

A STUDY OF GEORGIA SCHOOL DISTRICTS' BALANCED SCORECARD  
ALIGNMENT TO THE COLLEGE AND CAREER READY PERFORMANCE INDEX

by

JARED BRYANT ROBINSON

(Under the Direction of Sally J. Zepeda)

ABSTRACT

The purpose of the study was to measure Georgia school superintendents' perceived goal alignment to the College and Career Ready Performance Index (CCRPI). The study took place during the accountability shift outlined in Georgia's approved waiver from the Elementary and Secondary Education Act (2012) and in the context of many school districts using balanced scorecards to measure performance on district goals. Within the study, perceptual data from school superintendents were collected and analyzed on the topics of accountability alignment to the CCRPI and self-reported demographics. Superintendents also reported about the systems that their school districts used to manage performance goals, and alignment levels were compared.

The researcher designed a confidential survey to collect data on CCRPI alignment levels and demographic variables of interest. Independent variables including school district and superintendent characteristics were divided by levels or categories, while a 7-point Likert scale was used to measure the dependent variable: perceived alignment to the CCRPI. Survey items also targeted perceived alignment to certain subcategories in the

CCRPI (achievement, post high school readiness, progress, and achievement gap).

Internal consistency measures were implemented before and after the data collection process.

A quantitative approach was used to display the degree to which the sample of 72 participating superintendents was representative of Georgia superintendents as a whole. Analysis of Variance (ANOVA) calculations were used to test for mean differences between superintendents who used balanced scorecards as compared to superintendents who used other performance management systems, and perceived alignment was measured across demographic and performance management categories.

While superintendents, in general, reported goal alignment to the CCRPI, perceived alignment to the subcategory of achievement was reported at a greater level than post high school readiness, progress, and achievement gap. When analyzing superintendent and school district demographics, there were no differences in perceived CCRPI alignment, and there were no significant differences between balanced scorecard and non-balanced scorecards users.

**INDEX WORDS:** Accountability, Balanced Scorecard, Charter School System, College and Career Ready Performance Index (CCRPI), Georgia's Waiver of No Child Left Behind, School District Balanced Scorecard

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## DEDICATION

This dissertation is dedicated to Jane and Joe Robinson.

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## CHAPTER 1

### INTRODUCTION

During the 1990s, many private sector businesses began to use balanced scorecards to manage organizational goals and strategies more systematically (Krumwiede, Eaton, Swain, & Eggett, 2008). The term balanced scorecard was conceived in the work of Robert Kaplan of the Harvard business school and David Norton, a business performance management consultant, and was characterized by its overarching purpose of providing chief executive officers with a tool to obtain formative information about organizational performance (Kaplan & Norton, 1992). One notable characteristic of the balanced scorecard was its emphasis on a combination of financial and non-financial measures (Ittner, Larcker, & Meyer, 1997). Bieker and Waxenberger (2002) further described Kaplan and Norton's concept of balance as an equilibrium between short-term and long-term goals, internal and external perspectives, quantitative and qualitative data, and leading versus lagging indicators.

Through this *balanced* approach, company managers could use their scorecards systematically to monitor non-financial measures instead of waiting until quarterly financial bottom lines to obtain data about organizational performance (Kaplan & Norton, 1996b). Norreklit (2000) described the value of balanced scorecards like this, "It contains outcome measures and the performance drivers of outcomes, linked together in cause-and-effect relationships, and thus aims to be a feed-forward control system" (p. 65). Chenhall (2003) categorized the balanced scorecard as a management control system.

The literature on balanced scorecards also included alignment of organizational goals to smaller units within the organization such as departments and individuals (Ittner & Larcker, 2001; Kaplan & Norton, 1996b, 2001). To articulate alignment, the balanced scorecard functioned as a mechanism to communicate organizational goals and to collect data pertaining to progress on objectives across all stakeholder groups including managers, department heads, employees, stockholders, decision-making boards, and chief executives (Chi & Hung, 2011; Kaplan & Nagel, 2003; Ling, Giacomino, Browne, & Akers, 2009). The number of businesses using balanced scorecards grew through the latter half of the 1990s and continued to grow moving into the first decade of the 21<sup>st</sup> Century (Krumwiede et al., 2008). In 2002, research indicated that approximately 50% of all Fortune 500 companies used a balanced scorecard (Gartner Group, 2002).

Running concurrently with the balanced scorecard movement in the private sector was the accountability movement in the public sector—particularly in K-12 public schools. A notable event in the school accountability movement was the enactment of the No Child Left Behind (NCLB) Act of 2001 (Elmore, 2004; McDonnell, 2005; O’Day, 2002). Within this mandate, schools and school districts were now being measured and labeled according to their student achievement scores in mathematics and English/language arts across multiple student subgroups on an annual basis. In response to these expectations and reports, schools were given annual performance labels based on whether they met numerical student achievement thresholds as outlined in NCLB. Based on expectations for student performance on standardized tests, schools and school districts were faced with the challenge of generating and managing student achievement



goals and aligning strategies to achieve their goals (Duke, 2010; Marzano & Waters, 2009).

As accountability increased in the context of standards-based reforms, schools and school districts faced the challenge of navigating multiple layers of reform to determine priorities and to make sense of their work (Louis, Febey, & Schroeder, 2005; Spillane, 2004; Tyack & Cuban, 1995). While complexity accompanies any attempts to determine the effects of organizational variables on school accountability mandates (O'Day, 2002), researchers have found that both district and federal reforms do concurrently impact the work of schools in the form of leadership priorities as well as the depth of implementation of each respective reform (Hargreaves & Fullan, 2009; McLaughlin & Mitra, 2001). As Georgia school districts faced the new accountability expectations in the College and Career Ready Performance Index (CCRPI), balanced scorecards were tools that were often used to manage and to track performance on school district goals.

One theme of balanced scorecards is the alignment of goals and actions across the organization (Kaplan & Norton, 1996a). Malina and Selto (2001) explained, "Because the BSC explicitly focuses on links among business decisions and outcomes, it is intended to guide strategy development, implementation, and communication" (p. 48). Cowart (2010), a Georgia school superintendent, described the balanced scorecard communication function, "The balanced scorecard enabled us to communicate current performance levels to all stakeholders objectively, clearly, and continually" (p.17). When describing the work of another Georgia school district, Kaplan and Miyake (2010)

explained, “It allows a district to look ahead with leading indicators, rather than always looking back with lagging indicators” (p. 12).

When examining ethics and the balanced scorecard, a theme in both the public and private sector literature was transparency (Cowart, 2010; Kaplan & Norton, 1996b). Bieker and Waxenberger (2002) explained that an up-front effort is needed for corporate leaders to foster ethics and shared governance through the balanced scorecard and “With reference to a management system for corporate sustainability this leads to the fact that an adequate strategic framework (involvement, mission/vision, principles, personal commitment, etc.) has to be established in the sense of a viable ethical approach beforehand” (p. 5). Similarly, Cowart (2010) described how his school district promoted transparency through the balanced scorecard:

We posted the scorecard on the district’s website. We also used it in presentations to the school board, parent groups and community audiences. We posted data from the scorecards in prominent locations in schools, such as teacher work rooms and ‘data rooms’ across the district that were used for meetings and training sessions. The frequent visits of community and civic leaders to these data rooms served as opportunities to discuss the strategic goals and connect them with the strategies for moving the schools forward. (pp. 17-18)

Thus, transparency and communication of goals across organizational stakeholders was a theme in both public and private sector balanced scorecard literature.

According to Louis et al. (2005), many school districts instituted internal accountability systems to measure NCLB indicators. During the NCLB era, several Georgia school districts began to use balanced scorecards to manage goals and to communicate expectations to their schools. Cowart (2010) described the school district balanced scorecard structure, “The district scorecard process set clear expectations for schools, departments and the district through a transparent process for tracking and

reporting performance” (p. 16). Balance within school district scorecards has been defined as a combination of leading and lagging indicators as well as the concurrent implementation of both short-term and long-term goals (Kaplan & Miyake, 2010). From a shared governance standpoint, balance in schools has been defined as the inclusion of indicators that focus on both external accountability mandates, while also adopting and managing measures that address perspectives of local constituents (Georgia Leadership Institute for School Improvement, personal attendance, February 9, 2010).

The *balance* of balanced scorecards is a topic that has been extensively examined in business literature (Atkinson, Banker, Kaplan, & Young, 1997; Ittner, Larcker, & Meyer, 2003; Norreklit, 2000). In this current era of increased school accountability (Elmore, 2004; McDonnell, 2005; McNeil, Coppola, Radigan, & Vasquez, 2008), school districts could be swayed to focus a vast majority of their goals on external accountability mandates such as NCLB or, in Georgia, the CCRPI. While there is a multitude of research on the implementation of balanced scorecards in the private sector (Kaplan & Norton, 1996b; Krumwiede et al., 2008; Malina & Selto, 2001), there is scant literature on balanced scorecard use in school districts and public sector organizations (Karathanos & Karathanos, 2005). Furthermore, in 2012, there was very little information on how Georgia school districts aligned their goals to the CCRPI as outlined in the state’s approved waiver from NCLB.

### Statement of the Problem

In February of 2012, the state of Georgia was granted a waiver from the Elementary and Secondary Education Act (2002) giving the state’s public schools independence from the accountability expectations set forth in the provisions of the

NCLB legislation. Within the waiver, Georgia school officials outlined a College and Career Ready Performance Index (2012) on which its schools would be measured. In addition to the CCRPI, the Elementary and Secondary Education Act (ESEA) waiver in Georgia included “District Performance Standards” (pp. 104-107). Calculations within the CCRPI gave schools a numerical point total to be calculated on an annual basis coupled with performance flags for the respective achievement of each subgroup and tested subject, as well as star ratings for both financial efficiency and school climate.

Thus, school districts in Georgia—in response to accountability changes under the NCLB waiver (2012)—were now accountable to a new set of indicators as outlined in the CCRPI. The problem was Georgia school district balanced scorecards and strategic plans were not aligned to the new accountability expectations set forth in the NCLB waiver. At the time of the present study, there was little research that examined how school districts used balanced scorecards to manage their goals (Karathanos & Karathanos, 2005).

### Background of the Study

Within the CCRPI, test scores were used to identify Priority, Focus, and Alert schools. According to Georgia’s Waiver of the Elementary and Secondary Education Act (2012):

Beginning in 2012-2013, Georgia will provide support in three categories to include Priority Schools, Focus Schools, and Alert Schools to address the need to raise student achievement, close achievement gaps, and promote continual progress toward full proficiency for all of the students in Georgia. Schools identified for support will fall into two categories following US ED definitions, Priority Schools and Focus Schools. (p. 37)

In August, 2012, an analysis of Georgia school district data indicated that 89 out of 180 school districts had at least one Priority, Focus, and/or Alert school (Georgia Department of Education, 2012a). Thus, schools and school districts faced the challenge of managing

reform in the context of accountability mandates (McLaughlin & Mitra, 2001; Tyack & Cuban, 1992).

Within Georgia's public school systems, there was also a governance movement running concurrently with the accountability movement in which school districts were required to select from three possible governance structures by June 30, 2015: charter school districts, investment in educational excellence (IE2) districts, or status quo districts (Georgia Department of Education, 2014). According to the Office of the Lieutenant Governor (2014), "Lt. Governor Cagle's Charter Systems Act gives individual school districts the option of stepping out from state and federal mandates to adopt an educational policy and curriculum that is right for the needs of their students" (p. 1). Because of the provision of a flexible governance structure with respect to certain state and federal mandates, charter system status was a variable of interest in the research study.

#### Purpose of the Study

The purpose of the study was to obtain perceptual data from Georgia school superintendents about the extent to which district balanced scorecards and performance goals were aligned to the College and Career Ready Performance Index (CCRPI) as outlined in Georgia's ESEA waiver (2012). Additionally, perceptual data were categorically analyzed to determine similarities and differences between Georgia school superintendent responses from different district enrollment sizes, levels of superintendent experience, and district governance structures. Each categorical variable was examined with respect to balanced scorecard alignment to the CCRPI as outlined in Georgia's

ESEA waiver (2012). An overall superintendent alignment score was also generated for each alignment subcategory in the CCRPI.

### Research Questions and Hypotheses

The study was organized around five research questions:

1. Are there differences in superintendents' overall perceived alignment to the following subcategories in the CCRPI: student achievement, post high school readiness, progress, and achievement gap?
2. Is there a difference in perceived alignment to the CCRPI between superintendents in school districts using balanced scorecards and superintendents in school districts using other school district performance management systems?
3. Is there a difference in perceived CCRPI alignment between superintendents who reported charter system status and superintendents who reported non-charter system status?
4. Are there differences in perceived alignment to the CCRPI between superintendents with different experience levels?
5. Are there differences in perceived alignment to the CCRPI between superintendents with different levels of student enrollment?

### Hypotheses

Hypotheses addressing each research question were phrased in the null.

1. There are no significant differences in superintendents' overall perceived alignment to the following subcategories in the CCRPI: student achievement, post high school readiness, progress, and achievement gap.

2. There is no significant difference in perceived alignment to the CCRPI between superintendents in school districts using balanced scorecards and superintendents in school districts using other school district performance management systems.
3. There is no significant difference in perceived CCRPI alignment between superintendents who reported charter system status and superintendents who reported non-charter system status.
4. There are no significant differences in perceived alignment to the CCRPI between superintendents with different levels of experience.
5. There are no significant differences in perceived alignment to the CCRPI between superintendents with different levels of school district student enrollment.

#### Categorical Analysis

For research question 1, a categorical analysis (within subjects ANOVA) was used to examine the mean differences between superintendents' perceived alignment to different subcategories in the CCRPI: student achievement, post high school readiness, progress, achievement gap. For research questions 2, 3, 4, and 5, a categorical analysis (between subjects ANOVA) was employed to examine whether there were mean differences in perceived CCRPI alignment (the dependent variable) between the following demographic categories (the independent variables):

- superintendents using balanced scorecards and superintendents using other school district performance management systems,
- different experience levels of superintendents,
- school district governance structure (self-reported charter system status and self-reported non-charter system status), and
- district student enrollment level

## Significance of the Study

When school districts manage accountability expectations and change, district expectations must be communicated coherently from school districts to schools (DuFour & Marzano, 2011; Duke, 2010). Kaplan and Norton (1996b) explained that the balanced scorecard, "... lets managers communicate their strategy up and down the organization and link it to departmental and individual objectives" (p. 76). In the context of Georgia school districts, Glennon (2010) described an analogous link or alignment between the district balanced scorecard and school balanced scorecards like this:

Using the same format, with consistent strategic goal areas and performance objectives for each school and the district, not only helped the school's inner workings; it also increased the capacity of school personnel to communicate with each other and align their work. (p. 18)

Therefore, results from this research could be used to shed light on how school districts aligned their goals in the context of changes in accountability. More specifically, the research could provide information about how school districts in one state (Georgia) managed the shift from NCLB accountability expectations to the CCRPI. In addition, differences in superintendents' perceptions of alignment when using balanced scorecards versus those using other school district performance management systems could provide insight into considerations for school districts as they decide what format is best to manage performance goals in the future.

## Assumptions

Some assumptions of the study were that Georgia school district superintendents would participate in the survey, and they would report information in an accurate manner. Another assumption of the study was that superintendents would be familiar with the components of the CCRPI as outlined in Georgia's Waiver of the Elementary and



Secondary Education Act (2012). Because language from the balanced scorecard literature was embedded into survey items (see Appendix B for more information), an assumption was made that the superintendents would be familiar with terminology and would also be cognizant of their respective school district balanced scorecards or other school district performance management system.

Given the November-December, 2014 survey administration, an assumption was made that newly employed superintendents would have had the opportunity to become aware of their district's respective balanced scorecard or other school district performance management system as it related to both goal alignment as well as the new accountability performance measures in the CCRPI. Another assumption of the study was that each respondent from the sample of Georgia school superintendents would be serving on a full-time, non-interim basis.

#### Definition of Terms

Terms unique to the study pertained to both balanced scorecards in the public and private sector as well as information from Georgia's Waiver of ESEA (2012).

**Alert Schools:** According to Georgia's Waiver of the Elementary and Secondary Education Act (2012), Georgia will identify, "...Graduation Alert Schools, Subgroup Alert Schools, and Subject Alert Schools" (p. 37). Graduation Alert Schools are "High Schools whose subgroup graduation rate falls at or below the third standard deviation compared to the statewide subgroup average" (p. 65). Subgroup Alert Schools are "Schools whose subgroup performance on any statewide assessment falls at or below the third deviation compared to the subgroup's state average" (p. 65). Subject Alert Schools

are “Schools whose subject area performance on any statewide assessment falls at or below the third deviation compared to the subject’s state average” (p. 65).

**Alignment:** Kaplan and Norton (2001) defined alignment as the linking and integrating of strategies across all subgroups or departments in the organization. To provide contrast, they explained the opposite of alignment, “Functional silos arise and become a major barrier to strategy implementation since most organizations have great difficulty communicating and coordinating across these specialty functions” (p. 149). Thus, alignment was defined as the elimination of working in isolation and was characterized by an integration of common strategies across departments and individuals in keeping with organizational goals.

**Balance:** In the context of the private sector balanced scorecards, Kaplan and Norton (1996b) defined balance as a combination of leading and lagging indicators encompassing both financial and non-financial measures. Within the construct of balance, Kaplan and Norton (1992) emphasized four perspectives focused on four questions, “how do customers see us? (customer perspective); what must we excel at? (internal perspective); can we continue to improve and create value? (innovation and learning perspective); how do we look to shareholders? (financial perspective)” (p. 72). Balance within Georgia school district scorecards has been defined as the inclusion of indicators that focus on both external accountability mandates, while also looking at other aspects of schooling that address perspectives of local constituents (Georgia Leadership for School Improvement, personal attendance, February 9, 2010). School district balanced scorecards also used the term balance to refer to a combination of leading and lagging indicators including both short-term and long-term goals (Kaplan & Miyake, 2010).

**Balanced Scorecard:** When describing balanced scorecards, Kaplan and Norton (1996a) explained, “The Balanced Scorecard translates an organization’s mission and strategy into a comprehensive set of performance measures that provides the framework for a strategic measurement and management system” (p. 2).

**Cascading:** According to Niven (2008), cascading is a process that aligns overarching strategies in the balanced scorecard throughout an organization. The process of cascading enables individuals and subunits of the organization to show how their daily work is in alignment with long-term organizational objectives.

**Charter School District:** A charter school district can be defined as a school system that has the flexibility to operate outside of certain state and federal guidelines to serve students in the district (Georgia Department of Education, 2014; Office of the Lieutenant Governor, 2014).

**College and Career Ready Performance Index (CCRPI):** Within Georgia’s waiver of ESEA (2012), the CCRPI was the set of criteria on which Georgia schools were evaluated beginning in the 2012-2013 school year. Within the CCRPI were three categories through which schools received a numerical score, two categories which yielded star ratings, and related performance flags that highlighted subgroup and subject academic performance levels. The numerical score was used to reflect a composite of three student achievement metrics: achievement score, achievement gap closure score, and progress score. An additional category, entitled Factors for Success, enabled schools to gain up to three more points for their documented use of researched-based practices in their school. Star ratings were used to evaluate schools on two categories: financial efficiency and school climate with a maximum score of five stars. The star ratings were

given in addition to the numerical score and did not factor into the numerical calculations for student achievement.

**Focus Schools:** According to Georgia’s Waiver of the Elementary and Secondary Education Act (2012), a Focus School was “A Title I school that has the largest within-school gaps between the highest-achieving subgroup or subgroups and the lowest-achieving subgroup or subgroups or, at the high school level, has the largest within-school gaps in graduation rates (‘within-school-gaps’ focus school)” (p. 37). An additional Focus School definition was offered, ”A Title I high school with a graduation rate less than 60 percent over a number of years that is not identified as a priority school (‘low-graduation-rate’ focus school)” (p. 37).

**Indicator:** Another name for a performance measure.

**Lagging Indicator:** Figge, Hahn, Schaltegger, and Wagner (2002) offered the following definition: “*Lagging indicators* and long-term strategic objectives are formulated for the strategic core issues of each perspective derived from the strategy of the business unit. Lagging indicators thus indicate whether the strategic objectives in each perspective were achieved” (p. 271, emphasis in the original).

**Leading Indicator:** Figge et al. (2002) explained leading indicators:

In contrast to the lagging indicators, the *leading indicators* are very firm specific. They express the specific competitive advantages of the firm and represent how the results—reflected by the lagging indicators—should be achieved. Based on the specific strategy of the business unit, the key performance drivers that have the greatest influence on the achievement of the core strategic objectives (measured by lagging indicators) are identified for every perspective. (p. 271, emphasis in the original)

**Other School District Performance Management System:** A term specific to this study that defines a school district goal management system that is different from a

balanced scorecard. Examples could include school district strategic plans or school district performance dashboards.

**Priority Schools:** According to Georgia’s Waiver of the Elementary and Secondary Education Act (2012), a Priority School is defined as:

A school among the lowest five percent of Title I schools in the state based on the achievement of the ‘all students’ group in terms of proficiency on the statewide assessments and has demonstrated a lack of progress on those assessments over a number of years in the ‘all students’ group; A Title I-participating or Title I-eligible high school with a graduation rate less than 60 percent over a number of years; or A Tier I or Tier II school under the School Improvement Grants (SIG) program that is using SIG funds to implement a school intervention model. (p. 37)

**Strategy Maps:** Niven (2008) explained strategy maps as “A one-page graphical representation of what must be done well in order to execute strategy. Strategy maps are composed of performance objectives spanning the four perspectives and linking together to tell the organization’s strategic story” (p. 350).

**Student Enrollment:** The number of students enrolled in a district or school at a given time during the school year.

**Federal Per Pupil Expenditure:** The total amount of federal money spent in a given school district divided by the total number of students enrolled in the school district.

**Transparency:** In the context of the private sector, information transparency is defined as visibility and accessibility to company information (Zhu, 2002). When describing balanced scorecard use, Cowart (2010) explained school district transparency as providing access to all members in the school and community with information about school goals, operations, and performance.

## Limitations of the Study

One limitation of the study was the sample size of Georgia school superintendents who responded to the study and reported on their level of district performance goal alignment ( $n = 72$ ). A second limitation of the study was the relatively new and mathematical nature of the terminology in the CCRPI from the ESEA waiver (2012), and the use of these terms in survey items (see Appendix B for more information). When administering the survey, there could have also been limitations based on the self-reporting of Georgia school superintendents with respect to each variable examined. Other limitations could be related to different levels of superintendent knowledge with respect to balanced scorecards and the reporting of information about each district's specific performance goals by superintendents who were surveyed.

## Overview of the Method

This study employed a quantitative, survey-based approach to examine the extent to which Georgia school superintendents reported alignment of their balanced scorecards or other school district performance systems in response to five research questions. In addition, a categorical approach was used to compare perceptions of Georgia school superintendents across each research question. When using surveys, Litwin (1995) explained, "measurement error refers to how well or poorly an instrument performs in a particular population" (p. 6). To limit errors and threats to validity, Fraenkel, Wallen, and Hyun (2012) recommended "collecting additional information before a study begins" (p. 180). To minimize error, the survey was piloted on multiple district office educators who have multiple years of experience with balanced scorecards, school district performance

goals, and accountability metrics. From the pilot, feedback was obtained on each item and the survey as a whole, and adjustments were made based on the feedback.

To address research questions 1 and 2, superintendents were asked what performance goal management system they used and the extent to which their management system was aligned to categories in the CCRPI, "...that contribute to a school district's overall numerical score and star ratings" (Georgia Department of Education, 2012a, p. 62). To address research question 3, superintendents were asked whether or not their district had approved charter system status or not, and each group's perceived CCRPI alignment score was compared. Research question 4 examined the relationships between superintendent years of experience and perceived alignment to the CCRPI. Research question 5 examined the relationship between student enrollment in the district and perceived alignment to the CCRPI.

#### Organization of the Dissertation

Chapter 1 provides both the context and rationale for the study including statement of the problem, research questions, and hypotheses. Chapter 2 presents a review of literature on balanced scorecard use in the private and public sector as well as information pertaining to Georgia's CCRPI. Chapter 3 presents the research methodology and describes processes such as survey development and validation, sample used, and how data were collected and analyzed. Chapter 4 presents the results of the study and analysis of data. Chapter 5 includes a discussion of results from the study, implications, and potential ideas for future research.

## CHAPTER 2

### REVIEW OF RELEVANT LITERATURE

The purpose of the study was to obtain perceptual data from Georgia school superintendents about the extent to which district balanced scorecards and performance goals were aligned to the College and Career Ready Performance Index (CCRPI) as outlined in Georgia's ESEA waiver (2012). Additionally, perceptual data were categorically analyzed to determine similarities and differences between Georgia school superintendent responses from different district enrollment sizes, levels of superintendent experience, and district governance structures. Each categorical variable was examined with respect to balanced scorecard alignment to the CCRPI as outlined in Georgia's ESEA waiver (2012). An overall superintendent alignment score was also generated for each subcategory in the CCRPI.

#### Research Questions and Hypotheses

The study was organized around five research questions:

1. Are there differences in superintendents' overall perceived alignment to the following subcategories in the CCRPI: student achievement, post high school readiness, progress, and achievement gap?
2. Is there a difference in perceived alignment to the CCRPI between superintendents in school districts using balanced scorecards and superintendents in school districts using other school district performance management systems?



3. Is there a difference in perceived CCRPI alignment between superintendents who reported charter system status and superintendents who reported non-charter system status?
4. Are there differences in perceived alignment to the CCRPI between superintendents with different experience levels?
5. Are there differences in perceived alignment to the CCRPI between superintendents with different levels of student enrollment?

### Hypotheses

Hypotheses addressing each research question were phrased in the null.

1. There are no significant differences in superintendents' overall perceived alignment to the following subcategories in the CCRPI: student achievement, post high school readiness, progress, and achievement gap.
2. There is no significant difference in perceived alignment to the CCRPI between superintendents in school districts using balanced scorecards and superintendents in school districts using other school district performance management systems.
3. There is no significant difference in perceived CCRPI alignment between superintendents who reported charter system status and superintendents who reported non-charter system status.
4. There are no significant differences in perceived alignment to the CCRPI between superintendents with different levels of experience.
5. There are no significant differences in perceived alignment to the CCRPI between superintendents with different levels of school district student enrollment.

A review of literature pertaining to balanced scorecards revealed a multitude of business-related studies and analyses (Ittner et al., 2003; Kaplan & Norton, 1996b; Malina & Selto, 2001; Norreklit, 2000), but few articles related to school district use of balanced scorecards (Karathanos & Karathanos, 2005). A majority of the articles were not research-based, and these articles ironically addressed Georgia school district balanced scorecard implementation (Cowart, 2010; Glennon, 2010; Kaplan & Miyake, 2010). At the time of the study, there was no research examining how Georgia school districts would manage the accountability expectations outlined in the CCRPI. Following this literature review, a need to examine balanced scorecard use by Georgia school districts emerged concurrently with a need to examine how districts would manage the new accountability expectations outlined in the CCRPI.

A quantitative survey-based method was employed to obtain perceptual data from Georgia school district superintendents addressing the level to which they aligned their district performance goals to the CCRPI and subcategories within it. In addition, superintendents were asked to self-report certain demographic information into categories. The categorical variables were also studied in the context of performance goal alignment to the CCRPI. An item pertaining to school districts also addressed which performance goal management system schools within their district used. Following a categorical analysis of the perceptions of superintendents using the balanced scorecard compared to perceptions of superintendents using other school district performance management systems, mean differences in perceived CCRPI alignment were tested for the following variables: whether or not the district was an approved charter system,

number of years of experience of the superintendent, and district student enrollment levels.

### Overview of the Balanced Scorecard

The concept of the balanced scorecard was conceived by Robert Kaplan of the Harvard business school and David Norton, a business performance management consultant, as a tool for corporate leaders to manage non-financial measures that drive future performance in conjunction with performance outcomes or financial measures (Kaplan & Norton, 1992; Kaplan & Norton, 1996b). Norreklit (2000) described the cause-and-effect relationship assumed in seminal balanced scorecard literature, “It contains outcome measures and the performance drivers of outcomes, linked together in cause-and-effect relationships, and thus aims to be a feed-forward control system” (p. 65). While the cause-and-effect assumption of balanced scorecards has been challenged in scholarly literature (Ittner & Larcker, 1998), the link between financial and non-financial measures is the central theme of the balanced scorecard as a “*strategic management system*” (Kaplan & Norton, 1996a, p. 10, emphasis in the original).

When describing value creation in terms of non-financial measures used in the balanced scorecard, Niven (2008) explained, “Today’s system must have the capabilities to identify, describe, monitor, and fully harness the intangible assets driving organizational success” (p. 5). Kaplan and Norton (1996a) defined how businesses have used four drivers of future performance in their balanced scorecards:

Innovative companies are using the scorecard as a *strategic management system*, to manage their strategy over their long run. They are using the measurement focus of the scorecard to accomplish critical management processes:

1. Clarify and translate vision and strategy
2. Communicate and link strategic objectives and measures

3. Plan, set targets, and align strategic initiatives
4. Enhance strategic feedback and learning (p. 10, emphasis in the original)

To further articulate the focus on the human capital and innovative aspects of the balanced scorecard, Kaplan and Norton (1996a) explained, “Information age companies will succeed by investing in and managing their intellectual assets” (p. 18)

In addition to the four management processes, Kaplan and Norton (1996a) outlined four perspectives to be addressed in balanced scorecards with supporting questions:

**Financial**– To succeed financially, how should we appear to our stakeholders?

**Customer**– To achieve our vision, how should we appear to our customers?

**Internal Business Process**– To satisfy our shareholders and customers, what business processes must we excel at?

**Learning and Growth**– To achieve our vision, how will we sustain our ability to learn and improve? (p. 77)

A critical assumption of balanced scorecards is the linkage between these financial and non-financial indicators (Ittner et al., 1997; Norreklit, 2000).

#### Cascading the Balanced Scorecard

In both public and private sector contexts, the balanced scorecard has been used as an organizational alignment tool to be communicated using a process known as cascading by which common language and strategies are shared from leadership teams to individuals and subunits in the organization (Kaplan & Norton, 2001). Kaplan and Miyake (2010) described cascading between school districts and schools, “With the cascading of the strategy from the district level down to the schools, each level becomes more aligned and accountable for district performance” (p. 14). Woodley (2006) explained that cascading is a critical component in the quality of balanced scorecard implementation and described an absence of cascading as a barrier to successful strategy

management. Cascading is also the role of school improvement leadership teams when communicating school improvement goals and strategies to departments and individuals within the school and school community (Georgia Leadership Institute for School Improvement, personal attendance, February 9, 2010).

### Balance of the Balanced Scorecard

One primary component of the balanced scorecard emphasized in business literature is the notion of achieving balance across multiple levels that impact organizational performance (Kaplan & Norton, 1996b). In seminal balanced scorecard literature, one type of balance was described as the organization's simultaneous focus on both external and internal perspectives (Ittner et al., 2003; Kaplan & Norton, 1992). Kaplan and Norton (2001) explained that the internal perspective should be linked to the external or customer perspective in order to achieve quality of balanced scorecard implementation. The idea of directly linking a company's internal actions with outcomes such as customer perspective (external) is consistent with the cause-and-effect chain commonly debated in balanced scorecard literature (Malina & Selto, 2001; Norreklit, 2000). In their study of the subjectivity of the association between performance variables and weighting, Ittner et al. (2003) explained an observed imbalance when examining private sector balanced scorecards:

These analyses indicate that financial par scores were used more frequently and received greater weight than nonfinancial par scores. As hypothesized, both the financial and customer par scores, which were based on externally oriented, quantitative results measures, received greater emphasis than the more qualitative, internally oriented customer, people, and control par scores. (p. 742)

Thus, it appeared that many of the companies analyzed placed more emphasis on financial bottom lines and quantitative measures than the qualitative factors emphasized

in the seminal balanced scorecard literature (Kaplan & Norton, 2001). Similarly, when using balanced scorecards, school districts are faced with the task of concurrently managing the external perspective of accountability mandates alongside the internal perspective of local constituents (Georgia Leadership Institute of School Improvement, personal attendance, February 9, 2010).

Another type of balance within balanced scorecards pertains to the interplay between non-financial and financial indicators often referred to as leading (non-financial) indicators and lagging (financial) indicators (Ittner & Larcker, 2001; Kaplan & Norton, 1996). When describing these terms in the context of a Georgia school district, Kaplan and Miyake (2010) explained:

The balanced scorecard captures both the financial and the nonfinancial elements of the strategy and describes the cause-and-effect linkages that drive results. It allows a district to look ahead, with leading indicators, rather than always looking back with lagging indicators. (p. 12)

Figge et al. (2002) further explained that leading indicators are very specific to each respective organization. Kaplan and Norton (1996a) described leading indicators as the drivers that translate strategy into action.

In addition, the balanced scorecard literature described another form of balance as the inclusion of both short-term and long-term goals in balanced scorecards (Bieker & Waxenberger, 2002; Kaplan & Miyake, 2010; Karathanos & Karathanos, 2005). Figge et al. (2002) described short-term versus long-term strategy management in the context of corporate balanced scorecards:

By linking operational and non-financial corporate activities with causal chains to the firm's long-term strategy, the Balanced Scorecard supports the alignment and management of all corporate activities according to their strategic relevance. The Balanced Scorecard makes it possible to take into account non-monetary strategic

success factors that significantly impact the economic success of a business. (p. 269)

Kaplan and Norton (1996b), in seminal balanced scorecard literature, explained the importance of managing both short-term and long-term goals at the individual or employee level when they shared, “Meeting short-term financial targets should not constitute satisfactory performance when other measures indicate that the long-term strategy is either not working or is not being implemented well” (p. 80).

### Challenges to the Balanced Scorecard Assumptions

The assumed cause-and-effect relationship between leading and lagging indicators is a cornerstone of corporate balanced scorecard strategic management (Kaplan & Norton, 1992; 1996a; 2001). While the assumed link between long-term financial outcomes and short-term organizational strategies is described as the driving force behind the notion that balanced scorecards add value to organizations (Niven, 2008), researchers have challenged the idea that any causal relationship can exist between leading and lagging indicators (Ittner & Larcker, 2001; Malina & Selto, 2001). Despite some skepticism from researchers about the causal chain inherent in balanced scorecards, since its inception, a growing number of businesses (Krumwiede et al., 2008) and Georgia school districts have adopted balanced scorecards moving into the second decade of the 21<sup>st</sup> Century (Georgia Leadership Institute for School Improvement, personal attendance, February 9, 2010; Kaplan & Miyake, 2010).

### Balanced Scorecards and Organizational Alignment

Organizational alignment to goals and relevant information was another common theme in the balanced scorecard literature (Kaplan & Norton, 1996b, 2001; Niven, 2008). According to Kaplan and Nagel (2003), “The company uses the scorecard to align the

strategies of business units and support groups, to communicate strategy to all employees, to align employees' personal objectives and incentive plans, and to screen and fund strategic projects" (p. 4). One balanced scorecard method for communicating strategy across organizational subunits is through a strategy map that accompanies the balanced scorecard. Niven (2008) explained the balanced scorecard strategy map as, "A one page graphical representation of what must be done well in order to execute a strategy" (p. 350). More specifically, Kaplan and Norton (2001) provided two important functions of strategy maps:

The causal linkages in a BSC strategy map enhance quality programs by articulating the two ways that process improvements can link to strategic outcomes. First, quality improvements in the internal perspective should improve one or more outcome measures in the customer perspective; second, quality improvements can lead to cost reduction, an outcome in the financial perspective. (p. 158)

Therefore, strategy maps not only align to overall organizational goals, but they also link with two of the four perspectives (customer and financial) inherent in the balanced scorecard. From the standpoint of communication and alignment, Niven (2008) recommended cascading both the balanced scorecard and strategy map to all units within the organization.

Another function within balanced scorecard processes is the alignment of information for chief executives and governing boards. When using balanced scorecards in the context of executive board meetings, Kaplan and Nagel (2003) elaborated, "Such effective time management includes streamlining the information that boards are asked to process in advance and during board meetings so that they can focus on their primary responsibilities" (p. 3). Similarly, Niven (2008) recommended that companies use strategy maps when "aligning information with the strategy" (p. 183). Kaplan and Norton



(2001) also recommended using balanced scorecards to assist with presenting aligned information about strategy implementation and to include this information in a standing agenda item during executive meetings. Kaplan and Norton (1996a) also explained how strategic business units (SBUs) within an organization could use their own areas of specialization to focus on certain overall company objectives from the balanced scorecard, and they pointed out that the company could take an aggregate total of performance of all SBUs to generate the company's overall performance on a given balanced scorecard performance measure.

#### Balanced Scorecards as Management and Evaluation Tools

While empirical research on the balanced scorecard is scant (Boulianne, 2006), balanced scorecards have been studied as private sector management tools (Ittner & Larcker, 2001; Lipe & Salterio, 2000; Malina & Selto, 2001). After examining manager and employee perceptions, Lipe and Salterio (2000) found that non-financial measures had no effect on managers' evaluation of employees. Based on this finding, it was concluded that non-financial measures, a central tenet of balanced scorecard literature (Kaplan & Norton, 1996a), were not receiving the attention by managers as they were intended. Similarly, Ittner and Larcker (2001) found that the value-based management aspect of balanced scorecards was problematic beginning with what content is chosen to be measured as well as how it is measured by managers. While Malina and Selto (2001) noted that more attention is given to financial indicators than non-financial indicators, their research did indicate that the balanced scorecard can be an effective strategic management tool when communication between organizational levels was perceived to be collaborative and effective.

## Knowledge Management and Balanced Scorecards

Within the much debated value-based management model that defines balanced scorecards (Ittner & Larcker, 2001) is the qualitative component of employee knowledge management—which has extensively been examined in the business literature (Arora, 2002; Teece, 1998; Woodley, 2006). When describing the ambiguity of measuring intellectual capital—a central theme within the balanced scorecard framework—Figge et al. (2002) positioned:

The concept of the BSC is based on the assumption that the efficient use of investment capital is no longer the sole determinant for competitive advantages, but increasingly soft factors such as intellectual capital, knowledge creation or excellent customer orientation become more important. (p. 270)

Teece (1998) described this knowledge management focus by explaining that intangible assets are critical factors that separate companies from one another, while also offering the hypothesis that intellectual capital would be one of the “...key sources for wealth creation in the new millennia” (p. 76). While employee learning and growth is one of the four critical components of corporate balanced scorecards (Kaplan & Norton, 1992, 1996b, 2001), it is considered hard to measure and to link with outcomes (Ittner, Larcker, & Randall, 2003).

### Balanced Scorecards and Educational Leadership Perspectives

The initial balanced scorecard literature addressed private sector, for-profit goals, and a top-down corporate approach (Bieker & Waxenberger, 2002). In 2012, an abundance of balanced scorecard literature existed addressing the business perspective, while there was very little information about balanced scorecard use in public school districts (Karathanos & Karathanos, 2005). In this literature examination, the only literature on school districts pertained to the balanced scorecard processes used by the

Chatuga School District of Anchorage, Alaska (Karathanos & Karathanos, 2005) in conjunction with practitioner journal articles addressing the perspectives of two Georgia school districts (Cowart, 2010; Glennon, 2010; Kaplan & Miyake, 2010).

When comparing the public sector to the private sector, there are both similarities and differences between balanced scorecard design and implementation (Kaplan, 2008). Differences gleaned from the literature pertained to both financial outcomes as well as employee compensation. For example, Kaplan (2008) explained that local input, in non-profit organizations, was of more importance than financial production. While Kaplan and Miyake (2010) pointed out that compensation is not part of the school district management system they studied, they did, however, state that the ongoing measurement and communication of goals was still important to motivation and effective management when using balanced scorecards in school districts.

Similarities observed across public and private sector balanced scorecard literature included the use of the balanced scorecard as a communication and strategic alignment tool with an overarching purpose of cascading goals and strategies across all units within the organization (Kaplan & Norton, 1996a; Niven, 2008). Both public and private sector balanced scorecards were also designed to concurrently consider short-term and long-term goals as well as internal and external perspectives (Kaplan & Miyake, 2010; Kaplan & Norton, 1996b). Positive outcomes pertaining to both organizational alignment and communication were reported in both private and public sector balanced scorecard literature (Cowart, 2010; Glennon, 2010; Kaplan & Miyake, 2010; Malina & Selto, 2001).

## School Districts as Loosely Coupled Organizations

Weick (1982) described schools as loosely coupled organizations. Within his description, Weick stated that when loose coupling occurs in schools, "...different people have different goals" (p. 676). In a follow-up to this article, Orton and Weick (1990) stated that in the context of loosely coupled organizations, "The three most frequently recurring managerial strategies are enhanced leadership, focused effort, and shared values" (p. 211). Some highlighted components of enhanced leadership were unification of goals and interaction with employees. Focused effort was described as, "...ways in which individuals can compensate for loose coupling by carefully selecting targets, controlling resources, and acting forcefully" (Orton & Weick, 1990, p. 212). A third compensation for loose coupling was referred to as shared values across the organization. In total, loose coupling was communicated as a challenge for educational leaders and for educational organizations attempting to monitor and achieve desired outcomes (Orton & Weick, 1990; Weick, 1982).

In recent literature, Marzano and DuFour (2010) explained that when a district office does not provide direction, site based management in schools has "proved faulty" (p. 28). Similarly, a completely top-down district leadership approach has also failed to foster clarity and commitment across schools (Fullan, 2007). Research instead indicated that clear direction from the school district balanced with the provision of some latitude at the school level when implementing district expectations was the most proven method for school district leadership to have a positive impact on student achievement (Marzano & Waters, 2009). Thus, in more current studies of school districts as loosely coupled

organizations, a call for both tighter coupling, common goal setting, and sharing of knowledge across schools was recommended (DuFour & Marzano, 2010; Elmore, 2004)

### Problems of Practice in School Districts

When describing problems that schools face as they address accountability mandates and accompanying expectations for improvement, O'Day (2002) described three problem areas:

*Problem 1: The school is the unit of intervention, yet the individual is the unit of action.*

*Problem 2: External control seeks to influence internal operations.*

*Problem 3: Information is both problematic in schools and essential to school improvement.* (pp. 295-296, emphasis in the original)

These problem areas are closely associated with characteristics of schools addressed in other literature past and present such as teachers working as isolated entities within the larger school context and culture (DuFour, 2004; Lortie, 1975; Musanti & Pence, 2010), school districts as loosely coupled organizations (Marzano & Waters, 2009; Orton & Weick, 1990; Weick, 1975), communication breakdowns between school stakeholders during the change process (Hargreaves & Fullan, 1992; Marzano, Waters, & McNulty, 2005), and the need for sense making while implementing reforms (Louis et al., 2005; Spillane, 2004; Tyack & Cuban, 1995).

### District Office Leadership

While a vast majority of K-12 literature addressed school level instructional leadership practices (Hallinger & Heck, 1996; Marks & Louis, 1999; Zepeda, 2011), research addressing the leadership behaviors of school districts was reviewed for this study (Daily et al., 2005; Fullan, Bertani, & Quinn, 2004; Leithwood & Prestine, 2002; Marzano & Waters, 2009; Murphy, 2007; Murphy & Hallinger, 1986; Murphy & Hallinger, 1988). Within the school district leadership literature, many common themes

and best practices emerged such as collaborative goal setting, instructional focus, monitoring of goals, board of education support, resource allocation, as well as an emphasis on teacher quality, professional development, and the evaluation of personnel (Zepeda, Lanoue, Price, & Jimenez, 2014). Of the studies examined, findings from four studies were examined in depth because of their data collection, reporting, and analyses occurring in the context of the present school accountability movement and its relationship to the present study.

Marzano and Waters (2009) described the following five district level “responsibilities” or “initiatives” that emerged from a meta-analysis of research:

1. Ensuring collaborative goal setting.
2. Establishing nonnegotiable goals for achievement and instruction.
3. Creating board alignment with and support of district goals.
4. Monitoring achievement and instructional goals.
5. Allocating resources to support the goals for achievement and instruction.
6. (p. 6)

The highlighted five school district actions were gleaned from multiple studies across multiple contexts and ultimately were selected based on their positive association with student achievement.

In a related synthesis focused on high poverty school districts with high levels of student achievement, Daily et al. (2005) described seven prominent themes that emerged as commonalities across high performing school districts analyzed:

1. Successful districts focus first and foremost on student achievement and learning.
2. Successful districts have a theory of action for how to effect improvements, and they establish clear goals.
3. Successful districts enact comprehensive, coherent reform policies.
4. Educators in successful districts accept personal responsibility for improving student learning and receive support to help them succeed.
5. Successful districts are committed to professional learning at all levels and provide multiple, meaningful learning opportunities.

6. Successful districts use data to guide improvement strategies.
7. Successful districts regularly monitor progress and intervene if necessary.  
(pp. 2-5)

Following the identification of the seven prominent themes, four other secondary themes—those occurring with less frequency, while still showing a positive association—were also reported. Among the secondary themes emphasized were partnerships with stakeholders, shared responsibility between the school and district, resource allocation, and support specifically tailored to schools.

In another related study that emphasized leadership with a focus on learning in the context of both schools and school districts, Murphy (2007) described 10 principle actions that were observed and communicated as recommendations:

1. Develop and steward vision
2. Hire, allocate, and support quality staff
3. Maximize content coverage in an aligned curriculum
4. Monitor student progress
5. Establish positive expectations for academic learning
6. Maintain high visibility and involvement
7. Promote student and teacher incentives
8. Promote professional development and practice
9. Develop a supportive work environment
10. Forge home-school links (pp. 72-82)

When describing the context of the research, Murphy (2007) emphasized that each of the 10 principles were particularly critical during an era of increased school accountability and school restructuring resulting from NCLB. The 10 principles described in the research were observed in the actions of both superintendents and principals; thus the data included both the school and district leadership contexts.

Fullan et al. (2004) synthesized a series of research findings and offered 10 recommendations for district office leaders:

1. Leading with a compelling, driving conceptualization

2. Collective moral purpose
3. The right bus
4. Capacity building
5. Lateral capacity building
6. Ongoing learning
7. Productive conflict
8. A demanding culture
9. External partners
10. Growing financial investments (pp. 42-46)

The “right” bus was characterized by the school district analyzing employee roles, collaborative structures, and internal leaders within the school district to ensure that goals have the best chance of being met. To get personnel on the right bus, Fullan et al. (2004) described the benefits of school and district reorganization including the strategic placement of human resources to heighten focus on the school district’s most prioritized objectives.

#### Commonalities in Balanced Scorecards and School District Research

Following a review of the balanced scorecard literature (Kaplan & Miyake, 2010; Kaplan & Norton, 1996b; 2001; Niven, 2008) and school district leadership studies (Dailey et al., 2005; Fullan et al., 2004; Marzano & Waters, 2009; Murphy, 2007), some common themes emerged across each. First, both balanced scorecard literature and school district literature emphasized goal setting and clear communication of goals throughout the organization. A second common theme was support for organizational learning aligned with established goals. A third theme was monitoring of both formative and summative indicators also known as leading and lagging indicators in balanced scorecard literature (Kaplan & Norton, 2001). A fourth theme was organizational alignment and tight coupling across subunits of the organization. Marzano and Waters (2009) emphasized that fostering tighter coupling within school districts was the only



organizational action that could be positively associated with a school district having an impact on student achievement. Marzano and Waters (2009) shared:

Our findings clearly point to the efficacy of tight coupling regarding achievement and instruction at the district level. Although the districts in the studies we analyzed most certainly differed in how they approached these two elements and the extent to which they achieved tight coupling, tight coupling clearly appears to hold great promise as the necessary ingredient for a district-level effect on student achievement. Our conclusion that tightly coupled districts can have a positive effect on student achievement is supported by a variety of sources. (pp. 18-19)

Similarly, with balanced scorecards, research emphasized that in the tightly coupled context of the balanced scorecard goal alignment structure, different companies had different processes and indicators specific to their respective organizations (Figge et al., 2002). Table 2.1 illustrates the relationships between literature on schools as organizations, research on school district leadership, and balanced scorecard functions as stated in seminal balanced scorecard literature.

Table 2.1

<i>School Coupling, School District, and Balanced Scorecard Literature</i>		
School Coupling	School Districts	Balanced Scorecards
Leaders focus schools through common goals, collaboration, and shared values	Leaders tightly couple schools around common goals and nonnegotiable practices	Leaders align and cascade goals across smaller subunits within the organization
Weick & Orton, 1990	Marzano & Waters, 2009	Kaplan & Norton, 1996a

*Note.* The themes above are commonalities in school, school district, and balanced scorecard literature.

#### School District Problem Areas and Balanced Scorecard Functions

In the previous section, the balanced scorecard literature was linked to practices associated with effective school and school district performance. In this section, balanced scorecard functions will be examined in the context of identified problem areas for

schools and school districts. For example, O'Day (2002) identified three problem areas for schools in the context of the current accountability expectations. The first problem area stated, "*The school is the unit of intervention, yet the individual is the unit of action*" (p. 95, emphasis in the original). In the literature, the use of balanced scorecards and accompanying strategy maps was intended to cascade goals across the organization moving all the way to the individual or employee level (Niven, 2008). More specifically, to articulate alignment, balanced scorecards functioned as vehicles to communicate organizational goals and to collect data pertaining to progress on objectives across all stakeholder groups including managers, department heads, employees, stockholders, decision-making boards, and chief executives (Chi & Hung, 2011; Kaplan & Nagel, 2003; Ling et al., 2009).

O'Day (2002) also communicated a second problem area for schools, "*External control seeks to influence internal operations*" (p. 295, emphasis in the original).

Glennon (2010) described an analogous link or alignment between the district balanced scorecard and school balanced scorecards:

Using the same format, with consistent strategic goal areas and performance objectives for each school and the district, not only helped the school's inner workings; it also increased the capacity of school personnel to communicate with each other and align their work. (p. 18)

Thus, schools were able to participate in creating their own balanced scorecards by participating in the same process, while using internal capacity and input to align to both district processes and outcomes.

O'Day (2002) identified a third problem area for schools in the context of increased accountability, "*Information is both problematic in schools and essential to school improvement*" (p. 296, emphasis in the original). Cowart (2010), a Georgia school

superintendent, described the balanced scorecard communication function pertaining to the flow of information, “The balanced scorecard enabled us to communicate current performance levels to all stakeholders objectively, clearly, and continually” (p.17). From the private sector perspective, one theme of balanced scorecards is the alignment of goals and actions across the organization (Kaplan & Norton, 1996a). Malina and Selto (2001) explained, “Because the BSC [balanced scorecard] explicitly focuses on links among business decisions and outcomes, it is intended to guide strategy development, implementation, and communication” (p. 48). Kaplan and Norton (1996b) shared that the balanced scorecard, “... lets managers communicate their strategy up and down the organization and link it to departmental and individual objectives” (p. 76). With respect to information exchange, balanced scorecards are both intended to streamline information for executives and managers (Kaplan & Nagel, 2003) and to cascade information aligned to the goals of the organization to all units within the organization (Niven, 2008).

#### Balanced Scorecards as Tools to Address Loose Coupling

An additional problem area for schools and school districts is the notion of trying to achieve goals and monitor performance in a loosely coupled organizational context (Orton & Weick, 1990; Weick, 1982). A consistent theme across both public and private balanced scorecard literature is the idea of aligning the organization to common goals and strategies across each committee, department, and individual in the organization (Chi & Hung, 2011; Kaplan & Nagel, 2003; Niven, 2008). When further discussing the notion of loose coupling following an analysis of school district practices, Marzano and Waters (2009) communicated that tighter coupling is necessary for school districts to have the desired impact on both instruction and student achievement.

## School Accountability as a Context

O'Day (2002) categorized the challenges of school-based accountability into three problem areas: “collective accountability versus individual control, internal versus external sources of control, and the nature and uses of information for school improvement” (p. 17). With respect to balanced scorecard literature, the response to internal relative to external factors, organizational accountability versus individual control, and strategic use of information for improvement run parallel (Niven, 2008). Moreover, the balanced scorecard literature illustrates direct alignment to both seminal business balanced scorecard literature and school district balanced scorecard literature and practice (Georgia Leadership Institute of School Improvement, personal attendance, February 9, 2010; Kaplan & Norton, 1996b).

Other researchers examined the role of accountability mandates and described their influence on how schools organized their work and made sense of their initiatives and structures (McLaughlin & Mitra, 2001; Tyack & Cuban, 1992). Therefore, the external perspective could play a major role as school districts adopt processes described in school district meta-analyses such as the implementation of common goals and strategies, while school districts are facing increased accountability (Marzano & Waters, 2009). From an ethical standpoint, Bieker and Waxenberger (2002) explained that balanced scorecard use has an influence on the community, and, therefore, should directly address this community impact factor; for example, the balanced scorecard should be designed initially in a manner that considers both ethical and community factors. In the context of schools facing increased external accountability (Elmore, 2004; McDonnell, 2005; McNeil et al., 2008), the push-pull between internal and external

expectations could be a source of conflict as school districts are faced with the challenge of achieving balance between internal or local expectations and external factors such as state or national accountability mandates (Kaplan & Miyake, 2010).

#### College and Career Ready Performance Index

Germane to the study of balanced scorecard use in Georgia school districts is the CCRPI. The CCRPI is the index on which each school in Georgia was measured beginning in 2012-2013. It addresses five main components: achievement score, progress score, gap closure score, financial efficiency, and school climate (Georgia's Waiver of No Child Left Behind, 2012). The Georgia Department of Education explained the first three calculations which are numerical, "Using a three-pronged approach, Georgia will calculate an overall CCRPI score to be used within the single statewide accountability system. This score will reflect a school's Achievement, Achievement Gap Closure, and its Progress" (p. 62). The three numerical calculations culminate into an overarching numerical index score for each school based on a 100-point scale.

In addition to the numerical calculations are two star ratings. According to the Georgia Department of Education (2012a), "The CCRPI reporting structure will also include a Financial Efficiency Rating and a School Climate Rating, based on one to five stars" (p. 62). Therefore, each school will also receive a star rating based on the categories of financial efficiency and school climate determined from analyses of documentation and survey results used by the school to ascertain information from stakeholders about school processes.

## Accountability Designations in Georgia's Waiver of NCLB

The Georgia Department of Education (2012a) outlined four school designations: Priority Schools, Focus Schools, Alert Schools, and Reward Schools. Each of the four designations with the exception of Reward schools was associated with a specific area or areas to be addressed by the school. Priority, Focus, and Alert designations were initially released by the Georgia Department of Education in the spring and summer of 2012 with each identified school receiving targeted support in their area(s) of need. The following definitions for Priority, Alert, and Focus schools define the calculations used to identify each school.

According to Georgia's Waiver of the Elementary and Secondary Education Act (2012), a Priority School is defined as:

A school among the lowest five percent of Title I schools in the state based on the achievement of the 'all students' group in terms of proficiency on the statewide assessments and has demonstrated a lack of progress on those assessments over a number of years in the 'all students' group; A Title I-participating or Title I-eligible high school with a graduation rate less than 60 percent over a number of years; or A Tier I or Tier II school under the School Improvement Grants (SIG) program that is using SIG funds to implement a school intervention model. (p. 37)

Following a sequence for designating schools to receive support, the Georgia Department of Education identified Priority Schools prior to designating its Focus and Alert Schools. Therefore, a school, once identified as Priority, was not eligible to be selected as a Focus or Alert School. An important distinction in the waiver was that only Title I schools were eligible to be given Priority School status.

According to Georgia's Waiver of the Elementary and Secondary Education Act (2012), a Focus School was "A Title I school that has the largest within-school gaps between the highest-achieving subgroup or subgroups and the lowest-achieving subgroup

or subgroups or, at the high school level, has the largest within-school gaps in graduation rates ('within-school-gaps' focus school)" (p. 37). An additional Focus School definition was offered, "A Title I high school with a graduation rate less than 60 percent over a number of years that is not identified as a priority school ('low-graduation-rate' focus school)" (p. 37). A school already identified as Priority was not eligible to be chosen as a Focus School. Similar to Priority Schools, an important distinction in the waiver was that only Title I schools were eligible to be selected for Focus School status.

A third designation used in Georgia's Waiver of NCLB was Alert Schools—which were subdivided into three types of schools. According to Georgia's Waiver of the Elementary and Secondary Education Act (2012), Georgia will identify, "...Graduation Alert Schools, Subgroup Alert Schools, and Subject Alert Schools" (p. 37). Graduation Alert Schools are "High Schools whose subgroup graduation rate falls at or below the third standard deviation compared to the statewide subgroup average" (p. 65). Subgroup Alert Schools are "Schools whose subgroup performance on any statewide assessment falls at or below the third deviation compared to the subgroup's state average" (p. 65). Subject Alert Schools are: Schools whose subject area performance on any statewide assessment falls at or below the third deviation compared to the subject's state average" (p. 65). Since Focus Schools and Priority Schools were designated prior to Alert Schools, they were thus ineligible to be identified as Alert Schools though they would be required to address any alerts within their school improvement plans. Alert Schools, unlike Priority and Focus Schools, could have either Title I or non-Title I status.

## Race to the Top Reforms and Georgia's Education Systems

In 2012, another major accountability and reform initiative in Georgia was Race to the Top which was in its third year of implementation. The Georgia Department of Education (2012b) described the funding level and reform plan:

The Race to the Top fund is a \$4 billion grant opportunity provided in the American Recovery and Reinvestment Act of 2009 (ARRA) to support new approaches to school improvement. The funds are made available in the form of competitive grants to encourage and reward states that are creating conditions for education innovation and reform, specifically implementing ambitious plans in four education reform areas:

- Recruiting, preparing, rewarding, and retaining effective teachers and principals, especially where they are needed most;
- Adopting standards and assessments that prepare students to succeed in college and the workplace and to compete in the global economy;
- Building data systems that measure student growth and success, and inform teachers and principals about how they can improve instruction;
- Turning around our lowest-achieving schools. (p. 1)

In 2012, of Georgia's 180 school districts, 26 were participants in Race to the Top and accounted for approximately 40 percent of Georgia's students. In the latter part of 2012, many of the initiatives being piloted in Race to the Top school districts were being considered by the state for full adoption or mandatory school and district participation within three years (Georgia Department of Education, 2012c). The context of Race to the Top, particularly the focus on data and data systems, was included in the literature review in consideration of its context and possible impact on how school districts managed their goals.

## School System Governance and Charter Systems

Within Georgia's public school systems, there was also a governance movement running concurrently with the accountability movement in which school districts were required to select from three possible governance structures by June 30, 2015: charter



school districts, investment in educational excellence (IE2) districts, or status quo districts (Georgia Department of Education, 2014). According to the Office of the Lieutenant Governor (2014), “Lt. Governor Cagle's Charter Systems Act gives individual school districts the option of stepping out from state and federal mandates to adopt an educational policy and curriculum that is right for the needs of their students” (p. 1). With respect to governance, accountability, and flexibility with respect to state and federal mandates, charter system status was adopted or explored as an option by some Georgia school superintendents and school boards during the same time the CCRPI was adopted as Georgia’s accountability index.

#### School Accountability and Theories of Action

When discussing the goal of educational accountability systems, Perie, Park, and Klau (2007) explained, “The theory of action explicates the policymakers’ assumptions about how the accountability system will bring about the desired changes” (p. 19). In the words of Fullan (2007): “If a healthy respect for and mastery of the change process do not become a priority, even well-intentioned change initiatives will continue to wreak havoc among those who are on the firing line” (p. 8). According to Louis et al. (2005), many school districts instituted internal accountability systems to measure NCLB indicators; such systems typically consisted of benchmark assessments or checkpoints throughout the school year to provide feedback on student subgroup performance from which to respond (McDonnell, 2002). Based on these findings, this research was designed to examine how districts aligned their goals in the context of new accountability expectations in Georgia’s CCRPI.

## Chapter Summary

The purpose of the study was to examine perceptual data from Georgia school superintendents pertaining to how they addressed district goals in the context of the new accountability expectations outlined in the College and Career Ready Performance Index (Georgia Department of Education, 2012a). Analyses examined both differences in superintendents using balanced scorecards as compared to superintendents using other performance management systems with respect to the variables: perceived alignment to accountability categories included in the CCRPI. Additional between groups analysis addressed the relationships between the alignment variables and categorical independent variables pertaining to demographic information: district governance structure, superintendent experience level, and district student enrollment. Perceived levels of alignment to different subcategories within the CCRPI were also examined.

In both public and private sector literature, data indicated that alignment was a recurring theme with respect to implementation of the balanced scorecard as a strategic management tool (Cewart, 2010; Kaplan & Miyake, 2010; Kaplan & Norton, 1996b; Malina & Selto, 2001). In both empirical and in the practitioner literature, organizational alignment emerged as a goal of organizations using balanced scorecards (Glennon, 2010; Kaplan & Norton, 2001; Lipe & Salterio, 2002; Niven, 2008). Another common theme in both the public and private sector balanced scorecard literature was the collective management of both internal and external perspectives (Kaplan & Miyake, 2010; Kaplan & Norton, 1996a).

When school and school district literature was examined, the theme of districts achieving tighter coupling around common goals emerged in multiple sources (Marzano

& Waters, 2009; Orton & Weick, 1990). Inversely, researchers who analyzed problems with schools and school district performance indicated that both communication and the disparity between organizational goals and individuals goals was a problem for school districts (Dailey et al., 2005; O'Day, 2002). Furthermore, there was evidence that educational policies are theories of action to which schools and school districts are required to respond (Anderson, 2003).

In the context of increasing school accountability (Elmore, 2004; McDonnell, 2005; McNeil et al., 2008), there is evidence in the literature that school districts are using balanced scorecards (Coward, 2010; Kaplan & Miyake, 2010), while there is scant literature examining balanced scorecard implementation in school districts (Karathanos & Karathanos, 2005). Based on the emergence of balanced scorecard alignment literature and use of the balanced scorecard as a management tool for both internal and external perspectives, the following research aimed to examine these themes in the context of current accountability shifts in the state of Georgia. In addition, the research aimed to collect data on how school districts are using balanced scorecards and other school district performance management systems.

## CHAPTER 3

### METHODOLOGY

#### Introduction

The purpose of this study was to examine perceptions of Georgia school superintendents pertaining to the alignment of school district performance goals to the state's accountability index: the College and Career Ready Performance Index (CCRPI). Perceptual data were obtained about the extent to which school district balanced scorecards or other school district performance management systems were aligned to specific subcategories within Georgia's CCRPI (achievement, post high school readiness, progress, and achievement gap). Alignment levels were then examined in conjunction with superintendents' self-reporting on certain school district and superintendent characteristics. The self-reported categorical data included the superintendent's number of years of experience, the school district's student enrollment, the performance management system that was used in the district, and whether or not the superintendent reported his or her district to be an approved charter school system. The CCRPI alignment variables were examined using a 7-point Likert scale, while demographic and categorical variables were reported and mean perceived alignment levels compared.

#### Research Design

The research employed a quantitative survey design. The quantitative survey design was selected due to its efficient administration for the target sample: Georgia school superintendents. Within the survey, use of a 7-point Likert scale enabled the

researcher to yield numerical results to measure superintendents' perceptions that could be used to test for mean differences between groups. As recommended in quantitative methodology literature, domains of interest in the study were gleaned from a review of past research, and research questions were created with the purpose of examining relationships between variables to obtain relevant data about a construct and to compare groups (Creswell, 2002). In addition, hypotheses were generated and stated in the null for each of the five research questions.

Each of the content categories and variables addressed in the survey pertained to research questions in the study that were synthesized from literature addressing strategy and goal management systems (Kaplan & Norton, 1996b; Malina & Selto, 2001), school district literature (Dailey et al., 2005; Kaplan & Miyake, 2010; Marzano & Waters, 2009), and categories from Georgia's CCRPI (Georgia Department of Education, 2012a). Similarly, the impetus for examining school districts' and superintendents' responses to accountability mandates was based on themes noted in the school accountability literature (McLaughlin & Mitra, 2001; O'Day, 2002).

More specifically, categories within the survey addressed superintendents' overall alignment to Georgia's CCRPI, differences between perceived alignment levels on smaller CCRPI subcategories (achievement, career readiness, progress, and achievement gap), and the relationships between perceived overall alignment levels and demographic categories pertaining to the superintendent and school district. A majority of items used a 7-point Likert scale. A Likert scale was chosen because of the multiple research studies addressing balanced scorecards in the business management and the business accounting literature (Chen & Chen, 2006; Lipe & Salterio, 2000; Lipe & Salterio, 2002). At the

time of the study, there was no scholarly research addressing how school districts used balanced scorecards in the public school or school district context.

The research sample of interest identified for the study was Georgia school superintendents ( $N = 180$ ) from public school districts in the state. Superintendents were selected because of their positions as public school district leaders in conjunction with their collaborative work with school board representatives from their local communities. The target sample size was limited to current Georgia school superintendents serving in school districts working exclusively in the context of the accountability guidelines set forth in the CCRPI. Neither random sampling nor random assignment was used when gathering the data due to the goal of obtaining perceptual data from as many respondents from the target population as possible.

#### Research Questions

The study was organized around five research questions:

1. Are there differences in superintendents' overall perceived alignment to the following subcategories in the CCRPI: student achievement, post high school readiness, progress, and achievement gap?
2. Is there a difference in perceived alignment to the CCRPI between superintendents in school districts using balanced scorecards and superintendents in school districts using other school district performance management systems?
3. Is there a difference in perceived CCRPI alignment between superintendents who reported charter system status and superintendents who reported non-charter system status?

4. Are there differences in perceived alignment to the CCRPI between superintendents with different experience levels?
5. Are there differences in perceived alignment to the CCRPI between superintendents with different levels of student enrollment?

### Instrumentation and Survey Development

A survey was developed by the researcher based on domains gleaned from the literature review and their relevance to the research questions. First, information from balanced scorecard literature that emerged in the seminal studies and the literature was synthesized addressing such topics as alignment, goal management, internal perspectives, and external perspectives (Kaplan & Norton, 1996a). Secondly, seminal research on school district leadership was used to determine practices used by district personnel to manage performance and to communicate goals (Marzano & Waters, 2009). Thirdly, literature from education practitioner journals relevant to district leadership was referenced (Coward, 2010; Glennon, 2010; Kaplan & Miyake, 2010). Fourthly, a review of Georgia's accountability model, the CCRPI, was examined to identify subcategories for which schools in the state were responsible (Georgia Department of Education, 2012a). The survey was divided into three sections:

1. Self-Reported Demographics
2. Self-Reported System-Wide Goal Measurement Processes
3. Self-Reported Alignment to the CCRPI

In each section, superintendents were asked to report information about their respective school district.

Prior to administration of the survey, feedback on the instrument was obtained from current practitioners in the state of Georgia. The first group to whom the survey was

administered was a class of education doctoral students at the University of Georgia—each of whom were practicing educators in positions that included teachers, school administrators, school counselors, and district office administrators. The second group of educators to review the survey was a focus group of district office leaders familiar with school district balanced scorecards, strategic plan alignment, and Georgia’s accountability index. Once the survey was deemed relevant, valid, and efficient by the pilot group, the focus group, and the researcher, it was submitted to the University of Georgia’s Internal Review Board (IRB). After being reviewed and approved by the IRB, the survey was emailed to Georgia school superintendents (including a letter of consent outlining the purpose of the study).

#### Target Sample for the Study

Of the 180 Georgia school superintendents initially identified for the study, 4 were eliminated from the email list due to their interim status. Therefore, the initial survey link was emailed to all non-interim Georgia school superintendents ( $N = 176$ ) in November of 2014 accompanied by an attached cover letter. The timeframe was selected based on feedback from practitioners (including the content validity focus group) indicating that November follows the first quarter of the school year when balanced scorecards and/or strategic plans are typically completed and revised by school and school district teams for the respective school year that is in progress. Therefore, a November administration date was selected. Prior to sending the initial email, superintendents’ email addresses were collected through a search in the Georgia School Superintendents’ Association (GSSA) website, and each address was verified using



individual school district websites via the internet. A spreadsheet was kept by the researcher to track participation and to prepare for follow-up emails.

After a two-week period elapsed following the initial email, a second email was sent only to superintendents who had not completed the initial survey. This email also included the cover letter and survey link. The second email to superintendents occurred in late November of 2014. A third and final email was sent to superintendents during December of 2014. The second and third emails were only sent to superintendents who had not responded to prior emails.

In two instances, school district officials emailed indicating that their districts were currently reviewing policies with respect to completing outside research. In these instances, the superintendent and school district were removed from the study and the email list, and they did not receive any subsequent emails from the researcher. In addition to two superintendents removed for research policy reasons, the four temporary or interim superintendents were also removed from the sample of Georgia school superintendents ultimately decreasing the number contacted. Table 3.1 outlines the sampling process for the study including how many superintendents were emailed, the number of superintendents removed from the study, the number of responses to each email, and how many responses were usable data:

Table 3.1

<i>The Sample of Georgia School Superintendents</i>		
<u>Sample</u>	<u>Timeline</u>	<u>Action of Researcher</u>
Original Target Sample N = 180	September 2014	Internet Search of Georgia School Superintendents Data Base and School District Websites to Locate Emails

Table 3.1 continued

<u>Sample</u>	<u>Timeline</u>	<u>Action of Researcher</u>
Sample Size After Interim Superintendents Were Removed from Data Set	October 2014	Interim Superintendents Were Removed from the Data Set
$N = 176$	November 2014	176 Superintendents Were Emailed the Survey and Consent Letter
Number of Responses to First Email 47 out of 176 (27%)		Respondents ( $n = 47$ ) and School Districts With Research Policies Under Review ( $n = 2$ ) Were Removed From the Data Set ( $n = 49$ )
Number of Responses to Second Email 21 out of 127 (17%)		127 Remaining Superintendents Were Emailed
Number of Responses to Third Email 25 out of 106 (24%)	December 2014	106 Remaining Superintendents Were Emailed
Total Responses from Target Sample 93 out of 180 (52%)	January 2014	Survey Was Closed
Usable Responses out of Total Responses Received 72 out of 93 (77%)		Usable Responses Were Defined as Those from a Georgia School District and Responses to All Likert Survey Items
Usable Responses from Target Sample of Superintendents 72 out of 180 (40%)		Usable Data Finalized

The first round of emails was sent to non-interim Georgia school superintendents ( $N = 176$ ) on November 11<sup>th</sup>, 2014. The second round of emails was sent on November 24<sup>th</sup>, 2014. A third and final round of emails was sent on December 10<sup>th</sup>, 2014. Each email also included an unsigned consent letter attached to the email (see Appendix A) with

specific information about the purpose of the study, confidentiality practices, and how data would be reported. After all rounds of emails were completed, the survey link was closed, and, in total, the researcher collected 72 usable surveys out of 180 for a return rate of 40%.

Within the survey, an initial section asked for self-reported demographic information from Georgia school superintendents. Self-reported demographics included items pertaining to the following topics:

- The number of years the superintendent served in the position of superintendent in his or her current school system;
- The total number of years the superintendent has served in the position of superintendent;
- The number of students currently enrolled in the superintendent's respective school district;
- The performance management system used by the school district;
- Whether the school district was an approved charter school system or not;
- The performance goal management system used by schools in the school district.

The self-reported demographic information served multiple purposes. First, it allowed the researcher to study exploratory variables in regard to the superintendents as well as the school district, while also providing respondents with an opportunity to answer some basic questions before addressing more technical content pertaining to alignment to Georgia's CCRPI.

Section two of the survey addressed school districts' system-wide goal management processes. Within these items, superintendents were asked whether or not they used balanced scorecards to manage school district goals. For superintendents who indicated they did not use a balanced scorecard, an additional question asked what school district goal management system the school district used and allowed for an open-ended response. Similarly, superintendents were also asked whether or not schools in their

district used a balanced scorecard. If a balanced scorecard was not used, respondents were asked what goal management system was used by their schools (See Appendix B for more information).

### Independent Variables of Interest

To test for differences, independent variables from the superintendent and school district data were placed into categories. In research question #2, the independent variable of interest was whether or not the school district used a balanced scorecard. Prior to the survey administration, there was no preexisting information about this variable. In research question #3, the independent variable of interest was whether or not the school district had obtained charter system status or not. Since charter system status was not static at this time, the researcher had no clear-cut prior knowledge about this variable. In research question #4, the independent variable of interest was superintendent years' of experience. For this variable, the researcher generated categories based on feedback from the focus group with the goal of comparing means for different levels of experience. Table 3.2 displays levels of experience in years for the superintendent data used in the study:

Table 3.2

*Participating Superintendents' Years of Experience*

<u>Years of Experience</u>	<u>Frequency</u>	<u>Percent</u>
Less than 2 Years	22	31%
2-3 Years	15	21%
4-5 Years	11	15%
6-7 Years	6	8%
More than 7 Years	18	25%

Table 3.2 continued

<u>Years of Experience</u>	<u>Frequency</u>	<u>Percent</u>
Total	72	100%

*Notes.* Percentages were calculated from the total of 72 participating superintendents with usable data in the study.

For research question #5, the researcher generated district student enrollment categories based on feedback from the focus group with the goal of comparing means for different sized school districts in the state. For this variable, the researcher generated categories prior to the study based on Georgia’s enrollment distributions. Generating categories prior to the survey met two goals corroborated by the focus group. The first goal was to provide participating superintendents with prescribed categories, so that they would not have to complete the additional work of locating exact enrollment figures. The second goal was to create equal categories to compare group means for different levels of experience. Table 3.3 displays student enrollment levels of school districts that participated in the study as compared to other school districts in Georgia:

Table 3.3

*Student Enrollment Levels for Participating School Districts*

<u>District Student Enrollment Levels</u>	<u>Participant Frequency</u>	<u>Number of Districts in Georgia</u>	<u>Percent out of Georgia School Districts</u>
0 to 1,499	12	34	35%
1,500 to 2,999	13	40	33%
3,000 to 4,999	15	42	36%
5,000 to 14,999	21	41	51%
15,000 or More	11	23	48%
Total	72	180	40%

*Notes.* Percentages were calculated using the 72 participating school districts’ data in the numerator and the number of Georgia school districts as the denominator.

## Survey Directions and Item Samples

Following the items addressing self-reported demographics and system-wide goal management processes, Georgia school superintendents were asked 16 Likert items addressing their perceived alignment to the CCRPI using a 7-point scale. Individual survey items asked the superintendent to indicate the degree to which their school district performance goals were aligned to 4 subcategories in the CCRPI (achievement, career readiness, progress, and achievement gap). Table 3.4 includes an example of directions and some sample Likert items pertaining to school district alignment to the four CCRPI subcategories:

Table 3.4

*Sample CCRPI Survey Items and Directions*

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**Self-Reported Alignment to CCRPI**

**DIRECTIONS:** The following items pertain to school district performance goals and their alignment with accountability categories found in the most current College and Career Ready Performance Index (CCRPI). Please read each statement and select the number that indicates the degree to which your school district aligns to each statement.

1. Our district has performance goals aligned to “student achievement” measures in the CCRPI.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

2. Our district has performance goals aligned to “career readiness” measures in the CCRPI.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

3. Our district has performance goals aligned to measures of “student progress” in the CCRPI.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

Table 3.4 continued

4. Our district has performance goals aligned to “achievement gap” measures in the CCRPI.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

---

*Note.* See Appendix B for a complete list of survey items.

To address internal consistency, the original survey (used in the pilot test) contained 5 items within each of the 4 CCRPI subcategories for a total of 20 Likert scale items. After receiving feedback from the focus group, the survey was narrowed to 4 items per subcategory resulting in 16 total Likert scale items administered in the actual survey of Georgia school superintendents. The focus group communicated a rationale that 16 items would be more manageable for the target sample, Georgia school superintendents. Furthermore, the focus group also communicated the rationale that fewer items would safeguard against the participant developing fatigue while responding. Table 3.5 provides a summary of the changes made to the survey based on feedback from the focus group:

Table 3.5

*Survey Adjustments Based on Focus Group Feedback*

<u>Content</u>	<u>Format</u>	<u>Wording</u>
1 scaled survey item per subcategory was removed for a total of 4 fewer items	4 items were listed per page in the 7-point Likert alignment section	Performance goals replaced the term indicators

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*Note:* See Appendix B for a complete list of survey items and directions.

Survey Content

Providing a justification for what information is included in a survey is recommended in the research (Creswell, 2002). For this study, the survey’s content was gleaned from the following sources:

1. A review of literature pertaining to balanced scorecards, organizational alignment, and strategic management;
2. A review of research pertaining to school districts and school accountability; and
3. An examination of Georgia's current school accountability system: the CCRPI.

Additional demographic information was also collected in the data set. The demographic data were collected and divided into categories: superintendents' years of experience, district student enrollment, and whether or not the school district was an approved charter system.

The categorical variables were divided by name and examined as exploratory variables for possible consideration in future research. These demographic data points were also validated by the focus group as variables of interest when studying school districts, in general. From the practitioner perspective, each focus group participant communicated that self-reported demographic variables were relevant to his/her own research and to the research of their colleagues when examining school district leadership processes.

#### Validity and Use of a Focus Group

To address content validity prior to the administration of the survey, a review team of practitioners was gathered as a focus group to examine the survey and provide feedback. Consistent with recommendations from Haynes, Richard, and Kubany (1995), a group of representatives familiar with the content (accountability, balanced scorecards, and school district performance management) was asked to review the survey and to review the research goals of the study in order to provide feedback to the researcher. Three school district-level administrators from two different-sized school districts volunteered after being asked to participate in the focus group.



Each of the participants had more than five years' experience as a district-level administrator and each participant also had practical experience with respect to the research variables in the study. In an attempt to be consistent with research addressing content validity, the goal of the focus group was to generate feedback on both the content of individual survey items and to gather information on the overall format of the survey (Fraenkel et al., 2012). An additional goal of the focus group was to obtain feedback about the target sample of the survey: Georgia school superintendents.

To provide clarity to review team members, Hinkin (1998) recommended that the researcher provide members of the content validity team with clear definitions related to what is being measured within each category addressed. For this focus group, definitions were provided to the review team by the researcher as needed. In addition, feedback on each survey item was collected with respect to its relevance to the research purpose. During this process, each member of the focus group was given time to individually view the survey in its entirety and to make notes prior to discussing with the other members in the group.

After receiving feedback from the review team members, the researcher made slight modifications to the survey's wording and to the number of items included in the self-reported CCRPI alignment section. An additional goal of the researcher was to honor the time of survey participants (Georgia school superintendents), while still maintaining an appropriate number of items for internal consistency purposes. Feedback on this goal was provided by the review team and, as a result, four survey items were removed (see Table 3.2 for more information pertaining to focus group feedback).

## Use of a Pilot Study for Reliability and Validity

The first goal of the pilot study was to receive feedback on the survey format and readability. The pilot group consisted of 15 doctoral students from the University of Georgia enrolled in EDAP 8000 for the summer of 2014. Each of the participating doctoral students was a current educational practitioner in the state of Georgia. Table 3.6 summarizes feedback obtained from the pilot study with respect to survey content, format, and readability:

Table 3.6

<i>Feedback from Pilot Study</i>			
<u>Content</u>	<u>Format</u>	<u>Word Choice</u>	<u>Other</u>
The content was relevant to the research goals. “Achievement” and Post High School Readiness” should be separated into different alignment categories.	The questions should be grouped or chunked into 4 questions per page.	Certain word choices were questioned with respect to the CCRPI alignment questions.	The length of the survey was considered to be manageable for respondents given the questions were regrouped.

The second goal of the pilot study was to test for internal consistency methods of reliability. Cronbach’s alpha was calculated to test for internal consistency of the instrument by examining the inter-correlations of responses on items measuring the same construct (Cronbach, 1951). The pilot group of 15 doctoral students was administered the complete survey, and responses from each participant were collected by the researcher for analysis. Since the CCRPI alignment items in the survey used a scale, Cronbach’s alpha was calculated to test for internal consistency (Creswell, 2002). Internal consistency calculations were made for each of the CCRPI subcategories as well as overall CCRPI alignment.

Cronbach’s alpha was calculated two times as a reliability statistic—once with the pilot group and again during the actual study of Georgia school superintendents. The Statistical Package for the Social Sciences (SPSS) version 22 was used to calculate the Cronbach coefficient alpha. Cronbach’s alpha for the pilot study was ( $\alpha = 0.742$ ), while Cronbach’s alpha for the actual study was ( $\alpha = 0.952$ ). For the subcategories, SPSS was used to calculate Cronbach’s alpha in each instance. Table 3.7 displays Cronbach’s alpha for the pilot study.

Table 3.7

*Cronbach’s Alpha for the Pilot Study*

<u>CCRPI Achievement</u>	<u>CCRPI Progress</u>	<u>CCRPI Achievement Gap</u>	<u>CCRPI ALL</u>
0.908	0.969	0.927	0.742

*Note.* Data were calculated from 15 participants in the pilot study.

Though it is debatable, an alpha of 0.70 is generally considered by researchers to achieve an appropriate degree of internal consistency in social science research (Charter, 2003). For each of the statistics calculated from the pilot study, Cronbach’s alpha exceeded the threshold of 0.70. In the subcategories of achievement, progress, and achievement gap, Cronbach’s alpha exceeded 0.90 in each case.

#### Data Collection Processes

Permission to survey Georgia’s school superintendents for the study was requested of the Internal Revenue Board (IRB) of the University of Georgia in October 2014. After obtaining approval from the IRB, a process was followed for distributing the survey. The process consisted of emailing survey links, and the researcher followed recommendations adapted from the four phases outlined by Salant and Dillman (1994). The two goals of the process centered on providing respect to participants, while also

attempting to maximize the response rate (Salant & Dillman, 1994). To increase efficiency of administration, the IRB approval also included permission to use an online survey provider, Survey Monkey®. Each survey question as well as accompanying directions were loaded into the Survey Monkey® platform, and within this platform, a link was generated leading participants to each item in the survey. Following the survey administration, results were exported to Excel spreadsheets and loaded into SPSS for further data analysis.

### Data Reporting

Confidentiality was a goal of the researcher due to the nature of the survey's content. Therefore, prior to analyzing the data, all school district names were de-identified in the data set. As communicated to the superintendents in the consent letter, participation in the survey was confidential. Because a majority of the survey items addressed accountability measures from Georgia's CCRPI, the researcher aimed to implement confidentiality measures to prompt candid answers from each respondent on perceived accountability alignment.

### Data Analysis and Interpretation

First, descriptive statistics were calculated from the survey data. The descriptive statistics included the mean and standard deviation for each of the survey items based on data obtained from superintendent perceptions on the 7-point Likert scales for each survey item. In addition, frequency data were also calculated including summaries of superintendents' self-reported demographics (i.e., number of years serving as superintendent in the current school district and number of years serving as a superintendent). In addition, frequency data were collected and reported across each of

the categories pertaining to superintendents' self-reported system-wide goal management processes. These responses were subdivided into categories based on whether the balanced scorecard format was being implemented or if another goal management system used by the district. Other categorical data were subdivided into intervals based on the data set. These data included superintendents' self-reporting on what management systems were used by schools in their district.

To determine the degree to which the sample of respondents ( $N = 72$ ) was representative of the state of Georgia, statistics were provided showing comparisons of participating superintendent to non-participating superintendents. These statistics included student enrollment sizes, student subgroup enrollment comparisons, economic status, revenue per pupil, and average CCRPI scores. These data included percentages juxtaposed in tables to show comparisons and levels of representation. Similarly, geographical representation was also examined. A map of Georgia was subdivided into five regions and superintendent participation percentages were calculated out of the total number of districts in the given region of the state.

To examine research question 1, a one-way within subjects ANOVA was used to determine if mean differences in perceived alignment existed between the 4 subcategories in the CCRPI: achievement, post high school readiness, progress, and achievement gap. Additional inferential statistics were used to examine whether results were statistically significant. All hypothesis tests were calculated using SPSS (version 22) software. In addition to the mean and standard deviations for items and categories, standard error was also calculated as well as degrees of freedom and statistical significance. Mean differences were examined irrespective of directionality, because the researcher was not

concerned with higher or lower differences in perceived alignment levels — just mean differences, in general.

Inferential statistics were also used to examine categorical data based on reported superintendent and school district characteristics:

- superintendents using balanced scorecards and superintendents using other school district performance management systems,
- different experience levels of superintendents,
- school district governance structure (charter system and non-charter system status), and
- district student enrollment level

SPSS was used to determine whether or not significant differences existed between the independent variables from research questions 2, 3, 4, and 5 using an analysis of variance (ANOVA) and statistics to examine significance (p-values). Following these calculations, it was determined whether to accept or reject each null hypothesis. In the event that results were significant, additional tables and figures were used to visually display the data. In the event that results were not significant, an explanation of why results were insignificant was provided by the researcher.

### Hypotheses

Hypotheses addressing each research question were phrased in the null.

1. There are no significant differences in superintendents' overall perceived alignment to the following subcategories in the CCRPI: student achievement, post high school readiness, progress, and achievement gap.
2. There is no significant difference in perceived alignment to the CCRPI between superintendents in school districts using balanced scorecards and superintendents in school districts using other school district performance management systems.

3. There is no significant difference in perceived CCRPI alignment between superintendents who reported charter system status and superintendents who reported non-charter system status.
4. There are no significant differences in perceived alignment to the CCRPI between superintendents with different levels of experience.
5. There are no significant differences in perceived alignment to the CCRPI between superintendents with different levels of school district student enrollment.

### Chapter Summary

A quantitative survey approach was used to study Georgia school superintendents' perceptions of balanced scorecard alignment in the context of Georgia's accountability system: the CCRPI. The 7-point Likert survey items were pilot tested for content validity, revised, and emailed to 176 superintendents in the state. After surveys were collected, both categorical data and an ANOVA were calculated to address the 5 research questions framing the study. In total, 72 superintendent responses were completed and deemed usable in the data collection for a return rate of 40%.

Using descriptive statistics, data were calculated including the mean, standard deviation, and frequency. Calculations were categorized into the respective domains of study (superintendents in districts using balanced scorecards and superintendents using other school district performance management systems). Descriptive statistics were also calculated for the complete sample of superintendents surveyed. Trends in these data were synthesized and grouped for reporting purposes and to show the degree to which the sample was representative of all superintendents in Georgia. Comparisons of means,

standard deviations, and statistical significance calculations were also computed to test each null hypothesis.

Through the use of inferential statistics, a one-way ANOVA was used to make comparisons and determine statistical significance. Following the data analysis, hypotheses were tested. The information generated from the survey results, descriptive statistics, and inferential statistics were collected to assist the researcher in making inferences and examining trends in the use of balanced scorecards by school districts and perceptions of superintendents in the context of Georgia's accountability system: the CCRPI. Other factors were examined such as superintendents' perceived alignment to subcategories within the CCRPI and whether the exploratory variables such as responses from superintendents in school districts with different demographic characteristics showed any significant difference with respect to perceived alignment levels to the CCRPI.



## CHAPTER 4

### RESEARCH FINDINGS

#### Introduction

The purpose of this study was to examine perceptions of Georgia school superintendents pertaining to the alignment of school district performance goals to the state's accountability index: the College and Career Ready Performance Index (CCRPI). Perceptual data were obtained about the extent to which district balanced scorecards or other school district performance management systems were aligned to specific subcategories within Georgia's CCRPI (achievement, post high school readiness, progress, and achievement gap). Alignment levels were then examined in conjunction with superintendents' self-reporting on certain school district and superintendent characteristics. The self-reported categorical data included the superintendent's number of years of experience, the school district's student enrollment, the performance management system that was used in the district, and whether or not the superintendent reported his or her district to be an approved charter school system. The CCRPI alignment variables were examined using a 7-point Likert scale, while demographic and categorical variables were reported and mean perceived alignment levels compared.

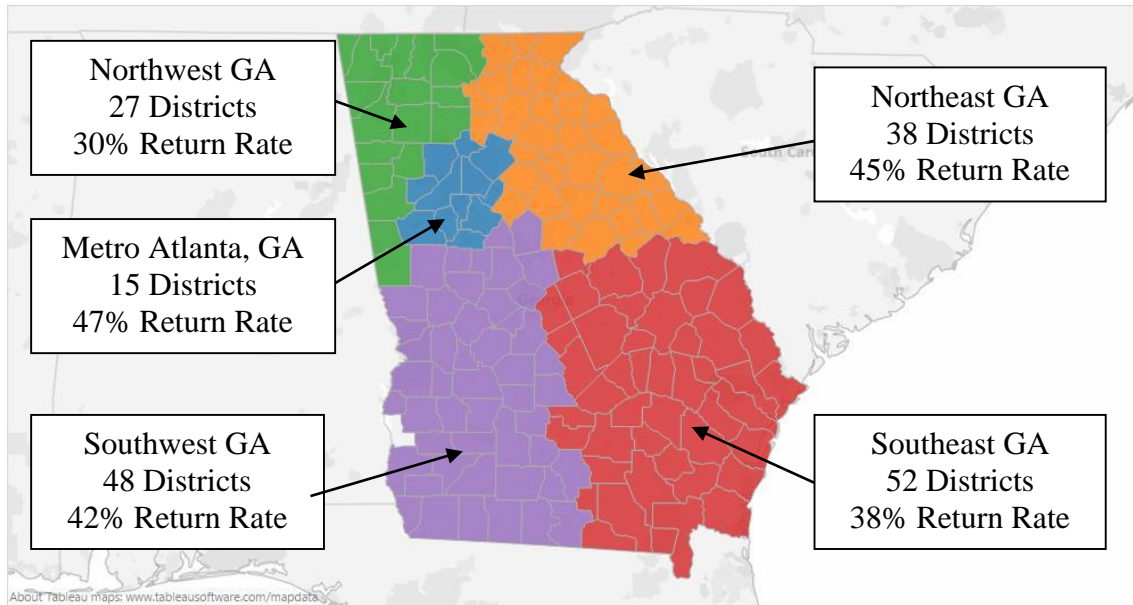
## Research Questions

The study was organized around five research questions:

1. Are there differences in superintendents' overall perceived alignment to the following subcategories in the CCRPI: student achievement, post high school readiness, progress, and achievement gap?
2. Is there a difference in perceived alignment to the CCRPI between superintendents in school districts using balanced scorecards and superintendents in school districts using other school district performance management systems?
3. Is there a difference in perceived CCRPI alignment between superintendents who reported charter system status and superintendents who reported non-charter system status?
4. Are there differences in perceived alignment to the CCRPI between superintendents with different experience levels?
5. Are there differences in perceived alignment to the CCRPI between superintendents with different levels of student enrollment?

## Sample and Representation

Of the superintendents surveyed, 72 provided usable data for a total return rate of 40% of the target population of 180 Georgia school superintendents at the time of the study. To examine the degree to which the respondents' school districts were representative of the state of Georgia, several demographic variables were included in the reporting of data. In Figure 4.1, a map of Georgia displays five different regions and shows the percentages of school districts in each region participating in the study:



*Figure 4.1. Geographical Representation of the Sample of Georgia Superintendents*

Participating superintendents from five different regions in the state represented between 30% and 47% of the total number of Georgia school superintendents in each respective region. Additionally, superintendents participating in the sample, using 2013-2014 Full Time Equivalency (FTE) numbers, served 745,814 students in the state of Georgia, while those who did not participate in the study served 896,067 students. Thus, sampled superintendents served approximately 45% of all Georgia public school students.

Other demographic data were calculated for Georgia school districts in the study, and side-by-side comparisons were made with non-participating school districts. Table 4.1 shows the participant versus non-participant breakdowns across multiple school district demographic variables including average student enrollment sizes, subgroup enrollment percentages, average revenue per pupil, and 2014 average aggregate CCRPI scores for the districts in each group:

Table 4.1

*Participating and Non-Participating School District Comparisons*

<u>School District Characteristic</u>	<u>Participants</u>	<u>Non-Participants</u>
<i>N</i>	72	108
Average System Size	10,967.9	8,072.7
Median System Size	3,920.00	3,110.00
Average % Students Non-White	48.48%	45.6%
Median % Students Non-White	46.04%	45.0%
Average % Students Economically Disadvantaged	64.6%	64.9%
Median % Students Economically Disadvantaged	67.6%	66.9%
Average Per FTE Revenue	8,630.91	8,864.70
Median Per FTE Revenue	8,486.17	8,557.77
Median Household Income of Community Served	39,234.00	35,681.00
Average 2014 CCRPI Total Score	71.9	72.4

Self-Reported Demographics

Self-reported demographic data were collected on each participating Georgia school superintendent. The following self-reported demographic categories were obtained from the survey:

- number of years of total experience as a school superintendent,
- number of students enrolled in the superintendent’s respective school district, and
- whether or not the superintendent’s school district was an approved charter school system.

Of the sample of 72 superintendents, descriptive statistics were calculated for each of the school districts represented in the sample. The demographic data were used to outline each of the research questions in the study and to provide aggregate data pertaining to the sample of interest. Table 4.2 provides a summary of the self-reported demographic data collected from Georgia school superintendents who participated in the survey:

Table 4.2

*Self-Reported Demographic Data from Participating Superintendents*

<u>Title</u>	<u>Category</u>	<u>Number</u>	<u>Percent of Participants</u>
Total Years of Experience as a School Superintendent			
	Less than 2 years	22	31%
	2-3 years	15	21%
	4-5 years	11	15%
	6-7 years	6	8%
	More than 7 years	18	25%
Number of Students Enrolled in School District			
	0 to 1,499	12	17%
	1,500 to 2,999	13	18%
	3,000 to 4,999	15	21%
	5,000 to 14,999	21	29%
	15,000 or more	11	15%
Approved Charter System Status			
	Yes	10	14%
	No	62	86%

*Note.* See Appendix B for a complete list of survey items.

#### Self-Reported System-Wide Goal Measurement Processes

Other descriptive statistics analyzed from the survey included self-reported system-wide goal measurement processes. Survey items in this section addressed whether or not Georgia school superintendents reported use of a balanced scorecard. Superintendents that indicated use of a performance management system other than a

balanced scorecard were asked to indicate what other format was used. In addition, items that pertained to goal management addressed whether or not schools in the school district used balanced scorecards. Similar to the district goal management items, superintendents whose schools did not use balanced scorecards were asked to indicate what other management system their schools used. Table 4.3 displays data pertaining to self-reported system-wide goal management processes:

Table 4.3

*Self-Reported System-Wide Goal Measurement Processes*

<u>Title</u>	<u>Response</u>	<u>Number</u>	<u>Percent</u>
Use of a Balanced Scorecard to Manage School District Goals	Yes	46	64%
	No	26	36%
Use of a Balanced Scorecard by Schools to Manage Goals	Yes	41	57%
	No	31	43%

*Note.* See Appendix B for a complete list of survey items.

Of 72 Georgia school superintendents who responded to the survey, 46 (64%) reported that their school district used a balanced scorecard to measure goals. Twenty-six (36%) of the Georgia school superintendents reported that their school district used some other performance management system—not a balanced scorecard. Forty-one (57%) of the superintendents reported that schools in their district used a balanced scorecard to manage school goals. Thirty-one (43%) of the superintendents reported that their schools used some other performance management system—not a balanced scorecard.

The number of respondents who reported that both their school district and schools used a balanced scorecard was also a topic of interest in the study. Table 4.4

displays school district and school breakdowns as to whether or not balanced scorecards were used to manage performance goals:

Table 4.4

*Balanced Scorecard Use in School Districts and Schools*

Title	School Districts	School Use in School Districts Using Balanced Scorecards	Percent
Balanced Scorecard Use	46	41	89%

*Note.* See Appendix B for a complete list of survey items.

Of the 46 school districts using balanced scorecards, 41 (89%) reported that their schools also used balanced scorecards to manage performance goals. Inversely, 5 out of 46 (11%) of the school districts that used a balanced scorecard did not have schools in their district that used balanced scorecards.

When Georgia school superintendents reported use of a performance management system other than a balanced scorecard, they were asked to indicate the name of the performance management system their school district used. Table 4.5 lists categories for each of the management systems reported by superintendents from school districts that did not use a balanced scorecard:

Table 4.5

*Other School District Performance Management Systems*

<u>Category</u>	<u>Number</u>	<u>Percent</u>
Analysis of Data	3	12%
CCRPI	1	4%
Locally Named Plan	4	15%
Monthly Reports to Board	1	4%
New System in Development	2	8%

Table 4.5 continued

<u>Category</u>	<u>Number</u>	<u>Percent</u>
No Response	3	12%
System Strategic Plan	12	46%

*Notes.* Percentages were calculated from the total of 26 superintendents using other school district performance management systems. See Appendix B for a complete list of survey items.

Twenty-six Georgia school superintendents reported that their school district did not use a balanced scorecard to manage performance goals. Of the 26 respondents, 3 (12%) of the superintendents indicated use of an analysis of data as their performance management system. One (4%) of the respondents reported direct use of the CCRPI to manage goals. Four (15%) superintendents reported use of a locally named management system. One (4%) reported use of a monthly report to the school board. At the time of the survey, two superintendents (8%) indicated that a new goal management system was in development, but had not been finalized. Three (12%) superintendents did not respond to the question. Of the superintendents who did not use a balanced scorecard, 12 (46%) indicated that their school district used a system strategic plan to manage performance goals.

With respect to the school's performance goal management, 31 (43%) Georgia school superintendents reported the use of a management system other than a balanced scorecard. In these instances, superintendents were asked to indicate the name of the other performance management system used by schools in their district. Table 4.6 lists names of the other performance management systems used by schools as well as the frequency and percent in which each type was reported by superintendents whose schools did not use a balanced scorecard to manage goals:



Table 4.6

*Other School Performance Management Systems*

<u>Category</u>	<u>Frequency</u>	<u>Percent</u>
Analysis of Data	3	10%
CCRPI	2	6%
Continuous Innovation Plan	1	3%
Locally Named Plan	4	13%
New Plans in Progress	2	6%
No Plan in Place	1	3%
Periodic Principal Meetings	1	3%
School Improvement Plan	15	48%
Stop Light Method	1	3%
System Improvement Plan	1	3%

*Notes.* Percentages were calculated from the total of 31 superintendents who indicated that schools in their district used other performance management systems (not balanced scorecards). See Appendix B for a complete list of survey items.

Thirty-one superintendents indicated that schools in their district used performance management systems other than a balanced scorecard. Three (10%) superintendents used an analysis of data. Two (6%) of the superintendents directly used the CCRPI. One (3%) used a continuous innovation plan. Four (13%) used a locally named plan. Two (6%) had new processes that were being developed at the time of the survey. One (3%) indicated that no plans were in place. One (3%) superintendent did not respond. One (3%) indicated that periodic principal meetings were used to manage school goals. Fifteen (48%) indicated that school improvement plans were used by schools in

their district. One (3%) indicated that a Stop Light Method was used by schools, and one (3%) superintendent reported that schools in the district directly managed school performance goals using the school system’s improvement plan.

#### Descriptive Statistics and CCRPI Alignment

Descriptive statistics were calculated using the sample of 72 respondents to examine the degree to which Georgia school superintendents reported overall goal alignment to the CCRPI. In the analysis, means and standard deviations were calculated to examine total CCRPI alignment (an aggregate of all alignment subcategories). Table 4.7 shows overall statistics for superintendents’ self-reported goal alignment to the CCRPI:

Table 4.7

<i>Self-Reported Total Alignment to the CCRPI</i>				
Superintendent Responses	Number of Survey Items	Mean	Percent of Maximum Possible Points	Standard Deviation
<i>N</i> =72	16	92.51	83%	17.57

*Note.* A 7-point Likert scale was used on each of the 16 survey items for a maximum total alignment score of 112.

From the 16 survey items pertaining to Georgia school superintendents’ perceived alignment to the CCRPI, a mean of 92.51 translated into 83% of the 112 maximum CCRPI alignment points in the survey. Per survey item, the aggregate mean of 92.51 was decomposed into a mean item response of 5.8 out of a maximum of 7 possible points per CCRPI alignment survey item. Based on the average response of 5.8 out of a scale of 7 possible alignment points, superintendents indicated that district performance goals (in aggregate) were aligned to the CCRPI.

Figure 4.2 displays the frequency of responses for each of the possible selections on the 7-point Likert scale:

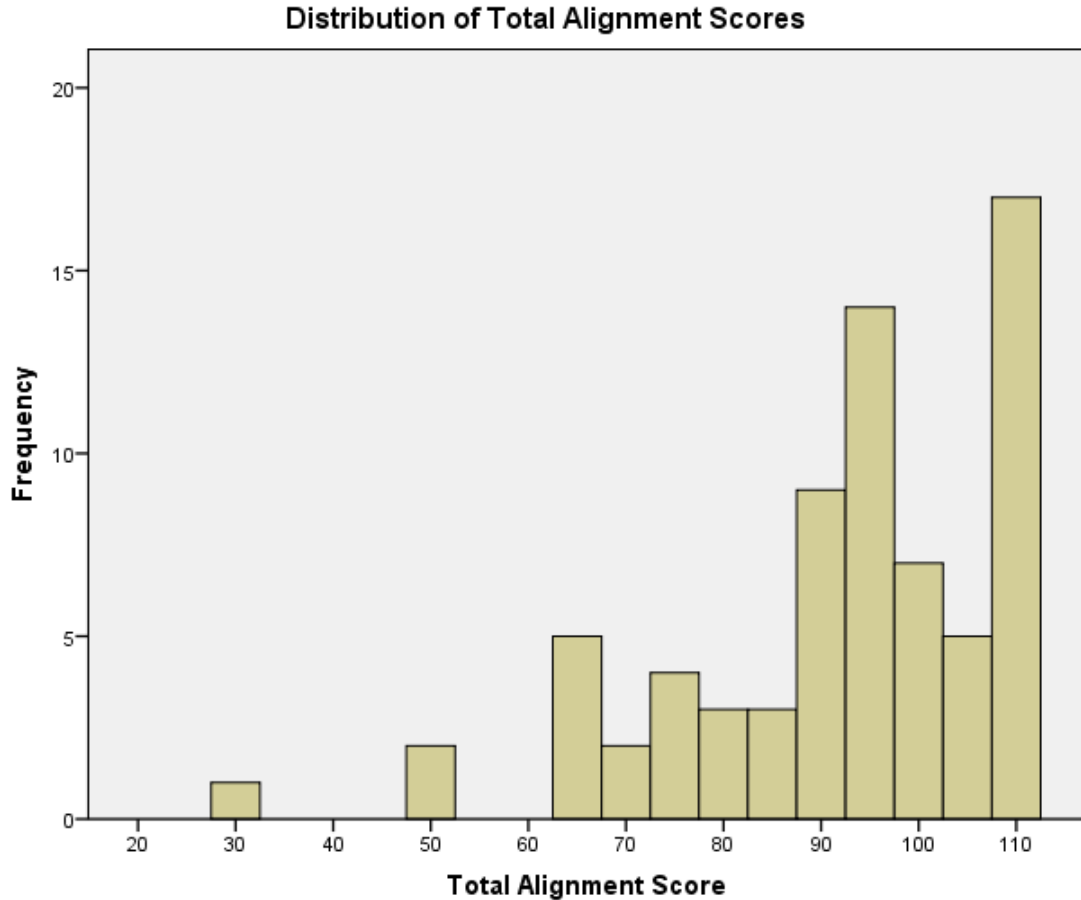


Figure 4.2. Distribution of CCRPI Alignment Frequencies

The total alignment distribution across all superintendents further displays that reported CCRPI alignment levels were skewed to the left. Thus, in general, superintendents reported that their school district goals were aligned to the CCRPI.

Overall CCRPI alignment was also calculated for each self-reported demographic variable of interest in the study. Table 4.8 displays descriptive statistics for total alignment across each of the categorical variables of interest:

Table 4.8

*Self-Reported Total Alignment to CCRPI by Demographics*

Group	N	Alignment Mean	Alignment SD	Alignment Min	Alignment Max
Participating Superintendents	72	92.51	17.57	30	112
<u>District Governance Status</u>					
Non-Charter	62	98.40	9.62	84	112
Charter	10	91.56	18.43	30	112
<u>Performance Management System</u>					
Balanced Scorecard	46	93.52	17.18	30	112
Non-Balanced Scorecard	26	90.73	18.44	48	112
<u>Superintendent Experience Levels</u>					
Less than 2 Years	22	90.68	19.11	30	112
2 to 3 Years	15	88.07	17.80	64	112
4 to 5 Years	11	92.00	18.38	51	112
6 to 7 Years	6	97.83	14.15	78	112
Greater than 7 Years	18	97.00	16.29	48	112
<u>District Student Enrollment</u>					
0 to 1,499	12	94.42	14.76	64	112
1,500 to 2,999	13	88.50	17.84	51	110
3,000 to 4,999	15	94.87	14.74	65	112
5,000 to 14,999	21	89.00	22.82	30	112
15,000 or more	11	97.27	12.63	76	112

## Findings for Research Question 1

With respect to Georgia school superintendents' perceived alignment to each of the four subcategories within the CCRPI (achievement, post high school readiness,

progress, and achievement gap), a one-way within subjects ANOVA was conducted to determine if significant differences were apparent between the CCRPI subcategories. Mauchly's Test of Sphericity was non-significant (5,  $X=8.798$ ,  $p=.117$ ), suggesting that the assumption of sphericity was supported. Table 4.9 displays each of the subcategories with their means and standard deviations:

Table 4.9

*Self-Reported Alignment to CCRPI Subcategories*

Superintendent Responses	Subcategory	Mean	Percent of Maximum Alignment Points	Standard Deviation
$N=72$	Achievement	24.57	88%	4.114
$N=72$	Post High School Readiness	22.78	81%	4.727
$N=72$	Progress	22.47	80%	5.402
$N=72$	Achievement Gap	22.69	81%	5.308

*Notes.* The survey used a 7-point Likert scale for a total of 28 points per subcategory.

Table 4.9 suggests a greater mean for Georgia school superintendents' perceived alignment to the subcategory of achievement relative to the three other subcategories: post high school readiness, progress, and achievement gap. Since four items were used per CCRPI subcategory, Cronbach's alpha was calculated ( $\alpha = 0.952$ ) to test for the internal consistency of survey items. Table 4.10 further details the test of within subjects effects for CCRPI alignment:

Table 4.10

*Test of Within Subjects Effects for CCRPI Alignment Scores*

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Alignment Sphericity Assumed	202.927	3	67.642	10.300	.000*

Table 4.10 continued

	Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
	Greenhouse-Geisser	202.927	2.979	72.550	10.300	.000*
	Huynh-Feldt	202.927	2.923	69.413	10.300	.000*
	Lower-Bound	202.927	1.000	202.927	10.300	.002*
Error (Alignment)	Sphericity Assumed	1398.823	213	6.567		
	Greenhouse-Geisser	1398.823	198.593	7.044		
	Huynh-Feldt	1398.823	207.567	6.739		
	Lower-Bound	1398.823	71.000	19.702		

Note. \*Significant at the .05 level

The within subjects ANOVA results suggest a significant effect between alignment dimensions of the scale (3,  $F=11.937$ ,  $p<.000$ ). Simple main effects were calculated using a Bonferonni correction. Table 4.11 outlines pairwise comparisons between each subcategory.

Table 4.11

*Pairwise Comparisons of CCRPI Alignment to Subcategories*

Alignment	Alignment	Mean Difference	Std. Error	Sig.	95% Confidence Interval for Difference	
					Lower Bound	Upper Bound
Achievement	Readiness	1.792*	.364	.000	1.066	2.518
	Gap	2.097*	.478	.000	1.145	3.050
	Progress	1.875*	.451	.000	.977	2.773
Readiness	Achievement	-1.792*	.364	.000	-2.518	-1.066
	Gap	.306	.396	.443	-.485	1.096
	Progress	.083	.417	.842	-.748	.915
Gap	Achievement	-2.097*	.478	.000	-3.050	-1.145
	Readiness	-.306	.396	.443	-1.096	.485
	Progress	-.222	.447	.620	-1.113	.669
Progress	Achievement	-1.875*	.451	.000	-2.773	-.977
	Gap	-.083	.417	.842	-.915	.748
	Readiness	.222	.447	.620	-.669	1.113

Note. \*The mean difference is significant at the .05 level

Pairwise comparisons indicated that CCRPI alignment scores within the sample were higher in the area of achievement than in the other three subcategories: post high school readiness, progress, and achievement gap. No significant alignment differences were observed between the group means of post high school readiness, progress, and achievement gap.

The results displayed in Tables 4.9, 4.10, and 4.11 suggest that the sample of Georgia school superintendents have a greater mean perceived alignment to achievement than any of the other three subcategories in the CCPRI. Based on these results, the null hypothesis for research question one stating that there were no differences in perceived alignment between the four subcategories would be rejected due to the greater degree of perceived alignment to achievement. Figure 4.3 illustrates the mean difference between achievement and the other three subcategories addressed in the survey:

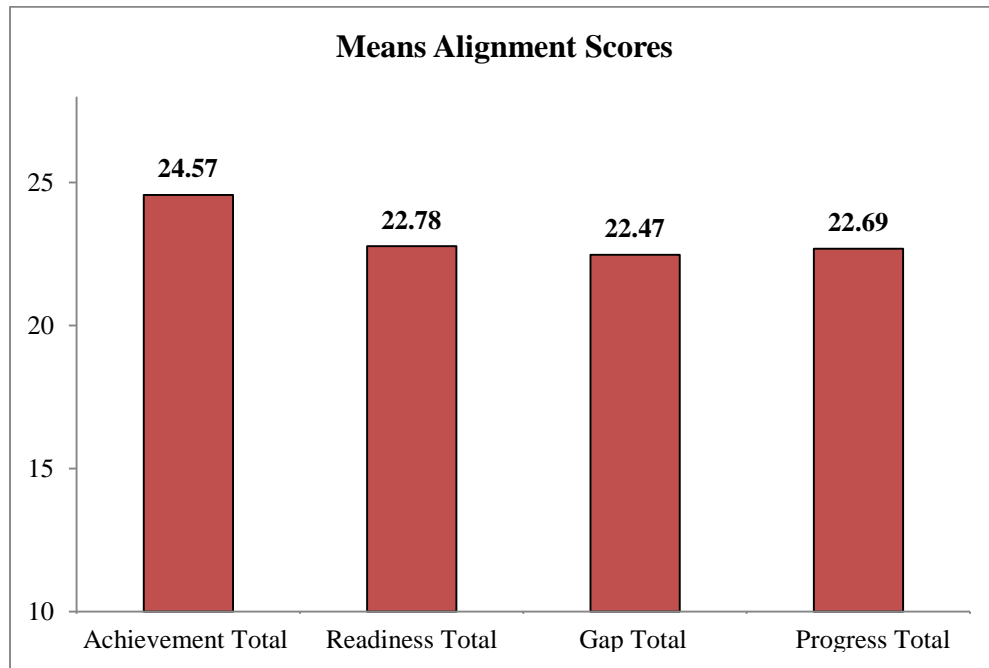


Figure 4.3. Mean Differences in Alignment to CCRPI Subcategories

In each CCRPI subcategory, individual items were measured using a 7-point Likert scale for a total of 28 points.

#### Findings for Research Questions 2 Through 5

For research questions 2 through 5, a factorial ANOVA was conducted using total alignment score as the dependent variable. The independent variables of balanced scorecard use, system charter status, district student enrollment level, and superintendent experience level were used as fixed factors in the model. Levene’s test of equality of error variances was significant (48,33,  $F=2.842$ ,  $p=.001$ ) suggesting a possible violation of the assumption of homogeneity of variance. Therefore, the results should be interpreted with caution. Table 4.12 includes the Omnibus tests of between subject effects:

Table 4.12

<i>Omnibus Tests of Between-Subject Effects</i>					
Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	10886.486	46	236.663	.537	.967
Intercept	264347.059	1	264347.059	599.726	.000
Superintendent Experience Level	916.531	4	229.133	.520	.722
District Student Enrollment	1141.878	5	228.376	.518	.760
Balanced Scorecard Use	32.019	1	32.019	.073	.790
Charter System	5.706	1	5.706	.013	.910
Experience * Enrollment	3550.253	14	253.590	.575	.859
Experience * Balanced Scorecard	261.256	4	65.314	.148	.962
Experience * Charter	76.800	1	76.800	.174	.680
Enrollment * Balanced Scorecard	1964.240	4	491.060	1.114	.372
Enrollment * Charter	128.643	2	64.321	.146	.865



Table 4.12 continued

Source	Sum of Squares	df	Mean Square	F	Sig.
Experience * Enrollment * Balanced Scorecard	1595.470	5	319.094	.724	.612
Error	11019.500	25	440.780		
Total	638141.000	72			
Corrected Total	21905.986	71			

At no level within the ANOVA was a significant difference found between groups. For each of the fixed factors, there were no main effects observed. Thus, means were generally equivalent on the survey across experience levels, system governance status, district enrollment sizes, and balanced scorecard use. Therefore, the hypotheses pertaining to research questions 2-5 could not be rejected. In addition, interactions were tested between groups, and no significant differences were found. Furthermore, certain levels of interaction could not be calculated, such as charter status by balanced scorecard, due to the small numbers of respondents in the charter system status category being subdivided too finely by other categories.

Figure 4.4 displays data showing the total perceived CCRPI alignment levels of superintendents in school districts that use balanced scorecards and superintendents in school districts that do not use balanced scorecards as indicated in research question #3:

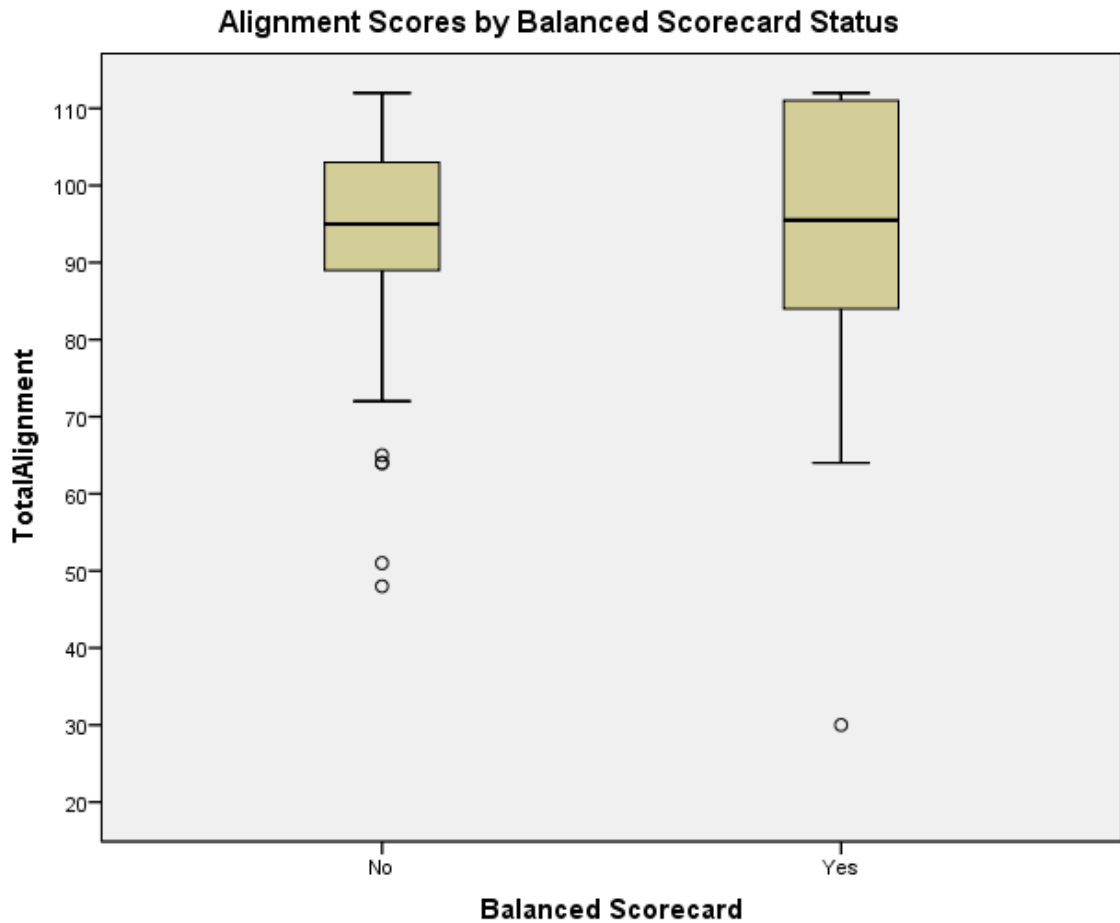
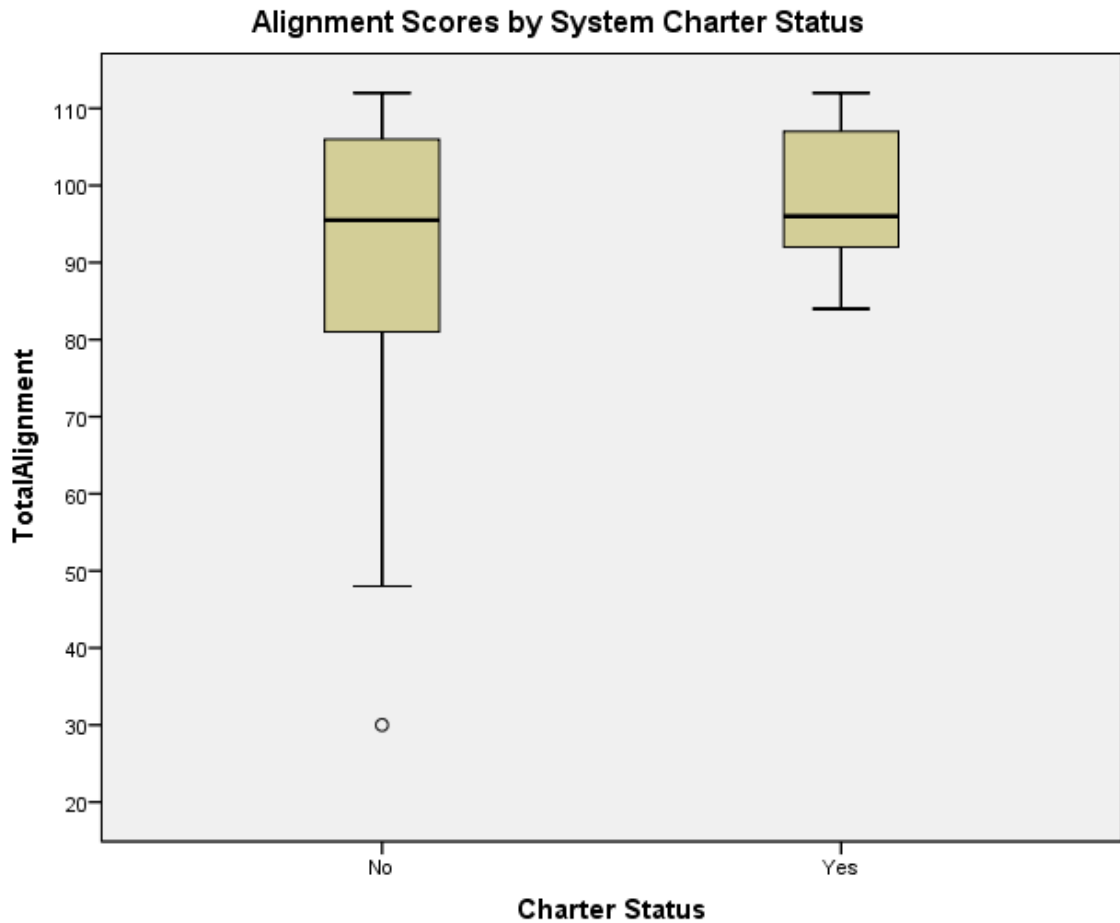


Figure 4.4. CCRPI Alignment Scores and Balanced Scorecard Status

The box plot illustrates that perceived alignment scores were reported at a high level for both balanced scorecard and non-balanced scorecard users.

Figure 4.5 displays data pertaining to the total perceived CCRPI alignment levels of superintendents in approved charter systems and superintendents in non-charter system status as indicated in research question #3:



*Figure 4.5. CCRPI Alignment Scores and Charter System Status*

The box plot illustrates that perceived alignment scores were at a high level for both superintendents who reported charter status and those who reported non-charter status.

Figure 4.6 displays data pertaining to the total perceived CCRPI alignment levels of superintendents with different levels of experience indicated in research question #4:

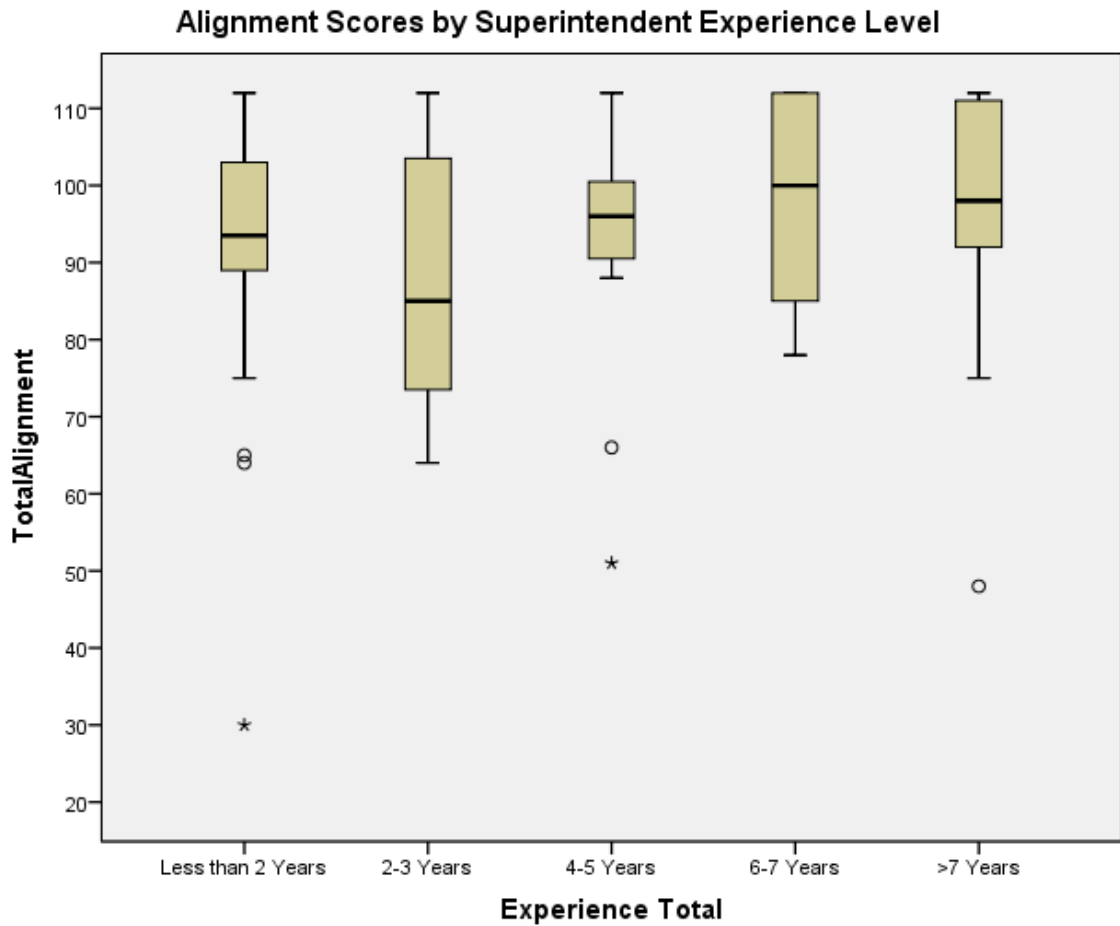
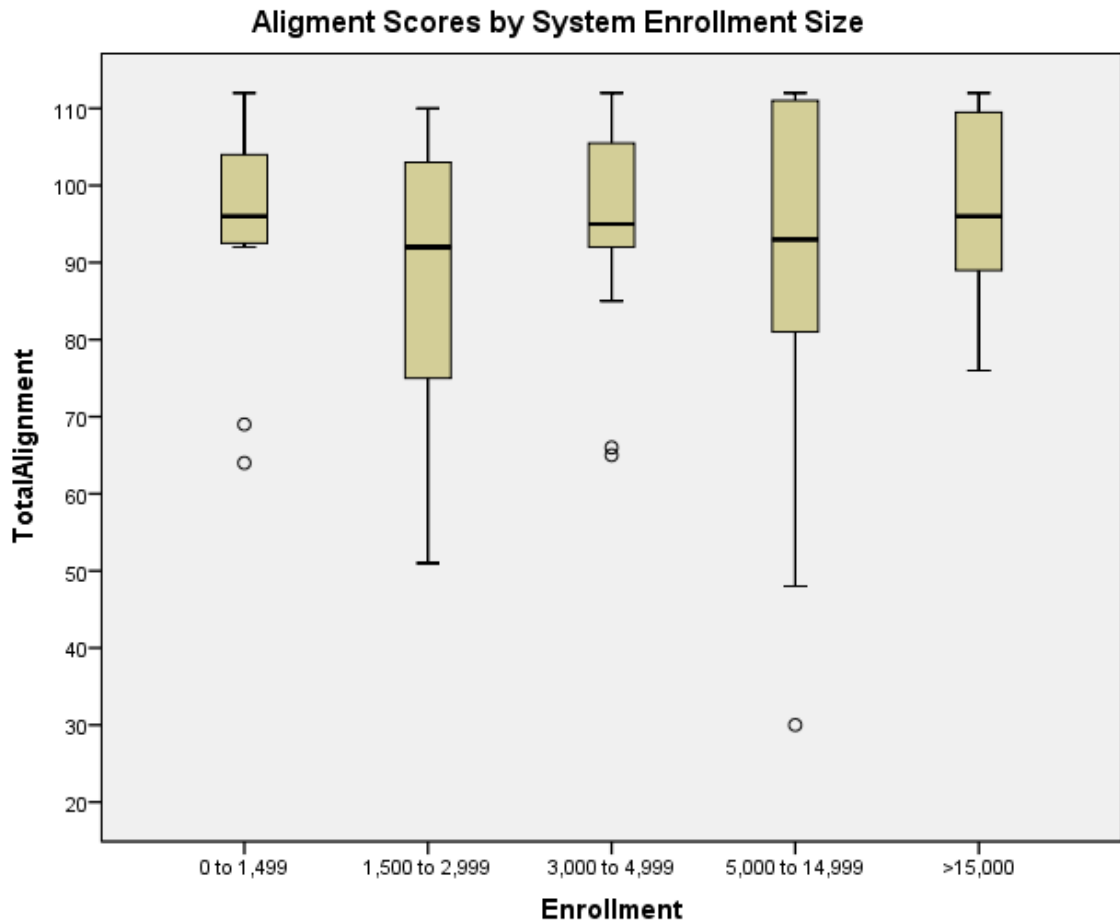


Figure 4.6. CCRPI Alignment Scores and Superintendent Experience Level

The box plot illustrates that perceived alignment scores were reported at a high level for superintendents with each of the different levels of experience.

Figure 4.7 displays data pertaining to the total perceived CCRPI alignment levels of superintendents with different levels of district student enrollment as indicated in research question #5:



*Figure 4.7. CCRPI Alignment Scores and School District Enrollment Size*

The box plot illustrates that perceived alignment scores were reported at a high level for each district enrollment interval. In total, for each of the fixed factors (balanced scorecard use, system charter status, superintendent experience levels, and district student enrollment levels), there were no main effects, and there were not any significant interactions observed in the data for perceived CCRPI alignment.

## CHAPTER 5

### DISCUSSION OF FINDINGS

The purpose of this study was to examine perceptions of Georgia school superintendents pertaining to the alignment of school district performance goals to Georgia's accountability index: the College and Career Ready Performance Index (CCRPI). A quantitative approach was used to compare perceived CCRPI alignment levels across different superintendent characteristics and school district demographics. Chapter 5 provides an overview of the principle findings, a discussion of the findings, and implications for policy, practice, and future research.

#### Overview of the Study

The purpose of this study was to examine perceptions of Georgia school superintendents pertaining to the alignment of school district performance goals to the state's accountability index: the CCRPI. Perceptual data were obtained about the extent to which school district balanced scorecards or other school district performance management systems were aligned to specific subcategories within Georgia's CCRPI (achievement, post high school readiness, progress, and achievement gap). Overall alignment levels were then examined in conjunction with superintendents' self-reporting on certain school district and superintendent characteristics. The self-reported categorical data included the superintendent's number of years of experience, the school district's student enrollment, the performance management system that was used in the district, and whether or not the superintendent reported his or her district to be an approved charter

school system. The CCRPI alignment variables were examined using a 7-point Likert scale, while demographic and categorical variables were reported and mean perceived alignment levels compared.

The survey was developed by the researcher, and it was validated by two educational practitioner focus groups prior to being emailed to Georgia school superintendents in November and December of 2014. The instrument was designed to obtain data across three categories:

1. self-reported demographics
2. self-reported system-wide goal measurement processes
3. self-reported alignment to the CCRPI

The demographic and goal measurement items produced categorical data, and the self-reported CCRPI alignment items used a 7-point Likert scale to generate numerical data.

Data in the study were collected from 72 Georgia school superintendents who voluntarily participated in the research. The research sample encompassed approximately 40% of all Georgia's school districts and included superintendents from all geographical regions in the state as well as representing a variety of student enrollment sizes and superintendent experience levels.

### Summary of the Findings

The study was organized around five research questions:

1. Are there differences in superintendents' overall perceived alignment to the following subcategories in the CCRPI: student achievement, post high school readiness, progress, and achievement gap?

2. Is there a difference in perceived alignment to the CCRPI between superintendents in school districts using balanced scorecards and superintendents in school districts using other school district performance management systems?
3. Is there a difference in perceived CCRPI alignment between superintendents who reported charter system status and superintendents who reported non-charter system status?
4. Are there differences in perceived alignment to the CCRPI between superintendents with different experience levels?
5. Are there differences in perceived alignment to the CCRPI between superintendents with different levels of student enrollment?

Research question one generated significant results and a finding, while the other research questions provided the context for two additional findings pertaining to the independent demographic variables and dependent variable of CCRPI alignment. The *first research question* asked, “Are there differences in superintendents’ overall perceived alignment between the following subcategories in the CCRPI: student achievement, post high school readiness, progress, and achievement gap?” In the data collection, a 7-point Likert scale was used across four items per subcategory and 28 possible points were generated. Across 72 superintendent survey responses, the subcategory of achievement had a mean of 24.57 out of 28 possible alignment points (88%)—which was approximately 8% greater than each of the alignment scores for other CCRPI subcategories: post high school readiness, progress, and achievement gap.



Research questions 2 through 5 measured the dependent variable of total CCRPI alignment across four independent variables. Table 5.1 displays the demographic and system-wide goal management categories examined in research questions 2 through 5:

Table 5.1

*Independent and Dependent Variables Pertaining to School Districts*

<u>Research Question</u>	<u>Independent Variable</u>	<u>Dependent Variable</u>
#2	Balanced Scorecard Use or No Balanced Scorecard Use	Perceived CCRPI alignment
#3	Approved Charter System Status or Non-Charter System Status	Perceived CCRPI alignment
#4	Experience Level as a Superintendent	Perceived CCRPI alignment
#5	School District Student Enrollment Level	Perceived CCRPI alignment

*Note.* See Appendix B for a complete list of survey items.

For research questions 2 through 5, an ANOVA was calculated to compare CCRPI alignment levels across each of the self-reported categories, and no significant differences in CCRPI alignment levels were found. However, it was noted that overall CCRPI alignment levels were reported at a high level (an average response of 5.8 using a scale of 7) across all alignment items and all superintendent responses. Therefore, it was noted that superintendents, in general, reported a high scale level of alignment to the CCRPI. Furthermore, superintendents reported high levels of CCRPI alignment irrespective of their school district’s goal measurement process or demographic characteristics.

#### Discussion of the Findings

*Finding 1: Georgia school superintendents communicated that their school district goals were aligned to the CCRPI subcategory of achievement at a significantly*

*higher level than the other three CCRPI subcategories: post high school readiness, progress, and achievement gap.*

Survey results indicated that superintendents' perceived alignment to achievement was higher than any other CCRPI alignment subcategories measured in the survey. At the time of the survey, Georgia's Waiver of NCLB (2012) was in its second full year of implementation. Prior to the Waiver of NCLB, student achievement was the primary measurement within the school accountability model. Therefore, schools and school districts had many years of experience with student achievement as a measurement. Inversely, the CCRPI used many more categories and indicators than NCLB had used in AYP (Adequate yearly Progress) reports and perhaps the newer CCRPI categories were not as familiar as achievement. In the school years prior to the waiver, Georgia schools operated within the NCLB accountability guidelines. Thus, when compared to NCLB accountability measures, the CCRPI was more recent and perhaps could account for achievement receiving the higher level of perceived alignment.

*Finding 2: Georgia school superintendents reported that their school district goals, in general, were aligned to the CCRPI.*

While superintendents reported greater alignment levels to achievement, they reported a high level of overall alignment to the CCRPI, in general. According to Perie, Park, and Klau (2007), accountability presupposes that practicing educators will respond to the accountability model that is in place. In this study, the 72 Georgia school superintendents communicated a high level of total school district goal alignment to the CCRPI (a mean response of 5.8 out of 7 possible points). Thus, it appeared that the accountability model—the CCRPI in this instance—had an overall impact on perceived

goal alignment. However, more research would be needed to determine whether the accountability model was the primary factor in the superintendents' reported goal alignment levels. In addition, more study would be needed to determine actual levels of goal alignment versus the reported levels of goal alignment.

*Finding 3: There were no significant differences in perceived CCRPI alignment levels from superintendents with different self-reported demographics or from superintendents who used different system-wide goal measurement processes.*

First, the researcher tested for differences in perceived CCRPI alignment levels between superintendents using balanced scorecards and superintendents who were not using balanced scorecards. No significant differences were found, and perceived alignment levels were relatively high for both groups. Second, the researcher tested for differences in perceived CCRPI alignment levels between superintendents in approved charter systems versus superintendents who did not serve in approved charter systems. Similarly, no significant differences were found, and perceived alignment levels were relatively high for both groups. Third, the researcher tested for differences in perceived CCRPI alignment levels between superintendents with different levels of experience as a superintendent. Again, no significant differences were found, and perceived alignment levels were relatively high for all groups. Fourth, the researcher tested for differences in perceived CCRPI alignment levels between superintendents with different district student enrollment levels. Once again, no significant differences were found, and perceived CCRPI alignment levels were relatively high for each of the enrollment levels measured in the study.

Since there were no perceived alignment differences based on the self-reported demographic characteristics or goal measurement systems, it is suggested that the accountability system could be the factor that drives goal alignment irrespective of school district and superintendent characteristics. However, more study would be needed to examine this theory. In addition, similar to finding 2, there was a high level of perceived alignment to the CCRPI across all superintendent groups. Again, this could give credence to the accountability theory of action (Anderson, 2003; Perie, Park, & Klau, 2007), but more study would be needed.

### Implications for Policy

One motivating factor for conducting this research was the context of policy change in Georgia at the time of the study. In the years preceding the study, Georgia had obtained a waiver from NCLB and was a participant in the Race to the Top initiative that came with many educational reforms. When characterizing education policy and schools, Levin (2008) explained that policies govern the work that is carried out in education. In Chapter 2, literature pertaining to school accountability outlined the accountability context as a factor that impacts the work of schools and districts (Hargreaves & Fullan, 2009; McLaughlin & Mitra, 2001). More specific to this study was the much larger number of accountability variables within Georgia's accountability index, the CCRPI, as compared to the limited number of accountability variables in the AYP reports within the NCLB accountability model (See Appendix D and Appendix E for an example section from each school accountability report).

Other motivating factors included a growing trend of school districts using balanced scorecards to manage their school district goals (Kaplan & Mikake, 2010;

Karathanos & Karathanos, 2005). Another motivation for the research was the limited amount of current research pertaining to the school district's role in managing the work of its schools though some recent studies were found (Duke, 2010; Marzano & Waters, 2009). Due to the context of increasing levels of school accountability (McNeil et al., 2008) in conjunction with Georgia's new accountability guidelines within its waiver of NCLB, the study was conceived with a concurrent interest in how school district leaders (i.e., Georgia school superintendents) responded to changes in policy.

Finding 1 stated that superintendents indicated a higher degree of goal alignment to the subcategory of achievement relative to other subcategories that were newer and exclusive to the CCRPI. Following an analysis of Georgia AYP reports from each year prior to the CCRPI, achievement was the central measure used in the NCLB accountability model and had been a consistent metric for U.S. schools and school districts in the years prior to the CCRPI. Therefore, it was noted that superintendents communicated a higher level of perceived alignment to achievement—a variable with a high level of familiarity and a clearly understood formula for school districts and schools to calculate (See Appendix D for more information on AYP reports and student achievement).

A consideration for future policymakers might also be that schools and school districts need time to have a clear understanding of policies and, in this case, to adjust to accountability indicators. In addition, it may, therefore, also take time for educators to fully align their work to new initiatives and to adjust their goals to synchronize with accountability measures. Louis et al. (2008) stated that schools often develop internal accountability systems to respond to external policies. Thus, an implication for

educational policymakers could pertain to the need to clearly communicate new accountability measures, to consider alignment examples for practitioners, to use or provide goal alignment tools in formats consistent with school district practice, and to allow adequate wait time for practitioners to adjust to new guidelines. With respect to balanced scorecards and school improvement plans, it might be of value to communicate alignment strategies that highlight leading indicators for managing accountability measures prior to the lagging bottom line or year-end reports included in school accountability indices.

### Implications for Practice

With respect to school district goal management, practitioner implications could pertain to the development of internal systems or next steps that may be needed to address the new accountability measures in the CCRPI. Based on the data collected in this study, more work may be needed to align school district goals to the newer subcategories within the CCRPI such as post high school (i.e., college and career) readiness, progress (i.e., student growth percentile levels), and student achievement gap (i.e., z-score calculations from the test performance of the lower quartile versus the state's mean score). Perhaps more direction is needed on the calculations themselves or more study might be needed related to developing short-term goals for these new accountability measurements (See Appendix E for more information about CCRPI reports).

Additionally, alignment data from the study may provide implications for school district organizational charts as well as decisions in regard to whether job descriptions address the accountability shifts in the new college and career-related accountability

expectations in the CCRPI. Furthermore, there may need to be increased learning opportunities for leaders, staff, media, and community members in regards to the indicators on which schools and school districts are now being measured. Similarly, school district leaders might benefit from a sharing of ideas pertaining to how school districts can manage accountability goals using either balanced scorecards or other performance management systems.

### Implications for Future Research

As stated in Chapter 2, the initial balanced scorecard literature was exclusively reported in business accountability and management practices, and it included formative performance measures in addition to financial bottom lines (Kaplan & Norton, 1996b). Similarly, practitioner journals indicated that Georgia school districts were implementing balanced scorecards as tools to manage leading and lagging indicators across school districts (Cowart, 2010; Kaplan & Miyake, 2010). In the business literature, Kaplan and Norton (1992; 2001) emphasized the value of managing different perspectives (internal and external), organizational learning, and qualitative goals in their original work. This research study examined balanced scorecard use in conjunction with school district goal alignment to a new accountability index: the CCRPI. Therefore, this research primarily focused on alignment to an external perspective, school district accountability, and included superintendent perceptions. Based on the review of relevant literature in conjunction with the research questions measured in this study, future research could be conducted to study the degree to which balanced scorecards address different perspectives about the work of the school district. In addition, organizational learning and qualitative measures could also be considered.

With respect to school district goal alignment, Marzano and Waters (2009) described tight organizational coupling as the precursor for district leaders to have an impact on student achievement. Therefore, additional research could be conducted to study alignment across all units of an educational organization. In the case of the school district, research could examine how common goals are addressed at the school board or district level, in individual schools, and, in the classroom setting as well. While this research did not find significant differences between perceived CCRPI alignment levels of superintendents using balanced scorecards and those who did not, a similar study might address whether or not the balanced scorecard users showed different perceived alignment levels to other goals such as local input or organizational learning. Table 5.2 includes some of the themes from balanced scorecard literature and relevant research that may be of interest to future researchers:

Table 5.2

*Topics for Future Balanced Scorecard Research in Education*

<u>Balanced Scorecard Research Topics</u>	<u>Related Literature</u>
Management Using a Balance of Leading and Lagging Indicators	Bieker and Waxenberger (2002) Figge et al. (2002) Kaplan & Miyake (2010) Kaplan & Norton (1996b)
Strategic Alignment to Short-Term and Long-Term Goals	Bieker and Waxenberger (2002) Figge et al. (2002) Kaplan & Miyake (2010) Kaplan & Norton (1996b)
Communicating Objectives Across the Organization (Cascading)	Kaplan & Miyake (2010) Kaplan & Norton (1996a; 2001) Lipe & Salterio (2000) Niven (2008)
Response to Feedback from Internal and External Perspectives	Ittner et al. (2003) Kaplan (2008) Kaplan & Norton (1992; 2001)



Table 5.2 Continued

<u>Balanced Scorecard Research Topics</u>	<u>Related Literature</u>
Using a Combination of Quantitative and Qualitative Measures	Ittner & Larcker (1998; 2001) Malina & Selto (2001)
Management of Organizational Learning, Knowledge Management, and Innovation Strategies	Arora (2002); Kaplan & Norton (1992; 1996a; 2001) Teece (1998)

Another area for future research might be the study of internal school district accountability systems. In Chapter 2, the trend of school districts developing internal systems to manage external accountability mandates emerged (Louis et al., 2008). In school district literature, Marzano and DuFour (2010) emphasized that district leadership can have a positive impact on student learning and that site-based or school-based management has not been effective. Furthermore, McNeil et al. (2008) pointed out that school accountability is increasing. Therefore, more research may be needed to study district leadership practices and internal accountability systems in an era of increased external accountability for schools and school districts.

#### Final Thoughts

In educational practice and research, many variables impact a school district's ability to accomplish desired goals. In this research, an objective was to bring together organizational management practices and examine them in conjunction with school district leadership and accountability as a context. In the study, superintendents were surveyed and perceptual data were collected and categorized by demographic characteristics and goal management processes. In the future, as district leadership evolves and accountability shifts, more study will be needed. And furthermore, other perspectives will require additional research to more fully understand district office leadership and nested educational variables that impact goal management systems and

measures. In closing, seminal balanced scorecard research provided companies with tools and perspectives to broaden the factors of consideration when examining organizational productivity (Kaplan & Norton, 1992). However, some research has shown that businesses still focused more on the *bottom line* financial measures (Ittner & Larker, 1998; 2001; Malina & Selto, 2001). In the future, perhaps educators—irrespective of what goal management system is implemented—will be able to avoid this pitfall and achieve balance in their accountability and management processes. This researcher is hopeful that information from this study can contribute to the dialogue and ongoing development of a common language that will be needed to establish positive performance cultures for educators and the students that are served in our schools and districts.

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## APPENDIX A

### Survey Consent Forms

#### Survey Consent Form for Georgia School Superintendents

##### **Consent Letter**

November 10, 2014

Dear Georgia School Superintendent:

I am a graduate student under the direction of Dr. Sally Zepeda in the Department of Lifelong Education, Administration, and Policy at The University of Georgia. I invite you to participate in a research study entitled A Study of Georgia School Districts' Balanced Scorecard Alignment to the College and Career Ready Performance Index (CCRPI). The purpose of this study is to examine school districts' goal management process and perceived alignment to accountability measures such as student achievement, student growth, and career readiness.

Your participation will involve completing a short fixed response survey that should only take about 10-15 minutes. Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time.

In the following research, individual school districts will not be identified to the researcher or in the research results and reporting, because the results will remain confidential. Internet communications are insecure and there is a limit to the confidentiality that can be guaranteed due to the technology itself. However, once the materials are received by the researcher, standard confidentiality procedures will be employed. The results of the research study may be published, but your name and school system or any identifying information will not be used. In fact, the published results will be presented in summary form only.

The findings from this project may provide information on school district goal management formats and perceived levels of alignment. There are no known risks or discomforts associated with this research.

If you have any questions about this research project, please feel free to call Dr. Sally Zepeda at (706) 542-0408 or send an email to [szepeda@uga.edu](mailto:szepeda@uga.edu). Questions or concerns about your rights as a research participant should be directed to The Chairperson,

University of Georgia Institutional Review Board, 609 Boyd GSRC, Athens, Georgia 30602; telephone (706) 542-3199; email address [irb@uga.edu](mailto:irb@uga.edu).

By completing and returning this computer survey, you are agreeing to participate in the above described research project.

Thank you for your consideration. Please keep this letter for your records.

Sincerely,

Jared B. Robinson

APPENDIX B  
Survey Items

**Section 1: Self-Reported Demographics**

1. How many years have you served as superintendent in your current school district?  
 Less than 2 years    2-3 years    4-5 years    6-7 years    More than 7 years
2. How many total years have you served as a school superintendent?  
 Less than 2 years    2-3 years    4-5 years    6-7 years    More than 7 years
3. Select the category that best describes the total number of students enrolled in your school district.  
 0 to 1,499    1,500 to 2,999    3,000 to 4,999    5,000 to 14,999    15,000 or more
4. Is your school district currently an approved Charter district?  
YES \_\_\_\_\_ NO \_\_\_\_\_

**Section 2: Self-Reported System-Wide Goal Measurement Processes**

**DIRECTIONS:** The following items pertain to the system-wide measurement of goals and to the measurement of goals by individual schools within your district.

1. Does your school district use a balanced scorecard to measure performance on district goals?  
YES \_\_\_\_\_ NO \_\_\_\_\_
2. If you answered “no,” please indicate what format your school district uses to measure performance on district goals.  

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3. Do schools within your district use balanced scorecards to manage school goals?  
YES \_\_\_\_\_ NO \_\_\_\_\_
4. If you answered “no,” please indicate what format schools in your school district use to measure performance on district goals.  

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APPENDIX C

Mean Response Rate for CCRPI Alignment Items

<b>Survey Item: CCRPI Self-Reported Alignment</b>	<b>Related Subcategory</b>	<b>Mean Response</b>
1	Achievement	6.15
2	Post High School	5.82
3	Progress	5.96
4	Achievement Gap	5.81
5	Achievement	6.35
6	Post High School	5.61
7	Progress	5.72
8	Achievement Gap	5.78
9	Achievement	5.94
10	Post High School	5.47
11	Progress	5.52
12	Achievement Gap	5.64
13	Achievement	6.21
14	Post High School	5.96
15	Progress	5.58
16	Achievement Gap	5.63

APPENDIX D  
Sample of Selected AYP Report Sections (2011)



**2010-2011 Adequate Yearly Progress (AYP)**

**New Search** | [Overview](#) | [Summary](#) | [Test Participation](#) | [Academic Performance](#) | [Second Indicator](#)

To meet AYP, each school and system must meet the following criteria: 95% Participation, Academic Performance (Annual Measurable Objective), and Second Indicator. The summary page recaps a school's or system's performance on each AYP component for each student group. Look at each tab for more details.

**SWD=Students with Disabilities | LEP=Limited English Proficiency**

**Search in Same District**

**School Information**      **All Schools**  
All Systems (ALL)  
Grades: PK, KK, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12

**Parameters**  
Second Indicator: Refer to Second Indicator Report

**Free Tutoring**

	All Students	Asian / Pacific Islander	Black	Hispanic	Amer. Indian / Alaskan	White	Multi-Racial	SWD	ELL (LEP)	Econ. Disadv.
<b>2011</b>	Test Participation	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Academic Performance	Y	Y	Y	Y	Y	Y	Y	N	Y
	Second Indicator	N	.	N	N	.	.	N	N	N
	AYP Group Status	N	Y	N	N	Y	Y	N	N	N
<b>2010</b>	Test Participation	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Academic Performance	Y	Y	N	N	Y	Y	N	N	N
	Second Indicator	Y	.	.	.	.	.	.	.	.
	AYP Group Status	Y	Y	N	N	Y	Y	N	N	N

Last Modified: 11/1/2011

2010-2011 Adequate Yearly Progress (AYP)

New Search

Search in Same District

Free Tutoring

Report

[Overview](#) [Summary](#) [Test Participation](#) [Academic Performance](#) [Second Indicator](#)

Each school (or system) as a whole and each student group with at least 40 members must meet or exceed the State's Annual Measurable Objective (AMO) regarding the percentage of students scoring proficient or advanced on selected state assessments in Reading/English Language Arts and Mathematics.

AYP Indicator: CRCT Mathematics

School Information: All Schools  
All Systems (ALL)  
Grades PK, KK, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12

Parameters: Second Indicator: Refer to Second Indicator Report

	All Students	Asian / Pacific Islander	Black	Hispanic	Amer. Indian / Alaskan	White	Multi-Racial	SWD	ELL (LEP)	Econ. Disadv.
Students in AYP Grade Levels	797708	27222	299076	96428	1845	349306	23831	95152	48770	473091
FAY Students with Test Scores	742367	24593	275304	88144	1615	330662	22049	87460	42664	441126
Group >= Minimum Size?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Basic / Does Not Meet	15.3% (113459)	4.9% (1200)	23.5% (64790)	15.7% (13841)	12.2% (197)	9.3% (30638)	12.7% (2793)	36.0% (31487)	23.2% (9918)	21.3% (94105)
Proficient / Meets	50.7% (376519)	27.9% (6871)	56.1% (154544)	55.4% (48797)	51.3% (828)	46.7% (154417)	50.2% (11062)	48.3% (42254)	54.7% (23356)	56.1% (247331)
Advanced / Exceeds	34.0% (252379)	67.2% (16522)	20.3% (55963)	28.9% (25505)	36.5% (590)	44.0% (145605)	37.2% (8194)	15.7% (13709)	22.0% (9390)	22.6% (99683)
Meets + Exceeds	84.7% (628898)	95.1% (23393)	76.5% (210507)	84.3% (74302)	87.8% (1418)	90.7% (300022)	87.3% (19256)	64.0% (55963)	76.8% (32746)	78.7% (347014)
Meets + Exceeds Rate >= 75.7%?	Y	Y	Y	Y	Y	Y	Y	N	Y	Y

## APPENDIX E

### Sample of Selected CCRPI Sections (2014)

#### Achievement

		High School Indicators	Benchmark for Indicator (%)	Performance on Indicator (%)	Adjusted Performance on Indicator (%)	Points Possible for Indicator	Points Earned on Indicator
<b>CONTENT MASTERY</b>	1	Percent of students scoring at Meets or Exceeds on the Ninth Grade Literature End of Course Test (required participation rate $\geq$ 95%)	100	88.4	NA	10	8.8
	2	Percent of students scoring at Meets or Exceeds on the American Literature End of Course Test (required participation rate $\geq$ 95%)	100	92.4	NA	10	9.2
	3	Percent of students scoring at Meets or Exceeds on the Coordinate Algebra End of Course Test (required participation rate $\geq$ 95%)	100	40.7	NA	10	4.1
	4	Percent of students scoring at Meets or Exceeds on the Analytic Geometry/GPS Geometry/Mathematics II End of Course Test (required participation rate $\geq$ 95%)	100	41.3	NA	10	4.1
	5	Percent of students scoring at Meets or Exceeds on the Physical Science End of Course Test (required participation rate $\geq$ 95%)	100	83.9	NA	10	8.4
	6	Percent of students scoring at Meets or Exceeds on the Biology End of Course Test (required participation rate $\geq$ 95%)	100	76.2	NA	10	7.6
	7	Percent of students scoring at Meets or Exceeds on the US History End of Course Test (required participation rate $\geq$ 95%)	100	73.6	NA	10	7.4
	8	Percent of students scoring at Meets or Exceeds on the Economics End of Course Test (required participation rate $\geq$ 95%)	100	82.0	NA	10	8.2
	<b>Total Points</b>						<b>80</b>
<b>Category Performance %</b>						<b>.7225</b>	
<b>Category Weight</b>						<b>40%</b>	
<b>Weighted Performance</b>						<b>.289</b>	
		High School Indicators	Benchmark for Indicator (%)	Performance on Indicator (%)	Adjusted Performance on Indicator (%)	Points Possible for Indicator	Points Earned on Indicator
<b>POST HIGH SCHOOL READINESS</b>	9	Percent of graduates completing a CTAE pathway, or an advanced academic pathway, or a fine arts pathway, or a world language pathway within their program of study	100	74.4		10	7.4
	10	Percent of CTAE Pathway Completers earning a national industry recognized credential, or an IB Career-Related Certificate, or a passing score on a GaDOE recognized end of pathway assessment (operational in 2014-2015)	NA	NA	NA	NA	NA
	11	Percent of graduates entering TCSG/USG not requiring remediation or learning support courses; or scoring program ready on the Compass; or scoring at least 22 out of 36 on the composite ACT; or scoring at least 1550 out of 2400 on the combined SAT; or scoring 3 or higher on two or more AP exams; or scoring 4 or higher on two or more IB exams	83.3	60.9	73.1	10	7.3
	12	Percent of graduates earning high school credit(s) for accelerated enrollment via ACCEL, Dual HOPE Grant, Move On When Ready, Early College, Gateway to College, Advanced Placement courses, or International Baccalaureate courses	73.9	49.8	67.4	10	6.7
	13	Percent of students scoring at Meets or Exceeds on the Georgia High School Writing Test	100	94.9		10	9.5
	14	Percent of students achieving a Lexile measure greater than or equal to 1275 on the American Literature EOCT	100	45.7		10	4.6
	15	Percent of EOCT assessments scoring at the Exceeds level	50.7	31.4	61.9	10	6.2
	16	Student Attendance Rate (%)	99.5	94.80	95.3	10	9.5
	<b>Total Points</b>						<b>70</b>
<b>Category Performance %</b>						<b>.73143</b>	
<b>Category Weight</b>						<b>30%</b>	
<b>Weighted Performance</b>						<b>.219429</b>	
		High School Indicators	Benchmark for Indicator (%)	Performance on Indicator (%)	Adjusted Performance on Indicator (%)	Points Possible for Indicator	Weighted Points Earned on Indicator
<b>GRADUATION RATE</b>	17	2014 4-Year Cohort Graduation Rate (%)	100	72.50	NA	6.6667	4.8
	18	2013 5-Year Extended Cohort Graduation Rate (%)	100	73.70	NA	3.3333	2.5
	<b>Total Points</b>						<b>10</b>
<b>Category Performance %</b>						<b>.73</b>	
<b>Category Weight</b>						<b>30%</b>	
<b>Weighted Performance</b>						<b>.219</b>	
<b>Content Mastery Weighted Performance</b>						<b>.289</b>	
<b>Post High School Readiness Weighted Performance</b>						<b>.219429</b>	
<b>Graduation Rate Weighted Performance</b>						<b>.219</b>	
<b>Sum of Weighted Performances</b>						<b>(.72667)*60</b>	
<b>Total Achievement Points Earned</b>						<b>43.6</b>	

#### Progress

High School Indicators Content Area Assessments	Count of Students Meeting Typical/High Growth	Count of Students with Student Growth Percentiles (SGPs)
EOCT: 9th Grade Literature, American Literature	138040	215945
EOCT: Algebra, Geometry	144612	222218
EOCT: Biology, Physical Science	103139	174860
EOCT: US History, Economics	118379	189811
<b>Total</b>	<b>504170</b>	<b>802834</b>
<b>Percent Meeting Typical/High Growth</b>		<b>.62799</b>
<b>Weighted Performance</b>		<b>(.62799)*25</b>
<b>Progress Points Earned</b>		<b>15.7</b>

#### Achievement Gap

High School Content Area Assessments	Gap Size	Gap Change	Higher of Gap Size/Gap Change	Points Possible
EOCT: 9th Grade Literature, American Literature	1	2	2	3
EOCT: Algebra, Geometry	1	0	1	3
EOCT: Biology, Physical Science	1	2	2	3
EOCT: US History, Economics	1	1	1	3
<b>Total</b>			<b>6</b>	<b>12</b>
<b>Percent of Higher of Gap Size/Gap Change</b>			<b>.5</b>	
<b>Weighted Performance</b>			<b>(.5)*15</b>	
<b>Achievement Gap Points Earned</b>			<b>7.5</b>	