the same way. The fourth model was *student

characteristics*. This was an area where the teachers believed they had little to no influence. If

the teachers attributed student outcomes to student characteristics (e.g., limited ability, lack of

assistance at home), they tended to apply diminished expectations to their interventions or

changes in practice. The authors pointed out that this could reveal a fixed mindset when teachers

are evaluating the performance of certain students, particularly English Language Learners

(ELL) and students with special needs. This study provides further evidence that teachers can

apply different interpretations to data, which can impact their approach to interventions or

changes in practices.

The studies reviewed in this section help to illustrate how data-driven decision making is

not a straightforward process, but highly situated and influenced by a number of factors

including the types of data and analysis used and the interpretive nature of DDDM. For teachers, having control over the data is a significant, positive factor in the experience DDDM practices. When teachers have control over the measurements of performance data, they can interpret the data as something they can impact with a change in practice (Bertrand & Marsh, 2015). Similarly, teachers are more likely to change their practice when responding to data based on student classwork or teacher-produced assessments (Farrell & Marsh, 2016).

Policy Context

The following section provides additional background information about ACHIEVE NJ, including how the New Jersey Department of Education communicated this program to school districts, provided support for implementation, and made adjustments to requirements during the first three years of the program. This information can add helpful context for the setting of the study, including the specific program requirements adopted by the teachers.

ACHIEVE NJ was officially approved as the new educator evaluator and support program by the New Jersey Board of Education on September 11, 2013. The program was developed to support the state's tenure reform law, TEACHNJ Act, which was approved and signed into law in 2012. Both the new evaluation program and the tenure reform law were based on the recommendations of the New Jersey Educator Effectiveness Task Force. Governor Christie established the Task Force in 2010 to explore evaluation methods and make recommendations on how New Jersey could more effectively evaluate educators as a way to improve overall school performance. One of the main recommendations by the Task Force was to incorporate student performance measures into the evaluation of teachers (New Jersey Department of Education, 2019). These efforts to reform teacher evaluation and tenure requirements based on student achievement data are similar to other federal and state policies

that have been adopted over the last decade (Firestone, Nordin, Shcherbakov, Kirova, & Blitz, 2014).

ACHIEVE NJ established two methods for tying teacher evaluations to student achievement: student growth percentiles (SGP) and student growth objectives (SGO). SGP scores are based on students' growth on the state assessment compared to similar students in the state[1]. This measurement only applies to teachers in grades 4 - 7 who teach mathematics and grades 4 - 8 who teach language arts, because those are the grades and subjects in which all students throughout the state take the same test at the same time. As an example of how this can vary in other grades, some students take Algebra (and the corresponding state assessment) in 8th grade, while others take that course in 9th grade. Along similar lines, while all 3rd grade students take the same state assessment, there is no state assessment in 2nd grade, preventing a measurement of growth for 3rd graders.

Unlike, SGPs, which target select groups of teachers, all teachers are required to set SGOs. The ACHIEVE NJ website defines SGOs as "academic goals for groups of students that each teacher sets with his or her principal or supervisor at the start of the year" (New Jersey Department of Education, 2019). Every teacher, grades K-12 and all subject areas, including teachers who qualify for SGPs, is required to create SGOs as part of this teacher evaluation program. Non-SGP teachers need to create two SGOs, while SGP teacher only have to create one.

At the end of the school year, SGP and SGO scores are incorporated as part of teachers' overall evaluation and performance rating. Both SGP and SGO scores are based on a 1 - 4 scale

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[1] See https://www.nj.gov/education/AchieveNJ/teacher/percentile.shtml for more information about the methodology the NJDOE uses to determine which students to compare across the state and how that data is used to calculate SGPs for individual teachers.

that aligns with the overall scoring for the evaluation system (1- ineffective, 2- partially

effective, 3- effective, 4- highly effective). Teachers receive an SGO score (1 - 4) based on the

scoring criteria established for the academic goals at the beginning of the year. SGP scores are

calculated by the NJDOE after state assessment data is available. Non-SGP teachers with two

SGOs scores average the two numbers to get their final score. For Non-SGP teachers, the SGO

score initially counted towards 15% of the teacher's summative evaluation score. For SGP

teachers, the SGO score was also worth 15%, but the SGP score was worth 30% (See Figure 3).

As a result, teachers who qualified for SGPs had a larger percentage (45%) of their summative

evaluation score based on student performance data than teachers in non-tested grades and

subjects (15%).

Figure 3

SGO and SGP Percentages for Teacher Summative Evaluation Score (from New Jersey Department of Education, 2017)
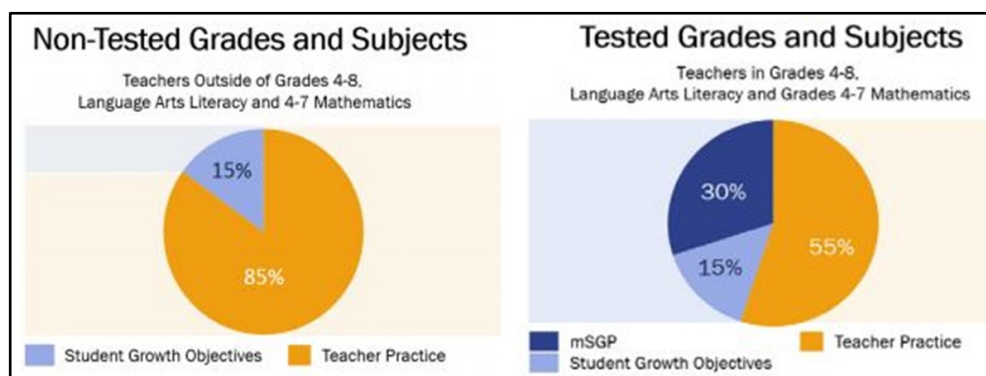
Prior to adopting the ACHIEVE NJ program in 2013, the NJDOE conducted a pilot

teacher evaluation program in ten school districts during the 2011-2012 school year. The pilot

program expanded to include 15 more school districts the following year. The pilot program was

evaluated by an external review team from the Rutgers University Graduate School of Education,

which published two reports on its findings (Firestone, Blitz, Gitomer, Kirova, Shcherbakov, & Nordin, 2013; Firestone et al., 2014).

Based on findings from the two Rutgers reports, the NJDOE made adjustments to some of the guidelines for ACHIEVE NJ (e.g., fewer required observations) and developed preparation materials for school districts that would be adopting the new evaluation program in 2013-2014. Specific to SGOs, in year one, participants in the pilot program requested clearer directions from the state. In year two, pilot program participants reported feeling more comfortable completing the requirement having received updated guidelines with clearer directions from the state. When discussing possible problems associated with the new evaluation program, Firestone et al. (2014) raised concerns about the quality of measurements used, particularly SGOs that were based on teacher-created assessments.

In March of 2013, Commissioner Cerf sent an email to school district administrators updating them on the pending changes to the state evaluation program. The email included links to several NJDOE-produced resources that schools could use when adopting the new requirements, including PowerPoint presentations for staff training, an SGO Guidebook, worksheets, and sample SGOs. Additionally, the NJDOE conducted regional workshops throughout the state in March and April, where school leaders could get more information about the upcoming changes (New Jersey Department of Education, 2013).

The following table and figure are included to provide a more detailed understanding of the process and product requirements laid out by the NJDOE for SGOs. Table 2 illustrates the implementation steps and timeline provided by the NJDOE for the development of SGOs during the first year. Figure 4 is a sample SGO for an 8th grade history teacher and it provides an example of all the work and calculations required to complete the SGO form. Teachers must

identify standards, calculate starting points, use the data to divide students into preparedness

groups and then set different targets for each group.

Table 2

SGO Quick Start Guide: Step-by-Step Instructions (from New Jersey Department of Education, 2013)

Step 1	Choose or develop a quality assessment aligned to NJCCCS or CCSS.	April - October
Step 2	Determine students' starting points.	September - October
Step 3	Set ambitious and achievable SGOS with the approval of the principal/supervisor	September - November
Step 4	Track progress, refine instruction	October - May
Step 5	Review results and score in consultation with your principal/supervisor	May - June

Figure 4

Sample SGO (New Jersey Department of Education, 2014)

Name	School	Grade	Course/Subject	Number of Students	Interval of Instruction
		8	US History	125	October 1st – May 15th

Standards, Rationale, and Assessment Method
Name the content standards covered, state the rationale for how these standards are critical for the next level of the subject, other academic disciplines, and/or life/college/career. Name and briefly describe the format of the assessment method.
Content Standards NJCCCS 6.1.8.3/4/5 CCSSRH6-8.1-9 Skills Skills table - chronological thinking, spatial thinking, critical thinking Assessment Diagnostic assessment after first 4 weeks of school includes content standards 6.1.8.3 only. Summative assessment in May includes content standards 6.1.8.3, 4 and 5 and incorporates: 1. Multiple-choice/defining questions to establish recall. 2. Timelines that require students to order events to assess chronological thinking. 3. Map questions to assess spatial thinking. 4. Text-dependent questions to assess reading comprehension and critical thinking.

Starting Points and Preparedness Groupings
State the type of information being used to determine starting points and summarize scores for each type by group. Modify the table as needed.
The information used for setting preparedness groupings was collected from an assessment bank that captured the content taught in the initial four weeks of school and the skills that will be taught throughout the year, prior year ELA test scores and several markers of future success including class participation and academic independence. Students were divided into four groups the number of preparedness points they earned according the key below.

Preparedness Points	Information #1 ELA NJ ASK Grade 7	Information #2 Diagnostic Test Score	Information #3 Markers of Future Success
3	<200	45-60%	6
2	200-250	61-75%	7
1	251-300	75%-87%	10
Preparedness Group Placement	Score		
1	8-9		
2	6-7		
3	4-5		
4	3		

Student Growth Objective
State simply what percentage of students in each preparedness group will meet what target in the space below, e.g. "75% of students in each group will meet the target score." Describe how the targets reflect ambitious and achievable scores for these students. Use the table to provide more detail for each group. Modify the table as needed.
From October 1 to May 15, 85% of the 8th-grade US History students in each preparedness group will meet their targeted score on the department-developed assessment.

Preparedness Group (e.g. 1,2,3)	Number of Students in Each Group	Target Score on SGO Assessment
1	31	≥90
2	63	≥80
3	16	≥75
4	15	≥65

In the spring of the 2013-2014 school year, the first year of state-wide implementation, the NJDOE published additional resources, including guidelines on scoring SGOs and reports sharing feedback and tips from practitioners around the state. Figure 5 provides the scoring guide for the exemplar SGO in Figure 4.

Figure 5

SGO Scoring Plan (New Jersey Department of Education, 2014)

Scoring Plan						
State the projected scores for each group and what percentage/number of students will meet this target at each attainment level. Modify the table as needed.						
Prepare dness Group	Student Target Score	Teacher SGO Score Based on Percent of Students Achieving Target Score			
		Exceptional (4)	Full (3)	Partial (2)	Insufficient (1)
1	≥90	≥95	≥85	≥75	<75
2	≥80				
3	≥75				
4	≥65				

Approval of Student Growth Objective
Administrator approves scoring plan and assessment used to measure student learning.

Teacher _____
Signature_____

Evaluator _____ Signature
_____

Date Submitted_____

Date Approved _____

Results of Student Growth Objective
Summarize results using weighted average as appropriate. Delete and add columns and rows as needed.

Prepared ness Group	% Students at Target Score	Teacher SGO Score	Weight (based on students per group)	Weighted Score	Total Teacher SGO Score
1	87	3	0.25	0.75	2.99
2	88	3	0.50	1.50	
3	75	2	0.13	0.26	
4	100	4	0.12	0.48	

While the initial pilot study with Rutgers University ended in 2013, the NJDOE continued to evaluate its own program, including SGOs, in subsequent years. Regarding SGOs, schools were provided updated resources and guidance prior to the second and third years of implementation. These materials were intended to provide greater specificity, correct misunderstandings, and shape educators' perceptions of the value and utility of the process. The

training PowerPoint for Year Two was titled "SGOs 2.0: From Compliance to Quality." In the

notes section of the presentation, the authors sought to address the misconception that SGOs

represented extra work for teachers:

> Rather than being extra work, SGOs should be a way to help teachers focus on teaching
>
> the right standards in the right way, moving students to a set of clear learning goals, and
>
> effectively measuring how well they made it to those goals (slide 9).

> A main area of focus for the presentation (41 out of 72 slides) was recommending that

schools evaluate the quality of their assessments. The logic being that better assessments would

produce better data and inform better instructional practices. It is also worth noting that the

NJDOE increased the weight of the SGO towards a teacher's evaluation (from 15% to 20%)

during the second year. For teachers with SGPs, the SGP value was dropped from 15% to 10%

and the SGO weight decreased from 30% to 20% (New Jersey Department of Education, 2014).

> The title of the SGO training presentation for the 2015-2016 school year was "SGO 2.1:

On the Road to Ownership." In the notes section of the presentation, the authors (2015) stressed

that one of the goals of the NJDOE is "taking SGOs from a series of due dates to a part of the

everyday classroom" (slide 6). To that end, the SGO 2.1 presentation continued to provide

guidance on improving assessment quality, while also encouraging schools to embrace

collaboration in the SGO process as a way to increase quality and meaning. Figure 6 illustrates

the NJDOE's vision of how SGOs should evolve as a tool for improving instruction and learning.

Figure 6

SGO Implementation Evolution
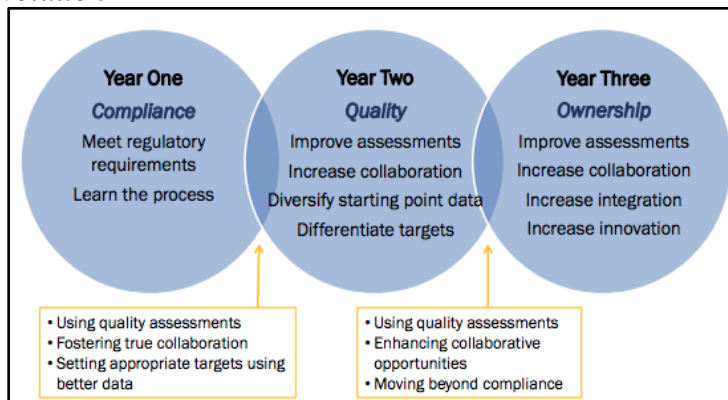
According to the notes for this presentation, the NJDOE acknowledged that many schools may still be transitioning from the compliance stage of Year One and that the three year development plan is not expected in all cases. The authors of the presentation encouraged school leaders to take steps towards producing more meaningful SGOs by continuing to evaluate the quality of assessments used by teachers and to promote collaboration in the process as a way to foster capacity building (New Jersey Department of Education, 2015).

The NJDOE did not provide any more training presentations for SGOs after the 2015-2016 school year. Changes were made to the percentage weights for SGP and SGO scores prior to the 2018-2019 school year. The SGO weight for non-SGP teachers returned to the original 15% value from the first year. More significant adjustments were made to the percentage weights for teachers with SGPs. The SGP weight is now 5%, with the SGO weight worth 25% towards the teacher's evaluation score.

In summary, the New Jersey Department of Education approved a new educator evaluation program (ACHIEVE NJ) in 2013 with the intention of improving school performance by more effectively evaluating educators. A key aspect of this new program was the use of

student performance data to measure teacher performance. ACHIEVE NJ established two tools

for connecting student performance data to teacher evaluation, Student Growth Percentiles

(SGPs) and Student Growth Objectives (SGOs). SGOs apply to every teacher, while SGPs only

apply to certain teachers, based on student testing populations. During the first three years of

implementation, the NJDOE provided schools with resources aimed at helping teachers develop

a more meaningful approach to their SGOs. The development and use of SGOs by teachers is an

example of teachers using data-driven decision-making (DDDM) in their practice.

Summary

This study of teachers engaging in data-driven decision-making in one school district

draws upon and extends the knowledge base described in this literature review. By examining

the experience of teachers in non-tested grades and subjects, I provide further insight into a

subset of teachers that were not typically included in previous research. The lessons learned from

this study of teachers' experiences with ACHIEVE NJ can be applied to other initiatives that

similarly require DDDM practices. Education leaders can use the study results to better support

teachers' data use and more fully realize the potential benefits of data-driven decision-making.

Chapter 3: Methodology

The purpose of this study was to understand how teachers engage in data-driven decision making (DDDM) so that educational leaders might better guide and support educators' data use. Without adequate support, education reforms and initiatives meant to improve education outcomes may have limited effects. To understand teachers' DDDM practices, this study examines one example of data usage: how teachers in traditionally untested subjects and grades constructed and made use of student growth data as part of ACHIEVE NJ, a teacher evaluation program. Using a comparative case study methodology (Yin, 2009), this study examined how teachers from three schools in one district engaged in the practices associated with DDDM as required by the state-mandated ACHIEVE NJ program. Qualitative research methods, including interviews with district- and school-level staff, provide information about educators' beliefs, rationale, and thought process and contribute to a rich data set and robust findings (Creswell, 2014; Yin, 2009). Data collection occurred during the second and third years of the new SGO requirement (2014 - 2016).

Sample Selection

The study took place in Richfield School District, where I had worked as a teacher for several years and could easily arrange interviews with teachers and administrators. This type of convenience sampling is common when the researcher is dependent upon accessibility (Miles, Huberman, & Saldana, 2014). Richfield is a K-8 school district in northern New Jersey in the GH district factor group. It consists of Garland Elementary (K-2), Nance Elementary (K-2), and Jefferson Middle School (5-8). The district has a total enrollment of nearly 1,400 students and 130 full-time teachers.

Thirteen teacher participants from across all three schools were purposely selected

(Creswell, 2009; Miles et al., 2014; Yin, 2009) based on availability and their assignment as

teachers who did not qualify for SGP scores under ACHIEVE NJ. The superintendent and

principals from each of the schools were also included in the study as a way to add additional

context and insight into the teachers' experiences with the initial implementation of the SGO

requirement. In the case of Jefferson Middle School, I was able to interview the interim principal

and the long term principal, who both worked at the middle school during the first year of the

study. Table 3 provides an overview of the participants. All names throughout this study,

including the district, school, and personnel are pseudonyms.

Table 3

Study Participants

James L. Irving, Richfield Superintendent

Garland Elementary	Jefferson Middle	Nance Elementary
Carolyn Sexton, Principal Mallory Harrison, 2nd grade Cassie Knight, 3rd grade Megan Porter, 3rd grade Heather Smith, Basic Skills Instruction/Resource Teacher	Dr. David Gilbert, Interim Principal Kevin Channing, Principal Jamie Smith, Social studies Brendan Woods, Social studies Sean Wilson, Science Andrea Perkins, Science Jackie Harris, World language	Brad Price, Principal Lisa Williams, Kindergarten Jen Sanders, 1st grade Chris Bennett, 2nd grade Teresa Hill, 3rd grade

As a teacher at the middle school during the time of the study, the teachers from the

middle school were invited to participate based on my collegial relationship with them and their

assignment of ungraded subjects. This version of snowball sampling (Miles et al., 2014)

continued as I recruited administrators and elementary teachers for the study. All of the

principals agreed to participate in the study after the superintendent approved the study and I

presented my study at one of the administrators' monthly meetings. In order to recruit

participants from the elementary schools, I started by presenting my study at one of their

monthly faculty meetings. I provided my contact information and invited teachers to email me if they were interested in participating. After receiving no emails, I reached out to a former colleague who worked at Garland School. She reached out to colleagues and put me in contact with the teachers who were willing to be a part of the study. One teacher was unable to find the time to meet with me for an interview and was not a part of the study. For Nance School, one of my middle school colleagues knew a teacher at Nance school, who helped me recruit the other participants for the study. One of the teachers from Nance was unavailable to participate in the study.

Including teachers from across subject areas and grade levels provided a more complete depiction of how the teachers in the district constructed and made use of their student growth data during the first two years of the SGO requirement. In addition the three-site sample afforded opportunities for comparison at the analysis stage of the study. Teacher experiences could be compared across schools and within schools, between grade levels, subject areas, and between elementary and secondary levels.

Data Collection

The design of this study meets many of the common characteristics of qualitative research, including data collection conducted by the researcher directly with the participants in their natural setting (Creswell, 2014). One of the strengths of a qualitative study is the ability to provide the reader with a detailed description of the local setting (Miles & Huberman, 1984). While it may lack generalizability, a thorough descriptive narrative can provide insight into the work of schools, which can inform future actions, initiatives and policy. This study obtained data through interviews with teachers and schools leaders about the teachers' experiences developing

SGOs during the first two years of implementation (the 2013–2014 and 2014–2015 school

years).

Teacher interviews took place in two stages. All 13 teachers participated in the first stage,

which focused on how the teachers originally went about completing the task of creating SGOs.

Participants were asked to discuss their role in the process, as well as their perception of how the

data could be used in practice. The superintendent and building principals were also interviewed

to provide additional context and insight into the teachers' experience with implementing SGOs.

Based on availability, nine of the 13 teachers participated in a second interview a few months

after the first stage. The focus of these second interviews was how the teachers made use of their

student growth data and how they perceived that data was used in their performance evaluation.

Table 4 provides an overview of teacher interview participants.

Table 4

Data Collection: Teacher Interviews

	Garland Elementary	**Jefferson Middle**	**Nance Elementary**
First Interview *-What was your role in the SGO process?* *-How do you see this data being put in practice?*	Mallory Harrison, 2nd grade Cassie Knight, 3rd grade Megan Porter, 3rd grade Heather Smith, Basic Skills Instruction/Resource Teacher	Jamie Smith, Social studies Brendan Woods, Social studies Sean Wilson, Science Andrea Perkins, Science Jackie Harris, World language	Lisa Williams, Kindergarten Jen Sanders, 1st grade Chris Bennett, 2nd grade Teresa Hill, 3rd grade
Second Interview *-How did you make use of your SGO data?* *-How do you feel your SGO data was used in your evaluation?*	Mallory Harrison, 2nd grade Cassie Knight, 3rd grade Megan Porter, 3rd grade	Jamie Smith, Social studies Brendan Woods, Social studies Sean Wilson, Science Jackie Harris, World language	Lisa Williams, Kindergarten Jen Sanders, 1st grade Teresa Hill, 3rd grade

A common protocol (Seidman, 2006) was used for each interview, with some adjustment

to the questions for the interviews with educational leaders (see Appendix A for the interview

protocols). Two previous studies on data-use (Cho & Wayman, 2014) and teacher evaluations

(Firestone et al., 2013) informed the design of the interview protocols. The protocols served as a guide for each interview, but I had the freedom to ask participants follow-up questions if more explanation or detail was needed from the participants' responses. Participants were interviewed individually in settings[2] convenient to the participants. Interviews lasted between 45 – 60 minutes, were audiotaped, and later transcribed on a computer processor.

Data Analysis

Data analysis took place in two phases. The first involved an inductive approach, drawing upon the interview transcripts to create analytic codes. Codes were developed progressively as I reviewed the transcripts (Miles et al., 2014) The second phase used a deductive approach. In deductive analysis, the researcher is analyzing the data based on an existing framework (Patton, 2002). Miles and others (2014) describe this process as deductive coding, in which the researcher develops a list of codes based on "the conceptual framework, list of research questions, hypotheses, problem areas, and/or key variables that the researcher brings to the study" (p. 81)

As part of the inductive approach, I began by reviewing interview transcripts of the middle school teachers. Based on my interview field notes and as a result of transcribing the interviews, I sensed that the overall SGO process presented a greater challenge to the middle school teachers than the elementary school teachers. Therefore, I began by reviewing the middle school transcripts for general references to the challenge of constructing measurements for student growth. I took notes about some of the factors that contributed to these challenges. Interviewees frequently described time as a challenge. Leadership, including a perceived lack of it, was another frequently mentioned challenge. Given that SGOs are tied to teachers' evaluation scores, I also anticipated there being a strong presence of threat perception when teachers

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[2] Two interviews were conducted over the phone and one interview was done via Facetime. The rest were conducted in-person.

discussed the SGO process. What I found was teachers making references to ways they could "game the system" or get around the accountability threat by manipulating their data or improving their testing conditions. Perhaps most interesting was that some participants talked about how they developed new practices as a result of the SGO requirement, even stating that they saw the SGO requirement as a positive influence.

Ultimately, my initial review of the middle school teacher transcripts produced a loose set of codes that I identified using different color highlighters on the printed interview transcripts (green for challenges, orange for lack of leadership, yellow for changing views, and pink for gaming the system). Additionally, I attached a Post-It note to each individual interview where I jotted down the three-four major ideas expressed by the participant. As I transferred highlighted passages from the transcripts to Word document, I started to identify sub-codes or child codes within the general codes. For example, teachers described different types of challenges associated with the SGO process. Creating new measurements for student growth represented a different challenge than figuring out the correct way to complete the SGO form. Each of these challenges became a sub-code.

Next, I reviewed the elementary teacher transcripts using the same loose codes (green for challenges, orange for leadership, yellow for changing views, and pink for gaming the system) drawn from the middle school transcripts. The original codes evolved as I reviewed the elementary transcripts because the elementary participants had different experiences from the middle school participants. For example, "lack of leadership" changed to a more neutral code of "leadership" because the elementary teachers gave many examples of how school and district leadership helped them during the SGO process. Similarly, the "gaming the system" code expanded to "teacher control over SGO" as the elementary teachers talked about the many

different ways that having control over their SGOs impacted their experience. For example,

teachers felt more comfortable with their SGOs because they had control over them, but they

also found the resulting data less valuable because they had watered it down to get good scores.

As a result, many elementary teachers simply saw the SGOs as added paperwork that did not

provide value to their teaching practice. Consequently, I adjusted the "changing views" code to

be "how SGOs fit into teacher practice." Finally, I split the "challenges" code into two codes:

"challenges of constructing SGOs" and "sensemaking process." In this way, I hoped to

differentiate between the concrete tasks or barriers teachers had to deal with during the SGO

process and the sensemaking process they navigated as they resolved those tasks and barriers.

Table 5 reflects my evolving parent codes, along with the potential child codes I started

to see after reviewing all of the interview transcripts. Separate Word documents were created for

each code and coded passages from the interviews were copied and pasted into the applicable

document. Passages within the document were then sorted by child code. In this way, I was able

to review all of the teachers' comments regarding a code and child code in one document,

providing some sense of emerging patterns.

Table 5

Evolving Codes From Teacher Transcript Review

Parent Codes	Child Codes
Challenges of constructing SGOs	Creating measurements for student growth
	Determining scoring criteria
	Figuring out the SGO form
	Time to develop/administer/review measurements
Leadership	Mixed messages
	Lack of guidance
	Helpful
	Trust
Sensemaking process	Collaboration with colleagues
	Guidance from leadership
	Trial-and-error
Teacher control over SGO	Selection of students
	Choosing achievable goals
	Gaming the system
After Year One, how do SGOs fit into teacher practice? Or How have SGOs changed teacher practice?	Paperwork
	Useful data
	Un-useful data

After reviewing the consolidated coded passages for all of the teachers, I shifted my

attention to the transcripts for the district superintendent and the principals. While the majority of

the teacher interviews described work that they completed on their own or with colleagues, there

were references to leadership framing and leadership interventions. I wanted to see how the

teachers' perception of the initial SGO process matched with the educational leaders' accounts.

As I read the leadership transcripts I made note of passages that could be directly connected to

content I had coded in the teacher interviews. In some cases there was agreement, such as the

Nance principal outlining his decision to meet with every individual teacher and assist them with

completing the online SGO form. Each of the Nance teachers referenced this specific practice in

their interviews.

Conversely, the school leaders' accounts did not always match what was shared in the teacher interviews. For example, the interim principal at Jefferson Middle School questioned the willingness of veteran teachers to make adjustments to their SGOs from the first year, even naming specific people. In contrast, Jamie Smith, veteran social studies teacher, described how she made significant changes to her practices around SGOs during the second year, (when the interim was her principal) even working with a colleague the interim principal had noted was unlikely to change her practices around data.

Passages from the educational leader interviews that connected to previously coded parts the teacher interviews were copied and pasted into common documents for review. After reviewing these organized passages, I wrote analytical memos to begin to make sense of how the educational leaders' interviews informed my understanding of the teachers' experience. Analytical memos are a way to record the researcher's reflections about data (Miles et al., 2014).

In addition to the insights developed through inductive analysis of the interview transcripts, I also engaged in deductive analysis. Deductive analysis is the process by which researchers analyze data based on an existing framework (Patton, 2002). Cycling back to my review of the literature, I developed what Miles and others (2014) call deductive codes based on the key factors that influence teachers' work in the data-driven decision making process. Table 6 provides an overview of these codes.

Table 6

Codes Based on DDDM Literature

Framing	Product	Action
The new requirement	Type of measurement	Challenges
Purpose of SGOs	Type of data	Teacher interventions
Framing of Year Two	Type of analysis	Principal leverage points

Framing codes were based on scholarship from Horn, et al., 2015 and Jimerson, 2014 and included how teachers understood their principal's framing of the new requirement (e.g., "this is just something we have to do" "here, do this, the state needs it"), the teachers' understanding of the specific purpose of SGOs (e.g., "to see if teachers are doing their job" "who knows?"), and how the teachers perceived the task heading into Year Two (e.g., "be smarter about setting achievable goals" "I think we got it"). Product codes were based on the different types of data and analysis described by Ikemoto and Marsh (2007) with the goal of detailing the specific types of measurement, data, and resulting analysis that were used by teachers in the SGO process. Action codes were drawn from Marsh's (2012) research. They described teachers' depictions of challenges they navigated when completing the process (e.g., collecting data, filling out the form, choosing achievable targets); teachers' explanations of interventions they made based on their analysis of the SGO data; and principals' depictions of leverage points in the DDDM process where teachers required support to complete the SGO requirement.

To gain a detailed overview of what took place in the study, I imported the deductive codes for each teacher into an Excel spreadsheet to produce a meta-matrix (Miles et al., 2014). This created a visual/graphic depiction of how different aspects of the SGO process lined up between participants. Using this display, I could gain a better understanding of how the SGO

process took place in each of the schools. Reviewing this master chart was particularly helpful

when writing the detailed narratives for each teachers' experience in the findings section.

Validity

Using only interviews as a data source can create concerns about the validity of the data.

I took the following steps to try to improve the validity of my data. Recording the interviews and

transcribing them myself ensured that I had an accurate record of what each participant said in

their interview. Interviewing half of the participants a second time provided opportunities to

verify several aspects of the teachers' accounts. Meaning, the teachers did not have significantly

different stories between the two interviews. Using interview protocols ensured that I was

covering the same topics with each of the participants and provided opportunity for comparison

across interviews. Additionally, having multiple interviews within the same school (and in some

cases, the same grade level team or content department) provide a mechanism for confirming

some many aspects of what happened in the study. As an example, all of the Nance teachers

spoke to their principal sitting with them individually to complete the new online SGO form.

Similarly, all of the Jefferson teachers referenced the administrative turnover and how it

contributed to confusion and a lack of guidance around the SGO process. By comparing different

accounts from the interviews, I was able to triangulate the data to ensure a valid and reliable

depiction of what took place in the study (Creswell, 2014). Each of the participants told their

own individual story, but there were enough overlapping experiences amongst the 18 participants

to provide a relatively detailed and accurate account of what happened in Richfield during the

first few years of the SGO requirement.

Role of Researcher

It is important to acknowledge and explain my role as the researcher and how that may have impacted my access and interpretation of this study (Creswell, 2014). I worked in the Richfield School District from 2005 - 2015 primarily as a social studies teacher at Jefferson Middle School. Consequently, I had a previous relationship with many of the participants, particularly the middle school teachers. During the first year of the SGO requirement (2013-2014) I had just started a new position at the middle school as dean of students. This was a teacher position with no supervisory responsibilities. Due to the unique nature of the position (I did not teach any classes), I did not have to create an SGO for my own practice and I was present for many of the initial administrative meetings and conversations around the new SGO requirement. During the 2014-2015 school year, I took a more active role in assisting teachers at the middle school with their SGOs, including facilitating a workshop on filling out the form, meeting with teachers to help them develop their SGOs and identify growth targets, and providing feedback and corrections to submitted SGOs.

The interviews for this study began in December of 2014, nearly two months after my role in assisting teachers with their SGOs ended. I had no direct involvement with how SGOs were scored or included in evaluations during the spring of 2015. In the summer of 2015, I left Richfield School District to take an assistant principal position in another district.

As a teacher in the district, I not only had a strong connection to many of the participants, but I believe the teachers were comfortable being candid with me about their experiences with SGOs. If I were an administrator in the district, they may have been more circumspect sharing their challenges, frustrations with leadership, and lack of application with the SGOs. Conversely, the administrators may not have been as candid speaking with me about their experiences. For

example, if principals had specific concerns about teacher performance, it would not have been appropriate for them to share that with me. Additionally, if principals had concerns about their own data literacy, they may not have freely shared that information with me as a teacher in their district. Overall, considering the focus of the study was on the experience of the teachers, I think my role as a colleague in the district was helpful.

Limitations of Design

There were some limitations to the design of this study. While interviews can provide a detailed account of someone's experience, it is also self-reported and can suffer from inaccuracies or misrepresentations. While I do not think anyone lied in their interviews, it is possible they may have portrayed some aspects of their practice in a more positive light. Their accounts are also based on their recollection of things that happened in the past. Therefore, participants may have simply made mistakes because it can be hard to remember everything that happened two or three years ago. Including other methods of data in the study, including observations and artifact review, would have provided more detail and opportunities to validate the teacher accounts of what took place. Additionally, expanding the sample of participants to include more teachers and some of the administrators would have improved the strength of the study. Ultimately, the decision to participate in research is voluntary and every study is bounded within the parameters of time and situated contextual conditions.

Chapter 4: Findings

The findings of this study are presented as case study narratives (Yin, 2009). The chapter

begins with the case narrative for the Richfield School District and is followed by case narratives

for each of the Richfield schools: Jefferson Middle School, Garland Elementary School, and

Nance Elementary School. Within each school case narrative, I have included individual teacher

case narratives. This provides a rich and detailed account of how the teachers engaged in DDDM

practices to complete the SGO requirement of ACHIEVE NJ.

Richfield District Case Narrative

Richfield was a school district in transition. At the time that the NJDOE initiated its new

evaluation requirements, including SGOs, James Irving had just begun his second year as the

superintendent of the K-8 school district in Northern New Jersey. James had already been an

administrator in Richfield for seven years, starting as the assistant principal at Jefferson Middle

School and more recently serving as the principal at Nance Elementary School. He had worked

closely with his predecessor, who had been the Richfield superintendent for nearly 20 years.

At the conclusion of his first year as superintendent, James worked with the Board of

Education to initiate a restructuring of the Richfield administrative team. The assistant principal

position at Jefferson Middle School was dissolved and replaced with a Dean of Students position

(assigned to a teacher with no supervision or evaluation responsibilities). The Board created two

new positions, intended to provide guidance and support to all three schools in the district. The

new Supervisor of Curriculum, Instruction, and Assessment was hired to facilitate between

alignment of curriculum across the district and to increase the use of data to guide practice

throughout Richfield. A Literacy Coach was also hired for the district as it continued to adopt the

Readers and Writers Workshop programs across all grade levels.

During the summer of 2013, James spent time meeting with his administrative team

discussing and planning for the roll out of the new evaluation program, as well as the SGO

requirement. During these discussions, James tried to facilitate some consensus among the group

about what they were looking for in an SGO and what it should look like. They discussed how to

present the information to the teachers. James recognized that this was uncharted territory for the

district:

> People didn't really know what an SGO was, like where do I start? You know, what do I
>
> evaluate? And obviously the anxiety of how it's going to affect them at the end of the
>
> year. But the initial challenge was getting the information, the appropropriate, the proper
>
> information, how to construct an SGO. How to train teachers to construct an SGO.
>
> Because it was so new that no one knew how to do it, including, to be perfectly honest,
>
> our principals.

James understood that this new requirement would affect all staff members in some capacity and

that there would be some uneasiness and confusion during the first year of implementation. To

that end, he sought to provide the schools with some additional support. The new Supervisor of

Curriculum, Instruction, and Assessment was sent to each school to provide follow-up assistance

to staff members constructing their first SGOs. The new Literacy Coach, also worked with

teachers on connecting rubrics and practices from the relatively new Readers and Writers

Workshop program to this task. As one elementary teacher explained, these two district staff

members were viewed as helpful resources in the process:

> We as the third grade definitely worked together with, and it might be during common
>
> planning, where we might have sat with Jennifer (Literacy Coach) or Michelle
>
> (Supervisor of Curriculum, Instruction, and Assessment) and said, "Okay, here's what
>
> we're thinking" or they would tell us what they were thinking and we kind of hashed it

out. Looking at percentages and numbers, okay is this reasonable? Are we going in the

right direction? So we really did rely on the people that we thought had the information

and to help guide us.

The teaming structure in place at both elementary schools, along with the established routine of

common planning time, provided these new district employees with entry points to assist the

teachers in this new task. Several elementary teachers, as well as the principals, made note of

these district staff members as resources during Year One of this process.

This was not the case in the middle school, where there was not a traditional team and

common planning dynamic in place. Many content teachers taught across multiple grade levels.

Additionally, there was resistance from the staff about incorporating the Workshop programs in

the older grades, making it less likely they would seek out assistance from the Literacy Coach.

The following year, James moved the offices for the Curriculum Supervisor and Literacy Coach

to the middle school in an effort to increase their involvement with the staff in that building.

Overall, James was admittedly "hands off" with the SGO process outside of providing his

administrators with what he saw as the necessary information, offering the help of the new

district staff members, and facilitating conversations around the topic at different points in the

year. He believed that the principals should have the freedom to decide what works best for their

building:

Every building, just like every teacher, has a unique style. Every principal has their own

unique style. So I didn't say everyone has to do it lock step with the other principals . . . I

don't believe, not just in this process, but in any process, dictating to them, to the

principals, you have to do things a certain way. There are certain requirements we have to

have . . . How they did that, I gave them some autonomy or some flexibility in how they

created that, because they know their building, they know their staff.

Based on his conversations with the administrative team, James believed that the first

year of SGO construction went well. The team discussed the task again in preparation for the

February revision deadline ("Do we revise it? How do I know if I should revise it? And then if

I'm going to revise it, how much can I change it?") and then again near the end of the year when

it was time to include the SGO scores in the summative evaluations. James believed that the

principals "were pretty comfortable with" the end result and how to incorporate SGO scores into

the summative evaluations. Ultimately, James believed that the district had cleared the biggest

hurdle- the first year. In his mind, the task would be easier each year as the staff built upon their

prior experience and the anxiety or fear of the unknown was gone:

> So just the fact that they've gone through the process, they've experienced it, they've
>
> lived with it. Now they're going through it for a second time, that helps. And every year
>
> you do it, it gets a little easier. And I think in some cases people aren't going to try and
>
> reinvent the wheel. Now whether that's good or bad, you know, I don't know. I don't
>
> necessarily think it's a good thing that they're always using the same SGO, so I would
>
> hope that people would modify or tweak it as they felt appropriate for their class or that
>
> new group or just to improve themselves as a teacher, so it's not just business as usual.
>
> But the process, they're gone through it once, I think that helps and that will make it
>
> easier and their anxiety levels will just drop because they've done it.

For James, going through the process was the most important task. Figuring out how to complete

it would come with time and under the informed direction of his building principals.

Richfield experienced significant administrative turnover after the first year of the new

ACHIEVE NJ program. James Irving left the district in December of 2014 (Year Two of SGOs)

to take the same position in a different district. After an interim superintendent filled the role for

the remainder of the school year, Kyle Williams took over as the new superintendent in 2015. He

resigned the following June (2016) to pursue other opportunities. The Supervisor of Curriculum,

Instruction, and Assessment left the district after one year. Her replacement left the following

February for a similar position in a neighboring district. The new Curriculum Supervisor held the

position for two years before accepting a principalship in another district.

All of this turnover at the district level had an impact on teachers' perception of the

district's ability to promote progressive, data-based practices:

> I remember having conversations with my friends and being surprised at just how much
>
> assessing and how data-driven they were and we really weren't. And I think that could be
>
> for a couple different reasons. I think with the turnover with administration that we've
>
> had, and let's face it, we've had a lot. I mean in my time here, we're on our 4th principal,
>
> our 3rd superintendent, 4th if you count Mr. Drew (interim superintendent in spring of
>
> 2012). There's been a lot of turnover and that could be part of the reason why. But I kind
>
> of felt that when it came to assessments, I always felt like we seemed a little bit behind
>
> what other districts were doing.

Teachers were hopeful that new leadership would address some broader concerns they had about

the direction of the district:

> Well I hope the new superintendent, he has a lot to do here. I feel the last couple of years
>
> our district has taken a lot of steps backwards and we need leadership. We need
>
> educational leadership, besides just organizing and making sure everything runs

> smoothly. I hope they're going in that direction. I think we need a lot more. I mean, I
> guess that's why they hired him (laughs).

And,

> I think that next year should be interesting with new leadership. I think we kind of need
> it. I feel like this year was very disorganized, very all over the place with things. And I
> personally think that, you know, it was kind of, things were just thrown at us. I know
> what I'm doing, but at the same time, so the data, I mean it reflects obviously that I'm
> doing my job, but a little bit of leadership, a little bit more guidance would be good . . .
> I'm looking for a definitive curriculum that we should be following, not just give this a
> try . . . People are like, well what are we supposed to do? I mean, people shouldn't be
> like, what are we supposed to be doing? You know? We should know what we're doing
> (laughs).

In the section I provide case narratives for each school in Richfield District, as well as case
narratives for each of the teachers in the study.

Jefferson Middle School Narrative

Similar to what took place at the district level, the leadership at Jefferson changed
multiple times during the course of this study. The longtime principal of over 15 years retired at
the end of the first year of the SGO requirement. The district hired an interim principal the
following year, while it conducted a search for a new principal. The interim principal was a
retired school administrator with no prior experience in the district. He served until the new and
current principal was available in January of the second year of SGOs. The new principal had
spent the last ten years in an assistant principal role in a different school district.

Another contextual characteristic of Jefferson that was unique to the other schools in the district, was the middle school's recent designation as a Focus School by the New Jersey Department of Education's Regional Achievement Center (RAC). The RAC was established as part of a new approach to accountability (included in the state's application to waive certain federal requirements under the Obama administration) (New Jersey Department of Education, 2017). One aspect of this approach involved a methodology for identifying schools in need of significant state intervention (Priority schools) or moderate intervention (Focus schools). The RAC also identified schools worth spotlighting for their achievement (Reward schools). Jefferson was identified as a Focus School in 2013 because two of its subcategories (special education students and ELL students) failed to make comparable progress with the other subcategories of the school on the state assessment.

As a Focus School, the principal and other members of the district administration were required to meet with members of the RAC on a regular basis to create an action plan and monitor the progress of that plan. Jefferson retained the Focus School label for the duration of the study. Therefore, in addition to navigating the new evaluation system and SGO requirements, the Jefferson principal was responsible for overseeing the execution of a state required action plan and all the paperwork, meetings, and time that went with it. Additionally, the Focus School designation carried a negative connotation, which could impact the principal's professional relationship with the superintendent and the Board of Education. Similarly, the Focus School label could negatively impact how the teachers perceive their own performance, the status of the school, the capabilities of the principal, and the support from the Board of Education. All of these factors had some influence on how the Jefferson staff interpreted and approached the new SGO requirement from the state.

Year One: Retiring Principal

The Jefferson principal during the first year of the SGO requirement was not interviewed for this study, but the principals who followed her and the Jefferson teachers did share a consistent perception of how she approached the first year of implementing this requirement. The teachers believed that the process was rushed and that they were provided limited guidance on how to complete the requirement. As veteran social studies teacher Jamie Smith describes, this lack of guidance caused confusion and frustration as she tried to comply with the requirements:

> I don't feel that I was properly trained on how to do it. I just felt like it was like, "Here do this, this is a simplified version of how to do this". . . I honestly didn't know how to fill out the form . . . I felt like it was thrown at me and I really didn't know how to do it . . . Why to do it. How to do it. "Here, the state's saying we have to do this, let's just do this quickly." That's how I felt last year.

This teacher's perspective speaks to her unfulfilled desire to not only know how to complete this task, but the ultimate purpose. Similarly, her colleagues shared many examples of how they struggled to figure out the correct way to measure student progress for their SGO.

The task of constructing measurements for student growth proved challenging for the middle school teachers. The teachers in non-tested areas (e.g., social studies, science, world language) had little experience systematically gathering student growth data. To meet the SGO requirements, the teachers had to create measurement tools that would allow them to track student growth throughout the year. This represented a significant new task for these teachers. For longtime teacher Jamie Smith, the whole idea was foreign:

> Just knowledge, just information, trying to get the information on how to go about doing it. How to figure out improvement, target ranges, just, it was so abstract to me. It was just

like, I've never done that before. I've been teaching for 23 years, I've never done that

before.

Andrea Perkins, a science teacher in her first few years of teaching, expressed similar frustration

over the lack of assistance provided by the administration:

I feel that I wasn't given a lot of guidance with how to create an appropriate

measurement. I was really forced to design it on my own and hope that it was going to

measure enough student growth. Or it was going to fit the bill, I guess I would say.

Overall, the Jefferson teachers talked about struggling to identify baseline data, determine

growth targets, and track progress. Even deciding how many questions to include on the

assessment was a challenge. Sean Wilson, a veteran science teacher of nearly ten years, shared

how his department gave a 160-question assessment for their SGO during the first year, but only

used 12 of those questions for the actual SGO. They paired down the assessment to 30-40

questions the following year. Even then, the Sean expressed frustration with what to do with all

of this information:

I would almost need a secretary, or I would need a research partner, just to help me with

that data and compiling that data, to then use it for my individual students . . . So that's a

dilemma for me, because I had a lot of data. I didn't use any of it, but it was there.

This teacher identified that collecting student growth data had minimal value if he was not able

to make sense of it or apply it to his practice. Many other teachers shared similar frustrations as

they attempted to discern value out of the work necessary to complete the SGO requirements.

Given the perceived lack of guidance and support from administration, most teachers

sought to work with their departmental colleagues to complete the task. Jackie Harris, a world

language teacher of over five years, went outside of her school to find colleagues and

collaborators:

> I actually sat with other teachers from other districts and we wrote our SGOs one night to
>
> try to discuss and banter about what we thought it was and how to organize it . . . We
>
> took all of the information that we were given from our districts and kind of tore it apart
>
> to better understand it. And then we wrote our SGOs and then we handed them in
>
> (laughs).

Lacking direct assistance from her school leadership, Jackie found it helpful to work with other

teachers and compare resources as she tried to get a good sense of how to complete this new

requirement.

Overall, the Jefferson teachers had a negative perspective of the first year of the SGO

requirement. They felt rushed to complete the task, receiving limited guidance from

administration. Many did not feel comfortable with their level of data literacy and ultimately

were unsure if they were doing it the right way. Frustration and confusion over the process

continued with year two.

Year Two: Interim Principal

After the longtime principal retired in June of 2014, the Richfield Board of Education

failed to find a suitable candidate for their principal vacancy and opted to hire an interim

principal in August, just a few weeks prior to the start of school. Dr. David Gilbert had retired

from education about six years before accepting the position of interim principal at Jefferson

School. During his career, he spent nearly 40 years in the same school district, primarily in a

high school setting, retiring as an assistant principal. Dr. Gilbert came to Jefferson with little

connection or experience with the Richfield School District or working in a middle school environment.

Dr. Gilbert was well-aware of Jefferson's Focus School designation and that continuing to meet the action plan requirements from the RAC would be a priority for him. Additionally, he understood that he would have to oversee the staff completing the still new SGO requirements. However, he had no personal background with this new requirement and found little guidance from what was left behind from the previous principal:

> The predecessor hasn't done anything, so we're starting from square one, peg one, which is making it very, very difficult to put it together . . . To be very honest, we've been shooting in the dark . . . because previous preparations were not done to help us get to where we need to be.

As someone who had never dealt with SGOs before, Dr. Gilbert was frustrated by what he perceived as inadequate implementation during the first year of the requirement. He believed that what had been done under the previous administration was incorrect, but he also lacked the previous experience to know how to navigate this change.

Further contributing to Dr. Gilbert's challenging situation was his sense that the Jefferson staff treated the SGO requirement as a joke during the first year, given the lack of accountability or direct guidance from the previous principal. Therefore, he perceived one of his greatest challenges was getting the staff to accept that they needed to fulfill these requirements and change their practices:

> That was the hardest thing for them. They actually didn't believe it was real. That it was a necessity. I had a few of them in here saying, this is going to go the way of the

> dinosaur like everything else. I said, this ain't going away coach. And I had to lock
>
> horns with a few people in here with the door closed and raise my voice a little bit to
>
> say this is not going away, this is going to be here for a long time . . . I had to take the
>
> SGOs that we had and rewrite them and say, you can't turn this in. I had to setup that
>
> whole document. I spent a whole Sunday, Saturday and Sunday rewriting
>
> everything, trying to get these people to understand this is not a joke.

Dr. Gilbert felt burdened by what he perceived as an unwillingness on the part of many

teachers to make changes or improvements on their SGOs from the previous year.

In addition to trying to make corrections himself to individual SGOs, Dr. Gilbert tried

to identify staff members he believed had a better understanding of how to create SGOs. His

hope was that those teachers could help the other teachers who were struggling with the

requirement and were not receptive to his direct involvement as an administrator. Despite

these efforts, Dr. Gilbert was not optimistic about the potential for many of the Jefferson

teachers to change:

> Those that have taken it seriously are going to evolve. They will evolve with these
>
> SGOs. They will see the value of them. They'll see the need of them. They'll see the
>
> growth of the kids. The ones that are resistant, you're still going to find the same
>
> kind of headaches next year, the same kind of moaning . . . You're going to see the
>
> same thing from them until they retire. Because they don't want to change. And
>
> unfortunately until you get a faculty change in that attitude or they change, it's going
>
> to stay the same.

To Dr. Gilbert, the culture of the building was a major barrier to the school adopting the

new SGO requirements. He attempted to change that culture during his time at Jefferson,

but seemed resigned to it staying the same when he was interviewed near the end of his

term as interim principal.

The Jefferson teachers did not speak much directly about Dr. Gilbert's leadership as

it relates to the SGO requirement. But the administrative turnover did seem to contribute

to the teachers' ongoing frustration that they were not being provided clear and consistent

guidance on this task. As Jamie Smith explains, teachers would talk to each other about the

requirement and find they had different interpretations or were given conflicting answers

by administration:

> There was a lot of frustration in creating them. It was our interpretation of what was
>
> supposed to be done, how it was supposed to be constructed, how to write out the form.
>
> And then I remember us meeting to discuss the forms, and like, "Well, no we have to
>
> have this." "No I just met with Matt and he said we're supposed to have this." So, a lot of
>
> different interpretations, misinterpretations. So it was a lot of confusion at first.

The inconsistent feedback and interpretations described here contributed to the overall concern

from many of the teachers that they were not doing the SGOs correctly.

In Year Two, the teachers did learn some tricks to make the process easier. For example,

the science teachers cut down how many questions they included in their pre and post

assessments, since they were only using a portion of the questions for their SGOs. Along similar

lines, Brendan Woods, a social studies teacher with over nine years of experience, went from

including all of his 6th grade students in his first SGO, to only including the general education

students in two classes in the second year. He made a separate SGO for his special education

students. Other teachers talked about adjusting the numbers for their scoring criteria now that

they had a better understanding of what it would look like in the spring. This included setting

lower target scores for the students, as some teachers realized they were too ambitious in Year

One and had to make adjustments later in the year. For the most part, teachers used the same

general SGO in the first two years. But again, they were still unsure if they were completing the

requirement correctly.

The New Principal

Kevin Channing took over as Jefferson principal in January of 2015. While Kevin

acknowledged that the previous SGOs were not sufficient, he also recognized the need to provide

clear and simple guidance to his teachers on how to complete the requirement correctly. He also

did not want to overwhelm teachers with more change given the degree of turnover over the last

18 months. Kevin believed that the teachers had a lot of anxiety about the new requirements and

how student growth data would be tied to their evaluations. Kevin had his own doubts and

misgivings about the impact data should have on evaluations. Therefore, he sought to work with

teachers individually to build trust and ensure proper compliance with the state requirement.

When Kevin started his first full school year as the Jefferson principal, the teachers were

entering their third year of the SGO requirement. Most teachers were still unsure if they were

doing the SGOs correctly or the broader purpose of the task. Kevin believed that too many

teachers were measuring student growth by having the students take the same assessment at the

beginning of the year and in the spring (commonly referred to as a pre- and post-test). The

assessments were largely based on content, rather than skill. To Kevin, this approach produced

data that had minimal value to teacher practice. Of course most of the students would score

better on the post-test than the pre-test. He sought to help them identify measurable skills that

they could track throughout the year. As part of that process, Kevin tried to reframe the SGO

requirement as a manageable task and not a drastic shift in practice for the teachers:

I actually like the idea of the SGO and when I met with the teachers, I said, well why

wouldn't you? You do this all the time. You always tested and kept track of student

progress. That's all this is. And now you're just picking out a particular skill that you're

going to chart . . . You know I think everyone was really scared as to what exactly it was

and it's not that big and scary. It's imminently doable.

For Kevin, it was important to demystify the concept of student growth data and help teachers

see that it was not a rapid departure from their existing practices. Moreover, monitoring skills

throughout the year would be more valuable to teachers than content-based data at the beginning

and end of the year.

While Kevin believed that his expectations for SGOs were simple and manageable, he

understood that the teachers' previous experiences would require some unlearning and

individualized assistance. To accomplish this, Kevin decided to meet with every teacher

individually to develop and review their SGOs:

I met with every teacher individually, showed them what a good SGO looks like, gave

them examples. And then when they submitted the SGO, those that needed some

adjustment, I met with those teachers again. Those that got it right the first time around, I

won't meet with them until January . . . I know meeting with each teacher individually

isn't the best use of time, but considering that the SGO construction from the previous

year, from the previous principal, was less than desirable, I felt it was necessary to make

that investment now so that in the future it will just become easier for the teachers. But it

was very time consuming.

Although it took a lot of time to meet with teachers individually, Kevin saw this as a worthwhile

investment that would help clarify his expectations and minimize the need for direct support with

SGOs moving forward. For the teachers, Kevin's approach was a welcome change from what they perceived as a lack of guidance and support from previous administrators. Additionally, the teachers expressed confidence that their new principal was more up-to-date with the expectations from the state for SGOs and how to incorporate meaningful data into their practice. Overall, the Jefferson teachers felt more comfortable with the SGO requirement and were confident that their new principal would be able to guide them in the right direction.

One area that Kevin acknowledged was out of his control was the potential that the state would change the expectations or requirements for SGOs. When asked how his approach to SGOs might be different the following year, he expressed concern and frustration about the influence of the state:

That's up to the state. If they don't make any changes, which I highly doubt, I think I won't need to meet with teachers individually next year. Or they'll use the previous year's SGO as a guideline. So, in that aspect I think it'll be easier. But if the state changes things like they have been, and they change things it seems every year, then you're back to articulating what that change is . . . They have to stop tinkering.

For Kevin, the task of helping his teachers interpret new state guidelines threatened to stall progress they might be making with their use of student growth data. Additionally, while he was willing to invest the time to meet with teachers individually about their SGOs during his first full year as principal, he did not see that as a good use of his time on a regular basis. Therefore, he was hopeful that the state would stop making annual revisions or recommendations to the SGO requirement.

Perhaps just as important as the *how* to complete the SGO requirement, was the *why*. Many teachers expressed frustration about the amount of time necessary and the "tedium"

required to fill out forms and collect "meaningless" data. When few teachers could recall SGO

data being discussed during their summative conferences, that seemed to confirm their

suspicions that the entire exercise held minimal value. That being said, the general consensus

among teachers was that they would be opposed to student growth data being used to evaluate

their performance. As principal, Kevin shared a similar perspective, stating that he did not plan

to use the SGO data to evaluate his staff:

> We know the students better than any sheet of paper or SGO or whatever data is going to
>
> get pushed out. And sometimes, kids grow but they might not hit those growth points. I
>
> mean, we had a teacher last year, who had a very difficult class and technically she didn't
>
> hit the points and it came up ineffective, but it's not her fault. We created the class of kids
>
> that were low functioning or had behavioral issues or whatever it was. And, you know, if
>
> the teachers are doing their job and the students are growing, that's what's most
>
> important to me.

Kevin felt strongly that data had limited applications and that there were better ways to measure

and evaluate teacher performance. Overall, he believed that there was too great an emphasis

placed on data in education:

> Not everything is data . . . It's like education has become a slave to data the way baseball
>
> has become a slave to Sabremetrics. Instead of having a feel and a passion for what
>
> you're doing, now it's just a bunch of numbers shooting across the page that determines
>
> one's effectiveness. And that's just not true.

While Kevin did not support blind allegiance to data in education, he did provide examples of

how it could be valuable:

> It has its place and it can be used. I like the use of data when it comes to impacting the

type of instruction that goes in the classroom. So, if you're getting back results and it's

saying, you know what, the kids' inference skills are really weak, I need to focus in on

that and it really helps with differentiating instruction. And if you have that data and you

use it and the teacher decides to ignore it, that's different. But to use data to impact

someone's employment, when you know, you see it with your eyes. You're discounting

what you see and saying, your eyes lie, trust this instead. No. I disagree with that.

For Kevin, it was important to draw a distinction between using data to inform practice and using

data to impact teacher evaluations and employment decisions. He wanted his teachers to collect

and use student growth data to inform their practice, but he did not want them to feel the pressure

that can be associated with an accountability measure. This can be a difficult balancing act given

that many teachers associated the new SGO and teacher evaluation requirements as

accountability measures adopted by the state to impact employment decisions about teachers. A

reality that Kevin readily acknowledged:

Oh I think the teachers hate it. I think that this has sent a ripple effect of massive

proportions through, you know, for the teachers. Because I think they're afraid that

administrators are going to use all of that data against them. Teachers are inherently

negative, negative, negative people. You know, they may be all, you know, rosy in the

classroom with the kids, but they are panicked about their employment because of the

data. Oh, without a doubt.

To combat this fear, Kevin thought it was essential to build trust with his teachers that he would

support them and not use data in a harmful way. One way to accomplish this was to help the staff

make changes to their SGOs during mid-year review period:

They have faith . . . come January we'll see where the students are at and I'll be fair and

we'll make necessary adjustments. Like maybe what we put down was too lofty. So I

think that's the key thing, that the staff trusts you that you'll do the right thing and you

have to have that January adjustment. You know, but they have to hold up their end of

the bargain and make sure that they're keeping the data, they're actually keeping track of

student progress.

Once again, Kevin is prioritizing providing assistance with the SGO task and trying to make it

more manageable for his staff. In this case, he is offering a safety net to the teachers to adjust

their target goals in January if they do not make anticipated progress. In this way, he is

continuing to build trust with his staff, while ensuring that they are completing requirements for

the state.

During the first two years of the SGO requirement, the teachers at Jefferson were clearly

impacted by the administrative turnover in the building. Under a principal on the verge of

retirement and an interim principal, the teachers did not feel they received sufficient guidance on

how to complete the SGO requirement. Additionally, the teachers had doubts about the school

leadership's detailed knowledge of the expectations for this new state program. With the hiring

of Kevin Channing, the staff anticipated there would be more consistent leadership moving

forward. Moreover, the teachers believed that their new principal was better informed about new

state requirements and the best practices necessary to fulfill them. Kevin Channing helped

validate these beliefs by providing individualized support to his teachers on how to complete the

SGO requirement. In doing so, Kevin believed that he would alleviate the anxiety teachers had

over this new state policy, while building trust with his new staff that would pay dividends in

other areas in the future.

Jefferson Teacher Case Narratives

The Jefferson teachers navigated the first two years of the SGO requirement, despite administrative turnover and lack of clear guidance and support. The following section includes case narratives for the five teachers who were interviewed for this study. Table 7 provides an overview of the teachers interviewed from Jefferson School.

Table 7

Jefferson School Teachers

	Sean Wilson	Andrea Perkins	Jackie Harris	Brendan Woods	Jamie Smith
Experience	9+ years	3+ years	5+ years	9+ years	20+ years
Subject	Science	Science	World Language	Social Studies	Social Studies
Grade(s)	6th Grade	8th Grade	7th/8th Grade	6th Grade	8th Grade

Sean Wilson, Science, Jefferson Middle

Sean Wilson was a science teacher with over nine years of experience at Jefferson Middle School. During that time he had primarily taught 6th grade students. Based on the recommendations he was provided by administration, Sean worked with his fellow science teachers to develop a comprehensive test that would assess students' knowledge of the curriculum content for the entire year. Sean estimated that it took the students three class periods to take the assessment at the beginning of the year. Student scores would serve as the baseline data for Sean's SGO. He administered the same assessment in the spring and measured the students' growth between the two assessments. His SGO score was based on what percentage of his students met the target growth score he had chosen when he submitted his SGOs in the fall.

For Sean, the SGO process was a relatively straightforward experience, though he had serious doubts about the value of this new requirement. However, after two years of

implementation, he believed that the pre-assessment data he collected at the beginning of the

year helped him get a better understanding of his students:

> In doing it, it made me focus a little bit more on specific topics, which just helped me to
>
> focus on even more questions that weren't just part of my SGO. So, it made me a better
>
> teacher because it did, it almost taught me how to analyze some data.

While Sean only used a portion of the pre-assessment data for the purposes of his SGOs, he

claimed to find all of the preliminary data on his students to be helpful in guiding him throughout

the year. Sean admitted that he would not be collecting all of this pre- and post-assessment data

on his students if it were not for the SGO requirement.

While nearly all of the administrators and teachers acknowledged that including student

growth data in teachers' evaluations would cause some degree of threat perception or anxiety for

teachers, Sean chose to view the data in a more positive light:

> For me I think that personally it's going to give me evidence of my effectiveness and my
>
> style and the way I teach and how that's being processed and learned and understood. I
>
> don't know if you'd call it job security, but it would be recognition personally and then
>
> from an administrator looking at what I've done . . . just in the recognition sense of being
>
> an effective teacher.

Sean confirmed that he was comfortable with the SGO data being used in evaluations because he

trusted that it would be used in an appropriate way. He felt confident in himself and believed that

the breadth of his performance would show that he's an effective teacher. Therefore, while he

appreciated that there might be some fear for people to have data included in their evaluations, it

was not a compelling force for him. He also described a trust with his new principal to provide

the necessary support and time to make improvements. Therefore, he trusted that the principal

would use the data to help his practice and not as an accountability measure.

Although Sean seemed comfortable with the assessment routine he had established for his

SGOs, he did express some concern that the type of assessment data he was collecting had

limited value:

> I'm still a little concerned that it's actually valid information . . . The way that I'm doing
>
> it, with the type of assessment, has shown growth . . . So, I'm confident that they know
>
> what I set up my SGO for. But I always am questioning, is there a better way to do it?
>
> And with what we're learning in Universal Design, and with the new science curriculum
>
> standards, and the next generation science, and how there's a shift in moving toward
>
> more project-based and less rote memorization or true/false or fill-in tests, and things like
>
> that. I have a dilemma. Where my SGO has previously been more rote, I personally want
>
> to move it towards project-based or design challenge.

Sean's professed willingness to improve his SGO to incorporate more meaningful student growth

data seemed to line up with the current principal's philosophy that SGOs would be more

meaningful if they measured skill development and not merely content coverage.

Andrea Perkins, Science, Jefferson Middle

Compared to her colleagues in the science department, Andrea Perkins was a relatively

new teacher, having only been at Jefferson Middle School for three years at the time of the new

SGO requirements. During the first year of SGOs, Andrea worked with a colleague to develop a

test on two major standards in the 8th grade science curriculum. She administered the test at the

beginning of the year and then again in the spring. Her SGO scores were based on how well the

students improved on the test from the fall to the spring. Initially, Andrea struggled with

selecting appropriate growth targets for her students. Understandably, the students had low scores in the fall and Andrea was not sure what was a reasonable amount of growth to project for the spring. Lacking specific guidance from administration, Andrea said that she chose to "just pick a number and hope that it works."

In Year Two, she opted to set more modest growth targets after finding her projections in the first year were too ambitious. Andrea also trimmed the amount of questions in the test, based on her sense that the students had testing fatigue and gave less effort on the second day of testing. Overall, Andrea expressed frustration that she did not receive more assistance from administration during this process and was left to figure things out on her own. She was concerned that this trend might continue the following year when she had to incorporate new science standards into her SGOs:

> I know that the SGO is probably going to change with the new standards. Hopefully next year we will get more direction with how to put these together. This year it wasn't very helpful, the sessions we had, I would say. I mean, I feel like most of the time we were on our own doing what we needed to do. Unfortunately.

Although she was confident that she had figured out how to fulfill the SGO requirement, she understood that changes would continue to come in the form of policy guidelines and new curriculum. Therefore, she continued to be hopeful that she would receive better guidance and support from administration to meet these requirements.

When asked about data being used in evaluations, Andrea shared that she was not worried about data having an impact on her evaluation because she had so much control over the tools used to collect the data. In her mind, the students were familiar with her testing format, including the wording of the questions, so she was confident they would do well. By comparison,

she expressed concern for her colleagues whose evaluations were tied to state testing. In those

situations, she believed that the teachers had less control and other factors could impact student

performance. Specifically, she shared a story of a parent telling one of her students that the state

tests did not matter. This, as well as her own observations of students giving minimal effort on

state tests, provided evidence to her that state testing data would not be an accurate or fair

measurement of teacher performance.

Overall, Andrea did not see a lot of value in the SGO data outside of reflecting on how

she might approach some topics differently the following year. However, she did entertain the

possibility that the requirement could be more useful to her practice:

> Maybe there's something I'm missing. Maybe I should be doing a mid-year assessment,
>
> rather than a beginning and end year. Maybe the way that I designed it is not helping me
>
> in the best way that it could. I mean it's possible. It's just that because of all of the
>
> changes, I feel like everyone's in the same boat. We're kind of scrambling at the
>
> beginning of the year to put something together . . . I don't think we're given enough time
>
> to really think this out and think it through.

Here, Andrea recognizes that data could be more useful, but the lack of guidance from

administration and the rush to complete the requirement within the first two months of the school

year seems to drive teachers to keep their measurement of student growth as simple and

manageable as possible. However, this also contributes to the perception that the data has limited

value to her practice.

Jackie Harris, World Language, Jefferson Middle

Jackie Harris, a world language teacher at Jefferson Middle School for over five years,

represented a unique case amongst her colleagues as the only teacher in the building for her

subject. When constructing her SGOs during the first year of the new requirement, Jackie found her administration to be supportive but lacking the resources or knowledge to help her. Additionally, she lacked any colleagues who shared her subject to work with on similar SGOs. As a result, Jackie sought out teacher friends from outside of Jefferson to collaborate around this new requirement:

> The first year we did them, I went to my mother-in-law, because she's a teacher in a different school district and they were much more organized (laughs). So, I went to her and I got all of her notes and we sat and we did our SGO together. And then I also worked with the [world language teacher] that I used to work with before I came to Richfield, because they were doing them, as well. So, they were new to them, so we kind of worked together.

Jackie talked about the value of getting together with other teachers with a similar problem to "banter" and "tear apart" their resources to gain a better understanding of the new requirement. In this way, Jackie found a way to work around some of the challenges in her school environment, including the administrative turnover.

While being a department of one at Jefferson prevented Jackie from having natural, in-house collaborators, her assignment as both the 7th and 8th grade world language teacher did provide her some advantages when it came to completing the new SGO requirement. In the development of the SGOs, Jackie felt comfortable identifying skills that would be necessary for students to master in 7th and 8th grade because of her familiarity with the entire scope of the middle school curriculum. Additionally, Jackie found the outcome data at the end of the 7th grade to be helpful in guiding her practice with those same students the following year when they

were 8th graders. This is unique in comparison to most of her middle school colleagues, who

typically only taught one grade level and rarely had the same students in consecutive years.

Similar to many of her colleagues, Jackie acknowledged that student performance on

assessments could vary and be impacted by factors outside of the teacher's control. However,

Jackie saw this as a reason to want more frequent assessment data in order to get a better picture

of student learning and understand how to help her students:

> I think it kind of helps see what the kids still need to be reinforced . . . I mean, they're
>
> teenagers. We teach teenagers. Some days they're not there, some days they're out of it.
>
> If they completely miss the lesson because they were having social issues or they just
>
> weren't in class that day . . . physically there, but not mentally there, then you need to see
>
> that they totally missed that lesson and then you have to kind of go over it again. So, it's
>
> kind of nice to have that idea that, okay maybe the way that I taught it, they really didn't
>
> get it. Sometimes they don't want to say, we don't get it. So, it's nice.

From Jackie's perspective, inconsistent student behavior and performance was just part of the

middle school experience. Therefore, she saw the assessment data as a valuable tool for

identifying where students needed more help, as opposed to an unreliable reflection of her work.

While Jackie viewed assessment data, including the SGO data, as valuable to her

practice, she did lament the time it took to collect and review the data. To assist with that

challenge, Jackie began to frequently use a computer assessment program she had been provided

by the world language supervisor from the regional high school (Quia):

> It [Quia] makes your life so much easier. Last year when it was all paperwork and stuff, I
>
> thought that it was more challenging . . . God, I love it. Not only can you put your
>
> questions in it and have the kids log on and see it . . . you can pull questions that kids

were having difficulty with and create another quiz from those questions . . . You can

create games out of the areas that they're having difficulty with in Quia. So that they can

go on at home and study with them with games . . . and then I can see that they got on

and still see what they're having difficulty with.

Whereas Jackie found the initial data she collected for her SGO to be overwhelming and

unmanageable, the consistent use of the computer program allowed her to quickly collect data

and monitor student progress throughout the year, while still working towards her overall SGO

targets. Additionally, the tools within the computer program provided Jackie with different ways

to assess or remediate deficit skills for her students. Ultimately, Jackie saw the SGO requirement

as something that helped inform and improve her practice. She believed that her colleagues could

reach a similar perspective if provided the proper guidance and support.

Brendan Woods, Social Studies, Jefferson Middle

After teaching 7th grade social studies at Jefferson for the better part of nine years,

Brendan Woods was faced with a new assignment (6th grade) during the first year of the new

SGO requirements. Outside of how to complete the paperwork, Brendan did not think he

received any helpful assistance from administration on how to complete the new SGO

requirement. He chose to incorporate his existing quarterly research projects into his SGOs. In

his experience, incoming 7th grade students had traditionally struggled with doing research, so

he believed he was identifying an area that would show growth in his 6th grade students.

Additionally, he found it more manageable to use an assignment that he had been using for years,

including the rubric that would measure the students' performance on the project.

In Year Two, Brendan only included two of his classes in his SGO and made a separate

SGO for his special education students as a way to decrease the amount of paperwork associated

with his SGOs (essentially, fewer students to track and less data). He freely admitted to not

taking the process seriously during the first few years, while purposely selecting tasks, students,

and targets that he knew would produce a favorable SGO score for him on his evaluation.

However, he also acknowledged that documenting his data and student growth was a new

practice for him that at least got him thinking about the individual needs of his students:

> I never used to take data. That's not how I used to teach. I used to just teach based on
> information, you know, this is my curriculum, this is the information I'm going to impart
> on, the knowledge. I never really took data besides grades. It does make you much more
> aware of student needs, individual student needs once you start looking at the individual
> data per child.

Despite his belief that SGOs were merely a compliance task, Brendan still found some value in

the work he did to fulfill the requirement. Perhaps more importantly, exposure to collecting and

monitoring student growth data seemed to open Brendan up to new ideas that could inform his

practice.

In Year Three, under the guidance of the new principal to focus on skills, Brendan used a

writing rubric for his SGOs. He even talked about wanting to fine tune the skills he was

measuring in his SGO, because his students did not make the overall progress he had hoped the

previous year and he wanted to identify where they needed assistance. These are examples of a

teacher engaging in data-driven decision-making. Once again, Brendan acknowledged that the

data has value and gives examples of using it, even when he is professing that the data will not

alter his practice:

> I think data is important. I think that gaining the data, the initial data on the kids, does
> help because I never used to know, I never used to really look at that. And now looking at

where they come from, to where they're going is better than just not knowing . . . I don't

think it's changed the way I teach, but I think I know more. You know I probably know

what to emphasize more.

Now he also says explicitly that he will not change his teaching practice based on any data and

refers to the data at the end of the year as "meaningless". But even the idea that he is open to

reflecting on initial student needs based on diagnostic data seems like notable progress that a

principal might be able to mine for future practice. In this case, it is possible that the SGO

requirement prompted a change in practice by making this teacher more receptive to the value of

data-driven instruction.

Jamie Smith, Social Studies, Jefferson Middle

Jamie Smith, a Jefferson social studies teacher of over 20 years, may have had the most

transformational experience regarding SGOs and her practice. During Year One, any mention of

SGOs would cause Jamie to "shake." She felt that the process was rushed and that she was never

given a clear understanding of how she was supposed to complete her SGOs. Perhaps more

importantly, she did not understand why she had to make SGOs in the first place. Inconsistent

feedback from administrators and conflicting interpretations by colleagues further contributed to

her anxiety and frustration. Ultimately, Jamie made a test that measured her students' knowledge

of the 8th grade curriculum, administered it in the fall and spring, and used the growth data to

document her SGO scores for her evaluation. She did not receive any feedback from her

principal as to whether she did it correctly or not.

Driven to improve her understanding of SGOs, she signed up for a summer workshop

provided by the Regional Achievement Center. Initially frustrated at the lack of relevant

examples provided at the workshop, Jamie had her "ah-ha moment" when the presenter

suggested she do a combined SGO with a language arts colleague:

> She made it so that, "Oh language arts and social studies, why don't you combine? Do an
>
> SGO together." Which to me, I wouldn't have thought to do that. I didn't know I could
>
> do that. So, leaving that workshop, I immediately had a meeting with Alice (the language
>
> arts teacher on her 8th grade team). I was like, Alice we have to do this. You know we do
>
> writing, blah, blah, blah, it just made sense to me that we could do it this way. So, we
>
> talked about it and that's how it came about.

Jamie worked with her language arts counterpart to create a writing rubric that could be used in

both classes to help students hone their writing skills. They also enlisted the assistance of the

social studies and language arts teachers on the other 8th grade team to collaborate on the

process. Interestingly, Jamie and Alice are two of the veteran teachers that the interim principal

did not believe would change or adapt to the new expectations for skill-based SGOs. For Jamie,

it seemed important she found a meaningful way to complete the SGO requirement:

> Last year I just did a test, like what they were going to learn during the year, what will
>
> they learn at the end of the year. I think this is a better SGO, I think it's something that I
>
> can target throughout the year with various students. I don't know, I just feel it's more
>
> worthwhile.

Jamie recognized that the rubric she had developed with colleagues for her SGO led to a change

in her practice:

> I think that creating an SGO and looking at each individual essay . . . I started to see
>
> patterns. I started to see like, oh, this is a big problem here . . . Where before I just was
>
> grading papers, but I wasn't looking at what were the common problems overall . . .

Again, it did force me, it made me uncomfortable, but it did force me to, I guess be more

productive or be more, take a more detailed look at what my kids were doing.

Jamie was able to take a task that had limited value for her practice and transform it into more

meaningful work by finding data (student writing performances) and data practices

(collaborating on how to grade writing) that she could apply throughout the year.

Jefferson Middle School Summary

Generally speaking, the teachers at Jefferson had similar experiences with adopting the

new state SGO requirements. Frustration and confusion during the first few years, a time of

significant administrative turnover, largely dissipated under the stable leadership of the new

principal. Teachers became more familiar and comfortable with the process and no longer saw

the requirement as a daunting task. Two of the teachers, Jackie Harris and Jamie Smith,

identified ways to make SGOs meaningful for their practice.

Garland Elementary School Narrative

Carolyn Sexton, the principal of Garland Elementary School, was the longest tenured

principal in the Richfield School District. A veteran educator of over 20 years, Carolyn had been

the principal at Garland for nearly a decade. She had worked with the superintendent, James

Irving, during his previous stints as principal at Nance Elementary School and assistant principal

at Jefferson Middle School.

Carolyn prided herself on knowing her staff and what would work at Garland. To

complete the new state requirement for SGOs, she identified two existing structures that would

help her manage the task. One was the established routine of teachers meeting as a grade team on

a regular basis to plan, discuss students, and review data. The other was the benchmark

assessments for reading and math that were long standing practices in the school. Here, Carolyn

explains how the existing routine of grade team or PLC meetings to review data provided her a

logical entry point for guiding teachers to complete this new task:

> I am very much into teams in my school. So being that this is something that the teachers
>
> wanted to do or they had to do, I wanted to think about, well, how can I make it work for
>
> our situation at Garland, being that we are very team, pro-team? So I worked with them
>
> in teams, because you know, part of our PLCs is looking at data, seeing what we can
>
> work on and what we can improve and discussing that. So I actually asked them to sit
>
> down and think about what they wanted to test, what areas they wanted to test. So I gave
>
> them that liberty and trusted them in their leadership ability as teachers to do their SGOs
>
> as a team. So they all have the same, the whole team has the same SGO and they work on
>
> that throughout the year.

By incorporating this new state requirement into established routines, Carolyn minimized how

much change she was introducing to the work habits of her teachers. Additionally, the team

structure provided built-in opportunities to engage in shared work, collaboration, and problem-

solving.

Carolyn applied a similar approach when making recommendations to the teachers about

what to measure with SGOs and how to measure it. With the exception of special subject areas

(e.g., physical education, art), all teachers at Garland were responsible for math and reading

instruction and had been using common benchmark assessments to monitor student progress for

years. Therefore, Ms. Sexton encouraged her teachers to use these existing assessment tools as

part of the new SGO requirement. In this way, she continued to lessen the degree of change that

this new requirement would represent for her staff.

While Carolyn trusted her instincts about what would work best for her staff at Garland, she also reached out to other administrators within her professional network to share ideas and resources:

> I had to rely on my mentors, as well. Like, I have a little group of principals that we all meet once a month for dinner and that was the subject of our conversation for like, you know, the first three months. How do you do this? What are you doing at your school? I went to trainings.

Carolyn found it helpful to talk through with her peers about how to satisfy the new state requirements. This professional network was also valuable to Carolyn because she had concerns that Richfield as a district was not as up-to-date on data collection and analysis as other neighboring school districts. She was hopeful that, with this new requirement, Richfield administrators would begin to engage together in more conversations around student performance data. This might help Carolyn develop a stronger professional network within her own district while also building the capacity of the district to complete more meaningful work around student performance data.

Once the teachers had a general framework and guidelines for the task, Carolyn's main focus was assisting her teachers with the paperwork aspects of the requirement (e.g., meeting deadlines and accurately completing forms). Despite samples provided by the state, the SGO form was a highly formalized document that presented a number of problems for the teachers. In addition to being asked to provide specific standards and narratives about their rationale and approach to the SGO, the literal numbers of the form were difficult for many teachers. There were numbers to represent student performance, student growth and scoring criteria for the teachers. Moreover, there were percentages for the target score, as well as the percent of students

who achieved the target score and how that corresponded to the eventual *teacher* score. Carolyn

was explicit that this presented the largest challenge for her when supporting the staff to

complete the requirement:

> Oh, that was a pain. I went to a lot of workshops on that, so I actually had to sit with
>
> them, I enable them, I think, a lot, and I worked with them in doing it. Because I am
>
> going to tell you the truth, they really had a hard time with statistics and percentages. And
>
> you would think, oh my gosh, you're a teacher, you don't know how to do this shit? So
>
> yeah, but now they're getting better, but in the beginning, I really had to do it for them.

Carolyn saw direct, individualized assistance as the best way to support her teachers and make

sure they were completing the requirements correctly. While it was time-consuming to work with

teachers "every step of the way," Carolyn believed it was necessary to ensure accurate

completion of the new requirement. The need to provide direct assistance to teachers may have

been felt even more strongly because Garland had several teachers leaving and returning from

maternity leave during the first year of SGOs. Carolyn acknowledged that this was an additional

challenge she had to navigate during the first year of implementation.

In additional to providing technical support, Carolyn believed it was essential to promote

a positive outlook about the task:

> I said, "we're going to do this. You have to think positive." I think it's all about your
>
> mindset. That's just me as a person though. Just approach it in a positive way and you're
>
> going to get through it, you know? And we did, we did.

Teachers appreciated Carolyn's approach, as the following passages from her staff demonstrate:

> She's like, we're all in this together. Like, we're going to get through this together. So, I
>
> feel like she's on our side and she wants us to do well, she's not out to get us. So, I trust
>
> her in that.

Similarly,

> Carolyn was really helpful in doing it with us last year and making sure we understood
>
> how to do it and what the goals were. And I think people were able to kind of do it
>
> seamlessly because we had a lot of help.

Also,

> I was out on maternity leave when they had done it, but Carolyn sat down with me one-
>
> on-one and did it with my on the computer. So, we set it up together.

> Overall, Carolyn felt that the teachers were most anxious about the unknown of this new

task more than anything else and those concerns largely relaxed after the first two years of

implementation:

> I think in the beginning it was fear of the unknown, like it's that fear factor. Like, oh my
>
> god, this is crazy, what are we doing? No one knew what was going on and how we were
>
> going to be viewed, I guess . . . I think that was the biggest challenge overcoming the
>
> initial fear . . . I think at first people were really anxious about it, but now that we've
>
> done it twice and the kids have done well, as far as I know, among everyone, then I think
>
> people are more calm about it and it's just part of our day. You know, part of our year
>
> now.

Beyond getting past the first-year anxieties, Carolyn pointed out that teachers were largely

successful with meeting their SGO targets and did not see a negative impact on their evaluations.

Additionally, teachers saw they had the opportunity to adjust their targets in February each year

if there was an issue with student performance not meeting their initial projections. These types

of "safety nets," as Carolyn called them, helped mitigate a lot of the initial fear she saw in her

staff when they first began the SGO process. Ultimately, Carolyn was confident that she had

helped her school navigate the first year of growing pains with this new requirement and that

with each subsequent year, the task would become more routine for everyone.

Garland Teacher Case Narratives

The teachers in this interviewed from Garland found Carolyn Sexton to be a supportive

and helpful principal. They appreciated that she tried to make the SGO requirement a

manageable task for them. The next section includes case narratives for each of the Garland

teachers in this study. Table 8 provides an overview of the four teachers with descriptive

characteristics.

Table 8

Garland Elementary Teachers

	Mallory Harrison	Cassie Knight	Megan Porter	Heather Smith
Experience	8+ years	7+ years	2+ years	15+ years
Grade/Subject	2nd Grade	3rd Grade	3rd Grade	Basic Skills Instruction/Resource

Mallory Harrison, 2nd Grade, Garland Elementary

Mallory Harrison had a unique experience compared to most of her peers because she

was on maternity leave during the first year of the SGO requirements. In that way, Year Two for

everyone else was like Year One for her. When Mallory returned from her maternity leave, she

worked with her grade level colleagues to construct common SGOs for math and writing, using

the same assessment tools to collect baseline data in the fall and measure growth in the spring.

When Mallory's SGOs were due in May, she found herself having a more difficult time finalizing the requirement than her peers:

> I was like, why am I so overwhelmed this year, why did this happen? And they were all like, "oh we felt like this last year". Like they said, "you just didn't experience it last year. That was how we all felt."

Mallory attributed her initial SGO struggles to a lack of understanding of the whole process, particularly compared to her colleagues. Many of her students scored so well on the baseline assessment, that she set unattainable growth targets for the spring. For example, she did not realize until the spring that a student who scored a 93 on the initial assessment would not be able to reach her goal of at least 10% improvement on the same assessment in the spring. Teachers are able to adjust their goals in February based on student performance, which is a protection against setting overly ambitious (or impossible) goals in the fall. However, Mallory did not realize this was an option and did not recall being reminded about it by her principal or colleagues.

In addition to a her poor understanding of the process and how to set realistic growth targets, Mallory believed she simply ran out of time to teach the content to her students. When her SGOs were due in May, she still had not covered all of the information on the assessment. She insisted that if she had two more weeks her scores would have been much better. Mallory's solution for next year was to set attainable goals and adjust the content of the assessment to reflect how much she would be able to cover prior to the due date for her SGOs. In Year Three, Mallory transitioned to a new school district and a new position (Basic Skills Instruction). She reported feeling much more confident about designing her SGOs to align with her regular work

and fit within the timeline of her instruction, so that all of her students would have the chance to

learn what she was measuring with her SGO.

While Mallory was confident that she could design a better and more reasonable SGO the

following year, her interpretation of her experience speaks to the limited value of outcome

analysis procedures that use the same assessment tool to establish baseline data (the pre-test) and

measure growth data (the post-test).

> For example, some of my kids that didn't do so well on the baseline, I was kind of like,
>
> it's not because they don't know the information. It's because I didn't get a chance to
>
> teach it. I just don't think that's fair for them . . . One of the questions was, like, a
>
> rhombus. They don't even know, I didn't get a chance to teach them what a rhombus
>
> was, but once I taught it to them, they were like, "oh," they were able to get it right away.
>
> I just don't feel like it's a true evaluation at that point.

Despite having a difficult time with her first year of the SGO process and ending up with

low scores, Mallory still received a positive evaluation from her principal. According to Mallory,

she trusted her principal to support her and "look more at authentic tests" when evaluating her

performance as a teacher. She gave an example of the principal praising her for students making

growth in their writing even though they did not meet the target goals set in her SGO.

Based on her interactions with her principal around the SGO data, in which there was a

lack of emphasis on that data in her evaluations, Mallory's perspective was that the SGO

requirement largely represented pointless paperwork:

> I feel like it's a lot of work for all administrators and all of New Jersey to do this. I just
>
> feel like it's just another thing, when there are so many other, like for example, when I'm
>
> classifying, like when I'm bringing up students for the Child Study Team, no one looks at

those [SGOs], they look at every other thing we're doing. They look at more like

classroom observations, all my anecdotal notes, the weekly tests, the unit tests.

For Mallory, the absence of SGO data in meetings where student data was routinely discussed,

such as a CST meeting, further reinforced her conclusion that the SGOs have minimal value.

This perspective influenced her practice, as well. Mallory explicitly stated that she would not

change her teaching practice based on her SGO data. For her, students not meeting a goal

reflected a problem of assessment design, not instructional practice. As with the rhombus

example, the students simply missed the question because they had not been taught it yet.

Mallory found more meaning in the formative assessments she conducted with her students

throughout the year, calling them "more genuine" assessments. Again, the year-long outcome-

based design of the SGOs inherently made them less meaningful to the teacher.

Megan Porter, 3rd Grade, Garland Elementary

Megan Porter had just started her teaching career when the SGO requirement began in

2013. A 4th grade teacher at the time, Megan worked with her grade level colleagues to

implement a writing and math SGO to satisfy the new state requirement. The district reading

specialist provided grade level teams with model rubrics for on-demand writing pieces. Teachers

were expected to use the same rubric and process for on-demand writing three times during the

year as a consistent way to measure students' growth in writing. Megan described her

understanding of this process:

So, what you're supposed to do, what we've been directed to do, is you sit them down at

the beginning of the year and you give them very simple instructions: you're to write a

personal narrative, go. And then they write and then you grade it. And then you do it

again in the middle of the year. And then at the end of the year, same thing. These are

your instructions, write a personal narrative, go.

The idea behind an on-demand assessment is similar to a pop quiz, in that it provides the teacher

with a more accurate account of how well the student has progressed in the skill of writing. In

practice, Megan believed that some of her colleagues did not follow this process with complete

fidelity. She had heard that some teachers conducted on-demand assessments for their baseline

data, but used other writing pieces, which students had time to edit and revise, when it was time

to measure student growth at the end of the year. Similar instances of gamesmanship were

mentioned by other teachers in the study, though no one seemed particularly concerned about

how this impacted them.

In Year Two, Megan joined the third-grade team and used a writing-based SGO once

again, with on-demand assessments and a common rubric. During that school year, Megan

described meeting with her colleagues to grade the writing pieces together. She liked this

experience and found it a fairer way to score student growth as a school. It was not clear if this

type of shared work was a past practice with that grade level, a new directive from

administration, or an approach the teachers chose on their own.

Other than a change in grade assignment, Megan also noted that the state adjusted some

of the guidelines for SGOs in Year Two. This included the requirement that multiple

measurements be used to measure student growth. Meaning, teachers could no longer use the

exact same assessment at the beginning and end of the year as a way to show growth. For

writing, this did not represent a change for Megan and her colleagues, but they did have to revisit

the math assessment they were using for their SGOs. According to Megan, they kept the content

and layout of the assessment the same but changed around the numbers in the actual problems as a way to satisfy the multiple measurements requirement.

With the exception of the sample writing rubrics provided by the district reading specialist, Megan found most of her support with SGOs at the school level. She would go to her grade level colleagues for assistance first, but always felt comfortable going to her principal if she needed additional support. In general, Megan described her principal as a supportive leader whom she trusted to be fair and accurate when evaluating her performance. Megan gave examples of her principal providing helpful deadlines for requirements, as well as words of encouragement when new policies or expectations might seem overwhelming for the staff.

As far as the usefulness of SGOs to her practice, Megan saw limited value in that data. Megan was confident that she had a good understanding of her students' progress based on her daily interactions and the formative assessment tools she used with her students between the pre-, mid-, and post-assessments she conducted for her SGOs. When discussing the connection between student test scores and teacher evaluations, Megan expressed her belief that such data had limited validity or value for educators:

> I don't feel like kids are a test score. I have so many kids who one day will swear that they've understood rounding and then the next day it's like they've never seen it before in their life. Or they'll make silly mistakes. Or they've checked out, they haven't had breakfast, you know, they're thinking about a party that they're going to. So, in that sense, I like to use a variety of different things instead of just one assessment.

Ultimately, Megan expressed seeing the value in using student growth data to inform her practice but did not necessarily see that happening in practice with SGOs. Even when framed as an accountability tool, Megan was dubious that teachers who needed to improve would be

accurately identified by SGOs. This may be somewhat informed by her sense that teachers are able to game the system by inflating their scores, as when teacher used pre-existing writing samples, or setting low targets. Her broader sense was that SGOs were paperwork that went to the state for accounting purposes, but there were few, if any direct consequences for her instructional practice.

One area where Megan differed from many of her colleagues is that she did not openly lament the amount of time the whole SGO process takes for a teacher to complete and the opportunity cost it presented for other activities that teachers might prefer to do instead. This may be simply because she did not have teaching experience prior to the SGO requirement.

Cassie Knight, 3rd Grade, Garland Elementary

A veteran 3rd grade teacher of over seven years, Cassie Knight went on maternity leave during the first year of SGOs, but she was present for the initial roll out of the requirement and completed her SGOs before starting her leave. According to Cassie, the Garland staff "eased in nicely" to the new SGO requirement and found the overall change in practice to happen "seamlessly" in large part due to the support and assistance of the building principal. Cassie worked with her grade level colleagues to select assessments for writing and math that could be administered at the beginning of the year, middle of the year, and end of the year as a way to measure growth. Cassie and her colleagues used the same assessments in both years, with her students reaching their target goals each time. Based on this successful experience, Cassie felt like SGOs were something that she had figured out and incorporated into her regular practice.

Cassie shared that there was some concern amongst the teachers in Year Two about setting attainable growth targets, because that cohort of students scored lower on the baseline assessment than students in previous years. However, Cassie framed this as a positive aspect, in

so much that there was more opportunity to show growth with a lower initial score than a student

who scores very well at the beginning of the year. At the time of her interview, Cassie reported

that most of her students had already hit their growth targets in February.

A large part of Cassie's comfort level with SGOs stemmed from the amount of control

she had over the process. She had influence over what assessment tools were used with her

students, when and how it was administered, and even selected the growth targets for those

students. Cassie gave examples of other assessment experiences where she had less ownership of

the process, which gave her less confidence in the data outcomes. For example, the district had

begun using a computer-based reading assessment called STAR Renaissance. Students took the

assessment outside of their regular classroom with a different teacher. Cassie was very

uncomfortable with this process:

> I don't know enough about the [STAR] test. I know the kids go in and they take it, but I
>
> have never actually sat down and, like, seen it . . . The kids go in, they have headphones
>
> on, I don't see what their questions are, so I don't know what they're being evaluated on.
>
> I don't know what goals the test is testing. Some kids have an off day. I mean, my kids
>
> improved, but it said they were on a sixth-grade level. They're not on a sixth-grade level.

Cassie expressed doubts about the validity of an assessment that showed her students were

reading three grade levels above their expected performance, which seems understandable.

However, Cassie's doubts also were also driven by her lack of direct involvement and control

over this particular assessment. She expressed similar concerns about the state assessment

(PARCC). As a third-grade teacher, Cassie's students took the state assessment, but their scores

were not tied directly to her evaluation. Cassie appreciated this because she felt uncomfortable

with the lack of control she had over the PARCC assessment:

I have no way of knowing what the kids are being asked, what they need to know. So, it's

hard for me to understand how you can be evaluated on something that you have

absolutely no control over and also it's one day of these kids' lives . . . It just seems like

that's a lot to ride on an eight year old or nine year old's performance.

Cassie raised concerns about factors that influenced student learning that were outside her

control as a teacher. These included, format and content of the state assessment, as well as the

disposition or behavior of individual students on the day of the assessment. Many teachers in the

study shared similar concerns about tying teacher performance to assessment data given all of the

other forces that might impact student learning or test performance that are unrelated to teacher

practice.

While Cassie valued the level of ownership she had over the SGO process, she

understood that it also provided teachers with the opportunity to manipulate the results. Cassie

shared a rumor that other Garland teachers also mentioned in their interviews, in which some

teachers used edited and revised writing pieces for their final student assessment. The district

expectation was that those assessments would be on-demand pieces. Using something a student

had written over several days with teacher input would likely lead to higher scores for those

particular SGOs. Cassie's perspective was that teachers who did that were driven by the desire to

look better than their colleagues.

Even though Cassie had a largely positive and smooth experience with SGOs, she did not

see much value in the resulting data other than to affirm that she was doing a good job. Perhaps

tellingly, Cassie described her SGO data in very general terms:

We all had very similar experiences, because we all did it with one another and we all

used the same assessments and all of our kids didn't do well on the same things and all of

our kids were successful in the end, so we kind of had similar data.

To Cassie, there were no surprises in her first two years of collecting student performance data

for her SGOs. The students struggled in some areas in the beginning of the year and ultimately

showed growth and success by the end of the year. For her this outcome data was simply

verification that she was doing a good job. It would not be used to inform her lesson plans or

adjust her thinking about her instructional practice. Cassie did entertain the possibility that the

SGO process could reveal struggling students who required interventions, but she had not had

that experience yet, and remained comfortable that her students had all done well.

I think that if we analyzed it more, not that I really have time to analyze it more, but if we

analyzed it more . . . we looked to see more specifically . . . What skills did all the kids

do? What skills did none of the kids do? I think that could just help drive our instruction

more. But analyzing that data is very time consuming and unfortunately, we don't have

that kind of time.

Cassie acknowledged that there could be more value in the SGO data than she and her colleagues

were currently using in practice. However, she also admitted that she was not an "expert at

analyzing data" and raised legitimate concerns about teachers' limited time to conduct such

analysis.

Heather Smith, BSI/SE, Garland Elementary

One of the more veteran staff members at Garland, Heather Smith had been teaching

longer than the current principal had been at Garland (over 15 years). Heather was a Basic Skills

Instruction (BSI) teacher and special education teacher who worked with students in small

groups or 1:1 settings during the first two years of SGOs. Due in part to the nature of her position, Heather's SGO experience was different in a lot of ways from her Garland peers. In her role, Heather provided targeted assistance to students and used data to track students' progress. In that way, SGOs did not represent a major shift in her regular practices.

At the beginning of Year One for SGOs, Heather was on maternity leave, so she got a tutorial from the principal when she returned later in the year. While the majority of her colleagues constructed their SGOs as a grade level team, Heather created her own because she worked across multiple grade levels. Additionally, while her colleagues all created an SGO based on writing skills, Heather designed an SGO to measure her students' reading skills because she did not work with students on writing.

Other than starting the process mid-year, Heather found creating her SGOs and scoring them to be relatively straightforward. Heather attributed this to the natural responsibilities and practices of her BSI role:

> Special ed[ucation] has always had more of an SGO set up in the classrooms. So . . . it's not as new for me. It just had a different title. We have always had to do all these benchmarkings and evaluate our programs and what we're doing based on that [data]. And we've been scrutinized very closely by administration, I would say the last seven or eight years, like this. So, I guess, for me, it's not an adjustment.

To Heather, SGOs did not represent a drastic shift in work practices. The very nature of her job was to use data to monitor student learning within the general education classroom and provide interventions to help students make gains closer to their peers.

The growth targets that Heather set indicated that the students would go up two reading levels by the spring. In her experience, and based on the reading program guidelines, students

were expected to go up at least two levels each year. So Heather viewed this as an attainable

goal. In fact, three of her four students exceeded this goal by going up 4-6 levels. In Year Two,

Heather was unsure if her new students would make as much progress, but she was still

comfortable using the two reading level target for her reading SGO.

　　　　With her math SGO, Heather aimed for the students to increase their score on the

common assessment by 10%. She had less confidence that her students would hit this target and

did work with her principal to lower that target for the February deadline in Year One. For Year

Two, Heather decided she would continue with the same SGOs, despite her opinion that the math

assessment tool was poor. According to Heater, she would be required to use the district math

assessment tool even if she did not incorporate it into her SGO. Therefore, she did not want to

create an additional assessment because it would require her to use even more time to administer

both assessments. Time spent on assessments and the opportunity cost it represented for

instruction and learning was a major concern for Heather:

> All of this testing is really taking a lot of instructional time out. I think that we spend at
>
> least two months of the year not doing educational based things. And as a mom and as a
>
> teacher that really upsets me.

While there was not a significant change in her work practices, Heather had a lot of concerns

about how the SGO requirement and similar assessment-based policies or programs were

impacting the overall outcomes in schools. Additionally, she expressed skepticism about the that

the SGO requirement was intended to be used as an accountability tool, rather than a method for

helping teachers improve their practice.

　　　　Heather acknowledged that there may be some teachers who are not doing a good job, but

she reasoned that those people tend to also be good at gaming the system or completing their

paperwork. Therefore, she believed the new requirement, along with other policies and expectations from the state, contributed to a largely negative perception of teachers and schools. In essence, the accountability measures would create the perception that all schools were doing poorly and, subsequently, the general public would believe the accountability measures were necessary:

> You do feel like the state is just trying to make the teachers look like they're failing the kids. They're saying, this is what you have to teach them, no matter how unrealistic . . . you cannot alter from this course. This is how they're going to be assessed and we're going to judge you on it. Like we're going to grade you based on you doing everything the way we want to, even though we're not the educators.

The threat perception that Heather conveyed also extended to education administrators, who required teachers to follow programs and approaches but did not value teachers' input or feedback. She jokingly referred to the new district reading program (Lucy Caulkin's Readers Workshop) as "Readers Workshop of free love." This was a new reading program the district had recently adopted, despite concerns from some teachers that it lacked structure and rigor. To Heather, it is unfair that teachers would be judged on their performance when they are forced to use programs that she perceives as ineffective.

Heather particularly lamented the situation for her 3rd and 4th grade colleagues, who in addition to administering the high-pressure state assessment to their students, were more likely to see gaps in performance for their students, which could jeopardize their highly effective teacher rating. According to Heather, K-2 students were more closely aligned in ability and expectations for performance, while in 3rd grade and 4th grade, skill deficits were more apparent and students were more likely to struggle. As a result, she perceived the 3rd and 4th grade teachers to be very

stressed about their SGOs. This is an interesting perspective, because two of the Garland teachers in this study teach 3rd grade and did not express much stress or anxiety over their SGOs or particular placement with 3rd grade students.

Interestingly, the threat perception that Heather perceived was not perpetuated by the principal at Garland, whom Heather described as supportive. According to Heather, there was an earned sense of trust and support with the principal, that "we are in this together." Heather also pointed out that if teachers perform poorly on their SGOs, that will also reflect poorly on the principal's job performance:

> I think that Carolyn feels, I think somewhat the same way that we do. That this is being done to make us look bad. I mean I think most administrators feel that, but I do feel she's trying to be supportive. . . I mean she's on us to get everything done and everything else, so she takes that very seriously. But she's also, she's a mother, she's realistic, she knows that you can't make these kids into something they're not and they're going to come in and judge her, judge us, because she gets judged on our performance, on our SGOs. You know, she's been honest about that.

Heather sees her principal as an ally in what she perceives as an ongoing battle for schools to meet what she sees as unrealistic demands and expectations from district administration and the state.

Garland Elementary School Summary

For the Garland teachers and their principal, the main challenge with the SGO requirement was getting through the first year. Once the teachers had completed their initial SGO process, they reported feeling more comfortable with how to complete the requirement. While the teachers seemed comfortable with the task, they gave few indications that the SGO data held meaning for their practice.

Nance Elementary School Narrative

Brad Price was just starting his second year of his first principalship at the time of the new state requirements. Brad was new to the district, having come along in 2012 when his predecessor at Nance Elementary School, James Irving, was promoted to be the new superintendent of the Richfield School District.

Despite his limited experience at Nance, Brad recognized that the new SGO requirement, as well as the extensive changes being made to the evaluation program for Richfield, represented a significant change for his staff. He believed that the culture of his building was strong enough to manage these changes, but he also estimated that 20% of the teachers may have a difficult time.

Brad sought to provide support to his staff in completing the SGO requirements, while also taking advantage of the increased layers of supervision embedded in the new evaluation program to push his teachers to continue to grow and improve. Again, he believed that the majority of the teachers would aspire to improve and cooperate with his vision. At the same time, he welcomed the new evaluation and accountability tools provided by the new state requirements to push the remaining 20%. First and foremost, Brad saw it as his responsibility to align his vision and school practices with the district goals for curriculum, instruction, and assessment:

> I think the first thing we had to do was really understand what an SGO was and why we were doing them. And from there, trying to have a dialogue about clarity of district initiatives and how these SGOs should be supporting the district initiatives sent by the superintendent, Board of Education. As well as having conversations with the curriculum office and making sure that these SGOs are, number one, realistic and attainable.

This is in contrast to the middle school leadership, which focused on individual teachers when framing the task, as well as the Garland Elementary principal, who focused on grade level teams and the needs of her school. Brad also later explained how some grade levels at his school were required to cover certain content and use specific rubrics that were provided at the district level. Ms. Sexton made no mention of this in her interview.

Shifting to the building level, Brad worked with teachers among grade levels and also assisted them individually with completing the online form. As part of the new evaluation system, Richfield adopted a new online program (OASYS) through which administrators could complete evaluation tasks (e.g., observation reports, summative evaluations) and submit their documentation to the state. The program included the option to input SGOs, as well. The other school principals had their staff submit paper copies of the SGO forms during Year One. Brad thought it was important to have his entire staff use the online version, but provided them direct assistance in completing it:

> So we initially sat down grade levels and began to figure out how we can create measurable goals and objectives. And then from there, putting them into OASYS. And the first time that we did the SGO, created the SGO process, I sat with every single teacher and I actually typed it in for them while they were watching to figure out how we use OASYS and so that for the future, in February when we revisit the process and have to tweak it depending upon the types of assessments that they were using on an ongoing basis, they would be able to do it and feel comfortable in the OASYS system.

Brad chose to approach the task this way in order to monitor the individual progress of each teacher and provide support and guidance for them to complete the task. In this way, he believed that the teachers would gain confidence in their ability to manage the new online program.

Additionally, he saw this as a way to continue to develop relationships with his teachers, by engaging in shared work and providing helpful assistance:

> I think if I showed them that I would take this time and really work with them, you know, walk them through this that they would, number one, appreciate it, number two, that I was practicing what I was preaching, and most importantly, it gave them the confidence that they could do it next time on their own rather than 'Oh I can't do this, no one ever showed me how to do this.' So I think it was kind of a three pronged attack of, well I want you to do this in the future, what better way to do it than by sitting down together with one of your colleagues, in this case your immediate supervisor, and saying 'hey we can do this together' and this should give you some reassurance, some confidence that you can do it in the future.

Brad's approach seemed to have the intended impact, as the teachers described him as both knowledgeable and helpful. All of the teachers interviewed at Nance made note of their principal providing individualized and direct assistance with entering their SGO data into OASYS. The teachers saw Brad as someone who provided clear direction and they believed they could go to him if they had a problem or needed assistance. Brad's goal of developing positive relationships with his staff while also preparing them to feel more comfortable and skilled in the routines seemed to pay dividends, as all of the teachers expressed less anxiety over SGOs in subsequent years.

While Brad stressed the importance of reassuring his teachers that SGOs and the new evaluation program would not impact them negatively, he also frequently acknowledged and even lauded the increased opportunities to provide critical feedback to teachers and ultimately push what he called "coasting" teachers to improve their practice. At different points in the

interview, he estimated that as many as 20% of his staff needed some degree of "pushing" from

administration to improve. For example, in this passage he talks about using state assessment

data to help guide instructional practice and improve the performance of his school:

> I do envision at some point doing a math because the data over the past five or six years
>
> and then this year's PARCC scores included are showing that there is some sort of
>
> disconnect between our assessments and how the kids are scoring and the states scores, in
>
> this case the PARCC scores. We've kind of maintained the same level in math and we've
>
> continued to improve in language arts, but why aren't we growing in a similar clip in
>
> math than we are in language arts? So that's something that we're kind of looking at this
>
> year.

Here he is talking about wanting to use data to improve how the school performs as a whole. In

the next two examples, he speaks directly to feeling empowered by the new evaluation program

and how he would use those tools to push staff in need of improvement:

> How staff were being evaluated was changing pretty radically. I mean, it was really
>
> empowering the principals to say, well if you don't improve the next two years you're out
>
> of a job. And that was almost like a perfect storm between a new way of assessing and
>
> evaluating, trying to explain that and then having to create these SGOs.

He continues:

> As an administrator I like the fact that I'm empowered to have a lot of data to make the
>
> right choices when it comes to staffing. And if you have to have those uncomfortable
>
> conversations, like you would in a parent conference, you have to have data to show a
>
> teacher, to show parents, I've got a concern here and this is all the information I have for
>
> you, let's walk through it together. But the same goes for a staff member, before I think it

was a bit more subjective, now you have a lot of information that you have at your

fingertips to be able to sit down and have that conversation as a way to support.

It is interesting how Brad describes these potentially competing roles as prinicpal in which he is

reassuring teachers that he will not use accountability measure against them while also projecting

how he could used SGO data to drive "uncomfortable conversations" with teachers who need to

improve. The teachers' perception of how Brad handled these two approaches to SGO data are

unclear. While no Nance teachers referred to Brad using SGO data as an accountability tool, all

of the Nance teachers interviewed for this study felt comfortable in their job performance and

were not concerned that the data would be used against them. It is unlikely the teachers

interviewed were part of the 20% that Brad believed needed to improve their practice.

Nance Teacher Case Narratives

The teachers interviewed from Nance Elementary School saw their principal as helpful

and knowledgeable. Each of them mentioned him sitting with them invidually to assist with

completing their SGO forms. While the teachers did not find SGOs to be meaningful for their

practice, they did find the task manageable after the first year. The next section includes case

narratives for each of the Nance teachers in this study. Table 9 provides an overview of the four

teachers with descriptive characteristics.

Table 9

Nance Elementary Teachers

	Chris Bennett	Teresa Hill	Lisa Williams	Jen Sanders
Experience	8+ years	19+ years	11+ years	14+ years
Grade/Subject	2nd Grade	3rd Grade	Kindergarten	1st Grade

Chris Bennett- 2nd Grade, Nance Elementary

Chris Bennett had taught over eight years at Nance Elementary at different grade levels. He was teaching 2nd grade during the first few years of the SGO requirement. Chris described the process of creating SGOs as "pretty straightforward" and did not see the new requirement having a significant impact on his regular practice. During the first year of the SGO requirement, Chris received general guidance from administration about what to measure for his SGOs, selecting from either math, writing or reading. He worked with his grade level colleagues to create common SGOs for writing and math. According to Chris, the teachers drew from existing assessment tools and developed common SGOs as a way to "make this as easy as possible for ourselves." The teachers collected baseline data in the fall using a writing rubric and math assessment ("here's 15 questions kind of from the whole year") and then gave the students the same assessments in the spring to measure their growth. Chris and his colleagues used the same SGOs the following year, only adjusting their numbers slightly based on changes in class size.

One thing that contributed to Chris's level of comfort with the SGO process was the amount of control he had over it. This included the scoring of his SGOs, which he freely admitted would always look good. For example, he talked about the subjective nature of completing the writing rubric and described a scenario in which a teacher would give students a 4 instead of a 3 because it would give them a higher score on the SGO. To Chris, this was a logical outcome given that the SGO scores were tied directly to his performance evaluation:

> To be perfectly honest with you, there's no way I would hand in something that's going
>
> to show that I'm awful (laughs). I'm in control of creating it. I'm in control of making the
>
> numbers that say I'm successful. I'm the one who assesses it and grades it. Why would I

hand in something that doesn't [make me look good]? I mean it's a very silly system in

that regard.

Chris acknowledged that the state might eventually change the process because too many

teachers were scoring so well on their SGOs, but until that was the case, he saw no reason to

submit low scores for himself.

Doctored or inflated SGO scores was just one reason why Chris saw limited value in the

SGO data and overall process. Chris believed that the baseline data he collected at the beginning

of the year provided the same information about his students that he could gain by his own daily

observations. Similarly, the outcome data collected in the spring merely confirmed whatever

Chris already knew about his students. For him the data did not add value to his practice:

We're evaluating the kids, whether it's formally or informally, every single day with

every single interaction that I have . . . I know which kids are going to write well and not

write well. I know which kids know their math and don't know their math. I've been

evaluating them everyday and I'm helping this kid, I never have to help this kid, he gets it

all the time . . . I feel like it [SGO data] just shows you the obvious.

Chris expressed confidence in his own abilities to monitor student progress and provide

necessary assistance throughout the school year. He did not feel like he was missing information

or lacking understanding of his students' abilities. To that end, the process of measuring student

growth data was simply superfluous work for Chris to complete as a necessary requirement.

This perspective was not unique to SGO data. Chris gave the example of student writing

portfolios. Nance teachers are expected to compile samples of student writing throughout the

year into individual portfolios and pass those samples along to the next teacher. To Chris, this

was a meaningless practice:

No one looks at them, ever. They just collect dust for an entire year. Because, for the

most part, that stuff is going to tell you things that you are going to find out in week one.

Perhaps further contributing to his perspective about the limited value of SGO data was the lack

of time spent on that data with his principal. While Chris described his principal as "semi data-

driven", he did not have the impression that SGO data was an influential factor in his evaluation

process. Chris gave examples of what he considered more meaningful data: observations, parent

emails, how he gets along with colleagues, and how active he is in the community. These were

factors he trusted his principal used when evaluating him.

This perspective about the limited value of SGO data was also influenced by Chris'

perception of district leadership. Based on his interactions with district leadership, the main

purpose of the SGOs was to be compliant with state expectations and not lose funding or get a

negative label, like the middle school. Chris believed that everyone in the district understood that

"you've just got to play the game" when it comes to new state requirements, like SGOs.

Teresa Hill- 3rd Grade, Nance Elementary

Teresa Hill was in her 20th year of teaching at Nance Elementary during the first year of

SGOs. No stranger to what she described as the "pendulum swings" of requirements from the

state, Teresa's biggest challenge with the SGO process was simply that it was "unknown" and

the first time anyone in the district had to do this. During the first year of SGOs, Teresa

perceived a lot of anxiety by her colleagues over the new requirement. Teresa appreciated

working with her grade level colleagues, as well as administrators, on this new task. She

described how they "hashed it out together" in meetings, creating a common SGO on math using

a diagnostic assessment from their textbook series and an SGO for personal narrative writing

using a rubric provided by the district literacy coach.

Setting appropriate and attainable growth targets was another challenge for Teresa during the first year. She described her choices as "a shot in the dark" and "let's take it [the target] for a spin and see what happens". The 3rd grade teachers at Nance conducted a mid-year assessment to make sure students were on pace to hit their growth targets and ultimately achieved them in the spring. Based on her success during the first year, Teresa felt more comfortable identifying growth targets in the second year. She did base her targets more from her initial observations of student ability than the baseline data collected for the SGOs.

Teresa was effusive in her praise of school and district leadership as supportive agents in this process. She provided examples of the district literacy coach and Supervisor of Curriculum and Instruction meeting with her team to review samples and make decisions about her SGOs. She felt confident that she could always go to these administrators or her principal for answers and "if they didn't have an answer, they would find it out". Overall, Teresa was appreciative that she did not feel like she was alone in this process.

While Teresa continued to rely on her existing methods of monitoring student growth, she did acknowledge ways that the new SGO data informed her practice. For example, she administered the writing rubric multiple times throughout the year and used it to shape the feedback and assistance she provided individual students about their writing. Additionally, she found it a helpful practice to use the same assessment tool in all the 3rd grade classrooms.

Teresa also provided an example of how the outcome data for her math SGO data influenced her practice the following year. While she did not find the results of the math SGO "earth shattering", she did identify a common skill deficit with fractions that she hoped to address with her new students the following year. In general, Teresa described monitoring student progress as a nonlinear process. Meaning, students that struggle with one lesson may not

struggle with another, requiring daily and ongoing monitoring of student progress. Therefore, she

perceived the baseline data collected for SGOs as having limited value over the course of the

year. She was open to the idea that outcome data could be used to reflect on topics or skills that

require more attention or a different approach the following year. She did find SGO data to be

more applicable as a reflective tool than state assessment data (NJASK), which she found to be

too general.

While Teresa established ways to apply meaning to the work she conducted around her

SGOs, she expressed doubts about the broader purpose of the new requirement. For example, she

described the existing practice of reviewing state assessment data as a team with the building

principal in order to identify areas for improvement. She did not see the same conversations

taking place around SGO data. Her interactions with the principal around SGOs were more about

the collection of the data and completion of the task than the use of the resulting data. Teresa saw

it as a basic question of whether or not she achieved her goal. If she did, then the administrator

could "check the box" and move on to something else.

Teresa expressed frustration and resignation over what she perceived as the governor and

state government's belief that "teachers need to be held accountable". To her, all of these new

requirements really represented a "big paperwork trail" and she questioned whether or not

anyone in Trenton was "really doing anything with this". Teresa's negative feelings about the

new requirements were mainly rooted in her belief that it created an opportunity cost for schools.

The time they spent on fulfilling these requirements took away from time they could spend doing

more meaningful work:

We are so bogged down. You know I've been here for 21 years now and the difference

from when I came to now, it's mind boggling. And just the amount of proof that we need,

I think in some ways to prove that we're doing our job and doing what we're supposed to

be doing, I think takes away from us actually doing our job.

Overall, Teresa had a positive experience incorporating the new SGO requirement into her

practice, but she had significant doubts that it was for the right reasons or adding significant

value to her practice.

Lisa Williams- Kindergarten, Nance Elementary

Lisa Williams had taught kindergarten at Nance Elementary for over a decade. During the

first year of SGOs, Lisa and her kindergarten colleagues chose to measure letter and number

recognition. The assessment for number recognition had to be done one student at a time,

requiring the teacher to set up different self-directed learning centers for the students to work in

while she assessed students individually. Lisa found this disruptive to her usual practice, "a pain

in the ass, to be honest with you". The writing assessment could be done with the whole class,

but still required time to administer, record, and calculate the student work. Overall, Lisa

expressed frustration that too much instructional time was lost to the required assessments by the

district.

While Lisa worked with her kindergarten colleagues to develop their initial SGOs, the

collaborative work did not continue throughout the year. Lamenting that she sometimes felt like

she's "on an island down here", Lisa actually expressed hope that administration would push the

teams in her building to work together more. Although the new SGO requirement did present

new work demands, Lisa felt that her principal framed it in a way that it was not "a huge thing",

meeting with teams of teachers to go over ideas and directly assist with completing the online

form. In Year Two, Lisa felt comfortable completing the SGOs with minimal assistance from

administration, calling it a "piece of cake". Although she did report assessing her students more

often in Year Two based on her perception that her class was the "lowest and worst class that

I've ever had"

Overall, Lisa felt supported by administration, both at the school and district level. From

her perspective, the teachers were walked through the SGO process, so they felt comfortable

doing it on their own the following year. She also believed that the principal's approach had a

calming effect on the teachers and did not sense there was much anxiety over SGOs in her

building. Lisa did have the perception that expectations and procedures were very different at the

other schools in the district, with Garland Elementary being more intense and Jefferson Middle

School being "a joke" with all of its turnover in administration. Lisa was thankful to have the

consistency and support of her principal.

Regarding the use of student growth data to evaluate teacher performance, Lisa

acknowledged that she would want to know if her students were struggling on something so she

could make improvements. However, she did not feel comfortable with SGO data or test scores

having a direct impact on her overall evaluation.

> If I notice that all my kids bomb something, then I need to go back and reevaluate how I
>
> taught it. Because I clearly didn't do a good job. Or maybe I need to see that they're not
>
> all getting their teens in their numbers, that I have to take a little bit longer. I think it's
>
> [data] helpful. I just don't think that teachers should necessarily be graded on . . . a five
>
> year old's performance.

Lisa wanted to be evaluated based on "the whole package of the teacher", which included other

factors than just data, including observations and parent communication. Lisa cited a recent

example in which two students entered kindergarten with limited skills and were ultimately

classified and repeated kindergarten the following year. Lisa was concerned that the lack of

growth achieved by those students would reflect poorly on her as a teacher and she was thankful

that she did not include them in her SGOs.

Lisa gave examples of data being useful in meetings to help parents see where their

children were in terms of expected growth during the year. However, she admitted that she was

not well-versed in how to interpret data beyond the usual measurement tools that they used in

kindergarten. Additionally, she expressed concerns that the new district reading assessment

program (STAR Renaissance) was not a valid measurement tool for kindergarten, noting that one

of her highest readers performed poorly on that assessment. She was thankful that her principal

excused the kindergarten teachers from using this new reading assessment based on his

conclusion that kindergarten students were not "ready for a standardized test". In this example,

Lisa expressed appreciation that her principal had what she considered a reasonable perspective

on data and its value in education.

Overall, Lisa stated that she did not see much point to the SGOs, but she had also

incorporated it into her regular practices so that it created minimal disruption. She did continue

to lament the amount of time required to collect data and complete the requirements, wishing she

could just "teach to teach".

Jen Sanders- 1st Grade, Nance Elementary

Jen Sanders was a 1st grade teacher with over 14 years of experience during the first year

of the SGO requirement. During the first year of SGOs, Jen admitted that there was some stress

among the staff because it was a new expectation. However, as she put the SGOs together with

her grade level colleagues, she found it "pretty easy to do" and by Year Two felt like "we kind of

figured it [SGOs] out". Part of what made it a smooth process was that Jen and her colleagues

were able to identify an existing assessment for math facts that could be used for one SGO. The

other SGO was based on writing and they received assistance from the district literacy coach

putting that together.

During Year Two, the 1st grade team chose to switch from a writing-based SGO to one

that focused on growth in students' reading levels. In their experience, reading was a skill that

was prioritized in 1st grade and they were used to assessing reading levels throughout the year.

Therefore, a reading-based SGO fit better into their regular practice. Jen's main challenge was

achieving the same growth with all of her students, noting that some students do not progress as

quickly or easily as others. As an example, she had some students who were not moving up in

their reading levels. Her solution was to adjust the goal to a range of reading levels (e.g., students

will be at levels I - K by the end of the year).

In Year Three, the Nance staff was directed to move away from the pre- and post-

assessment approach used in the first two years and shift to an ongoing monitoring of student

progress. For Jen, this was not a significant change because she was already tracking student

growth in math and reading as part of her regular practice. In math, Jen did shift to a more

individualized approach to monitoring student growth by making her goal to improve by ten

problems on a timed quiz over the course of the year. In this way, students could show progress

from a variety of different starting points.

According to Jen, the 1st grade teachers received a lot of guidance and support from the

principal with their SGOs. During the first year, he sat with teachers and helped them input the

data into the online form. After that, he was still available to consult and provide assistance with

finalizing the numbers for the SGOs. When discussing how the SGO data might be used to

evaluate teachers, Jen expressed trust that her principal would have an accurate account of her

performance with or without the SGO data. She did not think he saw the SGO data as the "be all, end all".

When asked about the new district leadership, Jen was hopeful to receive better guidance and support on new programs implemented across the district. In the past she felt like "things were just thrown at us". This seemed to be aimed more at curriculum and assessment strategies than the SGO requirement. For example, the district had recently adopted the Readers Workshop model for reading instruction and Jen felt that the district did not provide sufficient guidance and support for rolling out that new program. She also shared her sense that the building cultures were very different across the district. For example, she believed that the other elementary principal was more data driven than her principal, sharing an anecdote that 1st graders at Garland were required to take "twenty page tests" and were reduced to tears of this rigorous data collection.

Regarding the overall purpose of SGOs, Jen appreciated the desire to hold teachers accountable for student performance, stating that "if they're [the students] not showing growth then we're not doing our jobs." While she did not like the potential pressure that accountability measures put on her practice, she found the ability to design her own SGOs mitigated that fear. She believed that was common amongst her colleagues, as well:

> We all saw the growth that we expected, because we all made achievable SGOs (laughs).
> You know? I mean, we're not dumb. We're not going to make something that's (laughs),
> you know, that's difficult for them [the students] to do.

Jen recognized the possible intention to use SGOs as a tool to document the work of teachers and a way to identify teachers who were not doing what they were supposed to do. However, she pointed out that the ability for teachers to control the process and directly influence their scores

limited the likelihood that SGOs would reveal ineffective teaching. Additionally, she raised

concerns about the opportunity cost of completing the paperwork for the SGOs and wished that

teachers who do the right thing did not have to waste that extra time fulfilling this requirement.

Overall, Jen believed any stress during the first year of SGOs was based on the newness

of the requirement and the desire to make sure they were doing it the right way. She felt

confident that she knew what to do and was comfortable with the requirement. Ultimately, Jen

did not see the new requirement having a significant impact on her practice:

> It doesn't really affect my job in any major way, because like I said, it's what I'm doing
>
> anyway. It's just another formality of something that I have to do that actually takes a
>
> little extra time to put into OASYS and write it up and collect the data and put it all
>
> formally into the documentation log and all that stuff. But it's just another thing to do, but
>
> essentially it's what I do anyway. I would've had the data anyway, just maybe not in that
>
> particular document that they want.

Nance Elementary Summary

Overall, the Nance teachers explained how they managed the new SGO requirement.

With the support of their principal, they identified existing tools and practices that could be used

to complete the SGOs. In this way, they were able to minimize how much the SGO process

changed their regular practice.

Chapter 5: Discussion

Requiring teachers to complete student growth objectives (SGO) annually is one way the

New Jersey Department of Education (NJDOE) engages teachers in data-driven decision-making

(DDDM) practices. Through these practices, the expectation is that teachers can more effectively

monitor student progress and make adjustments in their instructional practice to support student

learning. While the teachers in this study completed the requirements established under

ACHIEVE NJ for their SGOs, the majority found the data from the SGOs to have limited value

to their practice. As a result, the teachers complied with the requirement to engage in DDDM

practices, but those practices did not yield the intended outcomes, as envisioned by the NJDOE.

Results from this study, which examines how educators engaged in DDDM practices to

complete the SGO requirement, suggest that the teachers' use of simple types of data and simple

analysis affected the DDDM's potential to influence teacher practice in meaningful ways.

Teachers identified *Basic* models of DDDM as a manageable way to fulfill the SGO

requirement. Principals helped promote and support this approach. Teachers' work around SGOs

was influenced by the strong association they made between SGOs and their evaluations. This

mental model, that SGOs were an evaluation tool, rather than a tool for improvement, led

teachers to engage in DDDM practices out of compliance with a fixed intention of producing

positive results. Teachers' conversations with principals around SGOs helped to reinforce this

mental model.

While the majority of teachers (11/13) characterized their work around SGOs as having

minimal value to their practice, two teachers reported that the process had positively influenced

their teaching practice. These teachers provide insight into the conditions under which school

leaders' and teachers' engagement with DDDM practices might provide more meaningful results.

Simple Types of Data

As part of the SGO process, teachers had to collect student performance data in the fall and spring to demonstrate student growth. Teachers were encouraged to use existing assessment tools to collect these data. The elementary teachers primarily collected data using common reading assessment tools, writing rubrics, and math assessments they had used in the past. Many of the middle school teachers combined existing unit assessments to create a cumulative assessment for the year. Students took the assessment at the beginning of the year and then took the same assessment in the spring. This pre- and post-test approach is how the teachers measured growth for their SGOs.

Ikemoto and Marsh (2007) describe types of data as existing on a continuum from simple to complex. Simple types of data might be collected at only one point in time, come from a single source, and provide minimal detail to the user. Complex types of data are collected over multiple points in time, come from several different sources, and provide rich, disaggregated detail to the user. The types of data most of the teachers collected for their SGOs would be classified as *simple data* based on these criteria. Teachers based their initial SGO projections in the fall using data that was from a single source, collected at one point in time. They considered this data to be baseline data, which provided information about their incoming students' skills and content knowledge. Similarly, the teachers scored their SGOs in the spring using data from a single source, collected at one point in time. These outcome data were used to determine if students had achieved the growth targets set in the fall.

Using simple types of data for their SGOs influenced the teachers' perception of the value of SGOs as a DDDM practice. Specifically, teachers described the baseline data they collected in the fall as unremarkable or unsurprising. It made sense to them that incoming students would lack certain skills or content knowledge because they had not yet been exposed to the curriculum for their grade level. Teachers were confident that over the course of the year the students would make gains in those areas as a result of being exposed to the grade-level content. Elementary teachers, in particular, saw limited value in the baseline data as it provided no new insights. They believed that the baseline data provided information about their students that they would be able to assess informally on their own within the first few weeks of the school year through observation and classwork. To them, formally assessing students with a standardized instrument that early in the year was unnecessary. For the middle school teachers, the baseline data gave them some initial impressions of their 100+ students (e.g., this student is low, this student is high), but few reported applying that data to their practice outside of collecting it for their initial SGO deadlines.

The teachers also found little value in the outcome data collected in the spring to finalize their SGOs. Similar to the baseline data, the teachers did not find anything unexpected in the outcome data. To the teachers in this study, all of whom had a history of positive evaluations, the outcome data showed that the students made the anticipated gains, which validated their instructional practices for the year. Additionally, the teachers did not believe the outcome data had relevance for the following school year, because they would have new students in their classes. As a result, the teachers did not see the outcome data as relevant for their future practice. Teachers may have found more meaning in the process if they used more complex types of data. Simple types of data can be applied to more complex DDDM practices (see *Analysis-*

focused model in Ikemoto & Marsh, 2007), but that requires complex types of analysis to be applied the user.

Simple Types of Analysis

Throughout the SGO process, teachers were expected to analyze data in order to make better-informed decisions about their practice. This included analyzing the students' baseline data to determine growth targets for their SGOs. According to the NJDOE (2013), teachers were supposed to track their progress towards those growth targets throughout the year and refine their instruction, accordingly. Finally, teachers were expected to work with their principals to analyze the final results of their SGOs and set professional improvement goals for the following year.

Just as types of data exist on a continuum of simple and complex, Ikemoto and Marsh (2007) describe a similar continuum for simple and complex analysis. Simple types of analysis are based on assumptions, rely on basic knowledge, occur once, and are conducted by an individual. Conversely, complex types of analysis base interpretations on empirical evidence, with access to expert knowledge, occur over time, and tend to involve multiple users.

Based on these characteristics, the teachers in this study mainly applied simple approaches to analysis when drawing conclusions about their SGO data. For example, teachers' analysis of the baseline and outcome data was based largely on their own assumptions and professional knowledge. They did not test their assumptions against other data sources or collaborate with others when interpreting the data. Teachers did describe collaborating with colleagues to get ideas for how to fulfill the SGO requirement, but teachers completed the actual analysis and interpretation of data on their own. Teachers' analysis of the SGO data was focused on drawing straightforward conclusions- what do the students not know, what should they know, did they meet their growth targets? With few exceptions, the teachers did not describe examining

the SGO data for a deeper understanding of how the students performed and what conclusions

they could draw about student learning or their own instructional practice. This simple approach

to analyzing the SGO data helped contribute to the teachers' perception that the SGO process

lacked value for their practice.

Basic Models of DDDM

Given their use of simple data and simple analysis, the teachers mainly followed a *Basic*

model for DDDM (Ikemoto & Marsh, 2007) when completing their SGO requirement. Educators

commonly apply this model because it requires minimal resources, including time and expertise.

While a *Basic* model might be appropriate for certain decisions, Ikemoto and Marsh (2007) point

out that it can make educators' less open to other DDDM models because they assume they are

already engaged in DDDM practices. Therefore, it may be difficult for principals to convince

teachers to use a different DDDM practice if they have an established practice of using a *Basic*

model.

The teachers' use of a *Basic* model for DDDM appears to be a logical outcome of their

need to satisfy the SGO requirement to maintain their high evaluation rating in a way that is

minimally disruptive to their usual practice. Teachers reported working with their colleagues to

determine the simplest way to complete their SGOs. They raised concerns that spending too

much time on their SGOs would take away from their ability to spend time teaching. Simple

types of data and analysis require less time and can be done individually. By using *Basic* models

of DDDM, teachers were ensuring that they would achieve high scores on their SGOs without

disrupting to their regular practice. While SGOs were created and promoted as a tool to help

teachers do a better job teaching, the teachers saw SGOs as potentially taking away time from

teaching and, thus, as a barrier to effective teaching

The principals helped promote and support the teachers' use of *Basic* models of DDDM. The principals were concerned about managing the teachers' anxiety over the new requirement and did not want teachers to be overwhelmed with additional work. The principals expressed a need to frame the SGO as a manageable task, rather than a drastic change in practice for the teachers. Additionally, they did not want teachers to feel the SGOs would be used as a "gotcha" to give them a negative evaluation. According to the principals, their main role in the SGO process was helping the teachers manage this new requirement. Principals sought to support the teachers by providing some ideas for what to measure, approval of assessment tools, awareness of deadlines, and most importantly, assistance with properly filling out the form. Moreover, teacher accounts of principal support largely verified that the principals' approach had the intended impact. When describing how principals assisted with their SGOs, the teachers mainly referenced assistance with completing the form and reminders of deadlines. As such, the principals' efforts to make SGOs a manageable task for teachers, may have contributed to the SGO process having less value for the teachers' practice.

Mental Models for DDDM

The term "mental models" is used to explain the "assumptions, definitions, and beliefs" (p. 6) that teachers might have prior to engaging in the DDDM process. Jimerson (2014) found that teachers often had both positive and negative views of data and data use. Teachers are more likely to have a negative perspective about the value of data and data practices when they perceive there is a connection to accountability systems.

The teachers in this study strongly associated the work around SGOs with their annual performance evaluations. This association is a logical consequence of the new SGO requirement being part of the broader changes to the evaluation program in ACHIEVE NJ. The teachers in

this study had a mental model that the purpose of SGOs was to evaluate their teaching performance. Additionally, because the teachers had a history of positive evaluations, they had a mental model that they were good teachers who should have good evaluations. The teachers' mental models about SGO as evaluation tools and their own belief that they were effective teachers constrained their ability to see the SGO process as something that could improve their practice. Therefore, they did not see the work associated with the SGO process as valuable to their practice. If the teachers had viewed SGOs as a tool for improved practices, they might have engaged in the DDDM practices in different ways.

The principals' work with teachers around the SGO process helped reinforce the teachers' mental model that SGOs were an evaluation tool. Teachers noticed a difference in how their principals talked about SGO data with them, compared to other conversations around data and teacher practice. For example, 3rd grade Nance teacher Teresa Hill shared how her principal would sit with teachers and review state assessment data to try and understand why students performed better in some areas than others and how they could adjust their instruction to make improvements. She did not see those same types of meetings and discussions taking place around her SGO data. Similarly, Mallory Harrison (2nd grade, Garland) described different types of data that she would have to bring to a Child Study Team meeting, noting that no one was interested in her SGO data. The lack of attention paid to SGO data compared to other types of data helped reinforce the teachers' belief that the SGO data had limited value to their practice.

How principals addressed SGOs during summative evaluation conferences also contributed to how teachers perceived the value of SGOs. Some teachers could not remember even discussing their SGOs with their principals in the summative evaluation conference. Others described their principals as "checking a box" to confirm students had met the targets and then

moving on to richer discussions about teacher practice, such as their observations, role in the community, and parent-teacher communication. The only teacher who described a meaningful conversation around SGOs in her summative evaluation conference was Mallory Harrison. Mallory remembered reviewing her SGO data with her principal (Carolyn Sexton) and receiving praise for helping the students improve even though they did not achieve the growth targets. These experiences in the summative evaluation conference also reinforced the teachers' beliefs that they were good teachers.

All of the principals in this study reported that they did not intend to use SGO data when evaluating their teachers. They found other evidence, such as observations, to be more meaningful when evaluating teacher performance. While they may not have explicitly stated this to the teachers, the principals' lack of attention to SGOs in the evaluation process made it apparent to the teachers that the SGOs were not as relevant to their performance evaluation as other sources of evidence. This approach by the principals served to reinforce the teachers' belief that the SGOs had limited value.

SGOs Used For Improved Practice

Two of the 13 teachers had significantly different experiences with SGOs than the other teachers in this study. Exploring their experiences provides some insight into how principals might make the practice around SGOs or other DDDM practices more meaningful for teachers. Both of these teachers were able to identify new assessment tools that provided them with data that was meaningful to their practice. Jefferson world language teacher, Jackie Harris, identified an online assessment tool (Quia) that allowed her to fulfill the requirements for her SGOs while also collecting meaningful performance data about her students' skill development throughout the year. Jamie Smith, Jefferson social studies teacher, collaborated with a language arts

colleague to develop and use a writing rubric that allowed her to monitor student progress in writing throughout the year.

While neither teacher engaged in particularly complex types of data or analysis, there were some ways that their data and analysis were more complex than the *Basic* models used by their peers. For example, the online program used by Jackie Harris allowed her to track student progress over time, providing trend data and allowing for more ongoing or iterative analysis. Similarly, Jamie Smith's frequent use of a common writing rubric produced data over time that she could monitor and apply to her practice each time she worked with her students on their writing.

Another dimension of complex analysis that Jamie tapped into with her writing rubric was a collaborative approach to analysis. By working with her language arts colleague, Jamie was doing a more sophisticated degree of analysis when reviewing student progress and comparing it with their performance in the language arts class (Ikemoto & Marsh, 2007). The collaborative approach was so inspiring to Jamie that she sought out other colleagues, including a special education teacher, to provide them with the rubric and share how it had informed her practice.

Perhaps the biggest different between these teachers' experiences and their colleagues' is that both teachers described the SGO process as a means for improving their practice, rather than a teacher evaluation mechanism. Jackie wanted a better assessment tool for her SGOs after spending too much time dealing with paperwork during the first year. With the help of a world language supervisor from a nearby high school, Jackie began to use Quia, an online assessment tool. As reported in Chapter 4, Jackie found the program very applicable to her practice:

It [Quia] makes your life so much easier. Last year when it was all paperwork and stuff, I

thought that it was more challenging . . . God, I love it. Not only can you put your

questions in it and have the kids log on and see it . . . you can pull questions that kids

were having difficulty with and create another quiz from those questions . . . You can

create games out of the areas that they're having difficulty with in Quia. So that they can

go on at home and study with them with games . . . and then I can see that they got on

and still see what they're having difficulty with.

Here Jackie explains how she was able to apply the data she collected for her SGO to her

practice. An important dimension of her work around SGOs was the continuous monitoring of

student progress using an online assessment tool. Therefore, Jackie did not just submit data in the

fall and spring for this requirement. She founds ways to use it throughout the year. This added

meaning and value to the DDDM practice.

Jamie Smith also struggled with SGOs during the first year of the requirement. She

created a cumulative assessment tool like many of her colleagues and administered it in the fall

and spring to get the necessary growth data. In her interviews, Jamie described how frustrated

she was during the first year because no one provided her an explanation for why she needed an

SGO. Satisfying a state requirement was not a sufficient reason for Jamie. She needed there to be

more meaning to the work. As reported in Chapter 4, once Jamie identified a model of DDDM

that made sense to her and helped inform her practice (working with a language arts colleague to

review student writing using a common rubric throughout the year), she viewed her SGO as a

positive tool for improving her practice:

Last year I just did a test, like what they were going to learn during the year, what will

they learn at the end of the year. I think this is a better SGO, I think it's something that I

can target throughout the year with various students. I don't know, I just feel it's more

worthwhile.

Here Jamie recognizes that using different types of data and analysis would make her

meaningful for her practice.

The examples of Jackie and Jamie provide evidence of teachers finding value from their

SGO data. Additionally, they demonstrate that teachers who lack experience with DDDM

practices can engage in those practices when they have the proper tools and purpose.

Understanding conditions that support meaningful teacher engagement with DDDM practices

can be helpful for education leaders and policymakers who seek to promote those practices in the

future.

Conclusion and Implications

Findings from this study suggest that teachers will engage in DDDM practices but the

quality of that engagement and the potential to positively impact instructional practice are

dependent upon the types of data and analysis that teachers use and how school leaders guide

that process. Although *Basic* models of DDDM may be easier for principals to implement and

feel more manageable to teachers, but the use of simple types of data and simple analysis may

limit the meaningfulness of the process and reduce it's positive impact on instructional practices.

Additionally, making DDDM practices more manageable for teachers may unintentionally create

the perception among the teachers that the DDDM process lacks value or importance. Mental

models can have a significant influence on how teachers engage in DDDM practices. Teachers'

negative mental models around data and data use that are associated with accountability systems

can constrain teacher's use of DDDM practices. DDDM practices that are portrayed as tools for

improved practice have a more positive association for teacher use. In sum, teachers will engage with DDDM practices in meaningful ways if they are provided the right tools and guidance.

The findings of this study are based on the accounts of the teachers. There may have been some factors that influenced their experiences that the questions from the interviews did not fully address or reveal. Different questions and sampling procedures may have provided more insight into the overall experience of the teachers. Here I will discuss some of these factors that could be explored further in future research.

The experience level of the teachers may have been a factor that influenced their experience engaging in DDDM practices. Only two of the 13 teachers interviewed had less than five years of experience at the time of the study. Megan Porter, 3rd grade teacher at Garland, was in her first year of teaching when the SGO requirement began. While the work around the SGOs was new to all of the teachers, Megan could not make comparisons to how this requirement affected her existing practices. Conversely, Teresa Hill, 3rd grade teacher at Nance, had taught nearly 20 years when she made her first SGO. In her interview, she did mention the "pendulum swing" of reforms she had witnessed over the course of her career and suggested that the SGO requirement would eventually be replaced by some other reform. By collecting a broader sample of teachers, future studies may be able to investigate if there are connections between teacher experience and how they engage in DDDM practices.

Administrative turnover was another factor that may have influenced the teachers' experiences with engaging in DDDM practices. As described in the Richfield School District narrative, there was significant turnover in district leadership during the first three years of the SGO requirement, including three superintendents (one being an interim) and three different people holding the title of Supervisor of Curriculum and Instruction. While only a few teachers

referenced this turnover at the district level in their interviews, it is possible that it influenced them. In the case of the principals, it may explain why they supported *Basic* models of DDDM. Lack of consistency at the district level may have prompted the principals to support simple and safer approaches to DDDM practices. The middle school teachers all referenced the administrative turnover in their building. Within two years, they worked with a retiring principal, an interim principal, and a new principal. The teachers included in the study saw the new principal as a welcome change and appreciate his guidance and support. It is possible that other teachers had different perspectives about their new principal. Different interview questions and a broader sample may have provided insight into how the administrative turnover at the district level affected this process.

The principals' own sense of efficacy with data and analysis was another factor that may have influenced how teachers engaged in DDDM practices. While none of the principals purported themselves as data analysis experts, they also did not share feelings of inadequacy around the subject. It is possible that my role as a teacher during the study prevented the principals from feeling comfortable enough to reveal any weaknesses they might have had with data and analysis. However, it is also possible that the principals would avoid sharing those beliefs with any researcher. In either case, the comfort level administrators' have with their own data literacy may be a factor to explore in future studies.

In addition to these factors, there are other ways future studies could expand on this study. As suggested earlier, a broader sample of participants may provide more insight into the teachers' experiences. For example, teachers who qualified for SGPs were not included in this study. Comparing their experience with the teachers in untested grades and subjects would help contribute to the understanding of how teachers engage in DDDM practices. Conducting a

similar study in different settings would also provide more insight into these practices. For example, a school district in an urban or rural setting might provide different details than a middle class suburb like Richfield.

In my own practice, I plan to use what I have learned in my study to help other administrators find ways to make data use for teachers both manageable and meaningful. As an active member of the New Jersey Supervisors and Principals Association, I can share my findings and help other administrators develop strategies for supporting teachers' meaningful data use. Additionally, with professional connections to Rutgers University and William Paterson University, I may be able to speak with aspiring administrators or doctoral students and share my experiences or help guide future studies.

The findings of this study are useful for school leaders who want their teachers to engage with DDDM practices in meaningful ways. School leaders should reflect on the types of data and analysis currently being used by teachers. There may be manageable ways to enhance the complexity of those practices so that the process yields more useful information and, thus, is more meaningful. More data may not be the answer if the teachers are not provided guidance on how to interpret and make use of it. Similarly, schools leaders can engage teachers in more ongoing conversations about data, but if the data is not meaningful to the users, those practices may lack value. However school leaders choose to adjust DDDM practices for their teachers, they should also be mindful of the mental models that influence teachers' engagement with those practices. How school leaders choose to present or define DDDM practices may go a long way towards influencing the outcome of those practices.

Policymakers need to think about how efforts to encourage DDDM are perceived by teachers. Association with evaluation or accountability measures can constrain and limit the use

of DDDM practices. Additionally, policymakers should give careful consideration to the

guidelines or requirements of policies that seek to promote DDDM practices in schools. Policy

can both oversimplify and overprescribe the DDDM process for schools, leading to unintended

outcomes when those policies are put into practice. If policymakers fail to improve the design of

these reforms so that they are manageable and meaningful for educators, they run the risk of

having them fade away like the data-based reform programs of the past (Tyack & Cuban, 1995).

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Appendix A

District-Wide Leadership Interview Protocol

First I would like to talk about the process of constructing measurements for student growth in untested areas.

1. How has the district approached the task of constructing Student Growth Objectives, as well as measurements for those SGOs, for every teacher in the district?

2. What has been your specific role in this process?

3. What are some of the challenges you have faced in completing this task?

4. How have you worked around these challenges?

5. What is the district doing to ensure that the SGOs are appropriate goals (e.g., not too ambitious, not too modest) for student growth?

6. In what ways has the process of constructing SGOs and measurements been the same for all the schools in your district?

7. In what ways has this process been different for each school?

8. Given that using SGOs is still a new practice, how do you expect this process will be different next year?

Now I would like to talk about your beliefs about student growth in untested areas.

9. How do you envision this data being used to evaluate staff?

10. How do you think teachers feel about data being used in evaluations?

11. How do you think principals feel about data being used in evaluations?

12. How might the use of SGOs in evaluations facilitate collaboration among educators in your district?

13. How might the use of SGOs in evaluations impede collaboration among educators in your district?

14. Other than evaluations, how do you see your principals making use of this student growth data?

15. As a district leader, how do you see yourself making using of this student growth data?

16. For your purposes as a district leader, what could be done to improve the usefulness of the student growth data?

School-Based Leadership Interview Protocol

First I would like to talk about the process of constructing measurements for student growth in untested areas.

1. How has your school approached the task of constructing Student Growth Objectives, as well as measurements for those SGOs, for every teacher in the school?

2. As principal what has been your role in this process?

3. What are some of the challenges that you have faced in completing this task?

4. How have you worked around these challenges?

5. How has your school developed SGOs that reflect appropriate goals (e.g., not too ambitious, not too modest) for student growth?

6. In what ways has the process of constructing SGOs and measurements been the same for all staff members in your school?

7. In what ways has this process been different for staff members in your school?

8. Given that using SGOs is still a new practice, how do you expect this process will be different next year?

Now I would like to talk about your beliefs about student growth in untested areas.

9. How do you plan to use this data to evaluate staff?

10. How do you feel about using data for evaluations?

11. How do you think teachers feel about data being used for evaluations?

12. How do you think district leadership feels about data being used for evaluations?

13. How might the use of SGOs in evaluations facilitate collaboration among educators in your school?

14. How might the use of SGOs in evaluations impede collaboration among educators in your school?

15. Other than evaluations, how do you see yourself making use of this student growth data in your role as a principal?

16. For your purposes as a principal, what could be done to improve the usefulness of the student growth data?

Teacher Interview Protocol: Stage One

First I would like to talk about the process of constructing measurements for student growth in untested areas.

1. How has your school approached the task of constructing Student Growth Objectives, as well as measurements for those SGOs, for every teacher in the school?

2. As a teacher what has been your role in this process?

3. What are some of the challenges that you have faced in completing this task?

4. How have you worked around these challenges?

5. What have you done to ensure that the SGOs are appropriate goals (e.g., not too ambitious, not too modest) for student growth?

6. In what ways has the process of constructing SGOs and measurements been the same for all teachers in your school?

7. In what ways has this process been different for teachers in your school?

8. Given that using SGOs is still a new practice, how do you expect this process will be different next year?

Now I would like to talk about your beliefs about student growth in untested areas.

9. How do you believe the data will be used to evaluate staff?

10. How do you feel about data being used for evaluations?

11. How do you think your principal feels about using data for evaluations?

12. How do you think district leadership feels about data being used for evaluations?

13. How might the use of SGOs in evaluations facilitate collaboration among educators in your school?

14. How might the use of SGOs in evaluations impede collaboration among educators in your school?

15. How do you see yourself making use of this student growth data?

16. For your purposes as a teacher, what could be done to improve the usefulness of the student growth data?

Teacher Interview Protocol: Stage Two

1. How have you approached the task of assessing your progress towards your Student Growth Objectives?

2. What are some of the challenges you have faced in completing this task?

3. How have you worked around these challenges?

4. How have you been using SGOs to guide your practice? Can you provide some examples of other teachers using SGOs to guide their practice?

5. How does your principal know if teachers need assistance understanding or making use of SGOs? What about the district? Who do you go to if you need help with SGOs?

6. What's your reaction to complaints that the data provided by SGOs are not meaningful?

7. What are the purposes of the SGO data?

8. Ideally, how should SGOs fit into a teacher's everyday work? How typically does this happen? How do you see this initiative affecting your job? What is your principal doing to support this?

9. Imagine that you woke up tomorrow and your school's challenges around SGO use had been solved. What would have happened?