

# MOVING YOUR NUMBERS

## Administrator Preparation Guide

*Using Assessment and Accountability  
to Increase Performance for  
Students With Disabilities  
as Part of District-wide  
Improvement*



NATIONAL  
CENTER ON  
EDUCATIONAL  
OUTCOMES

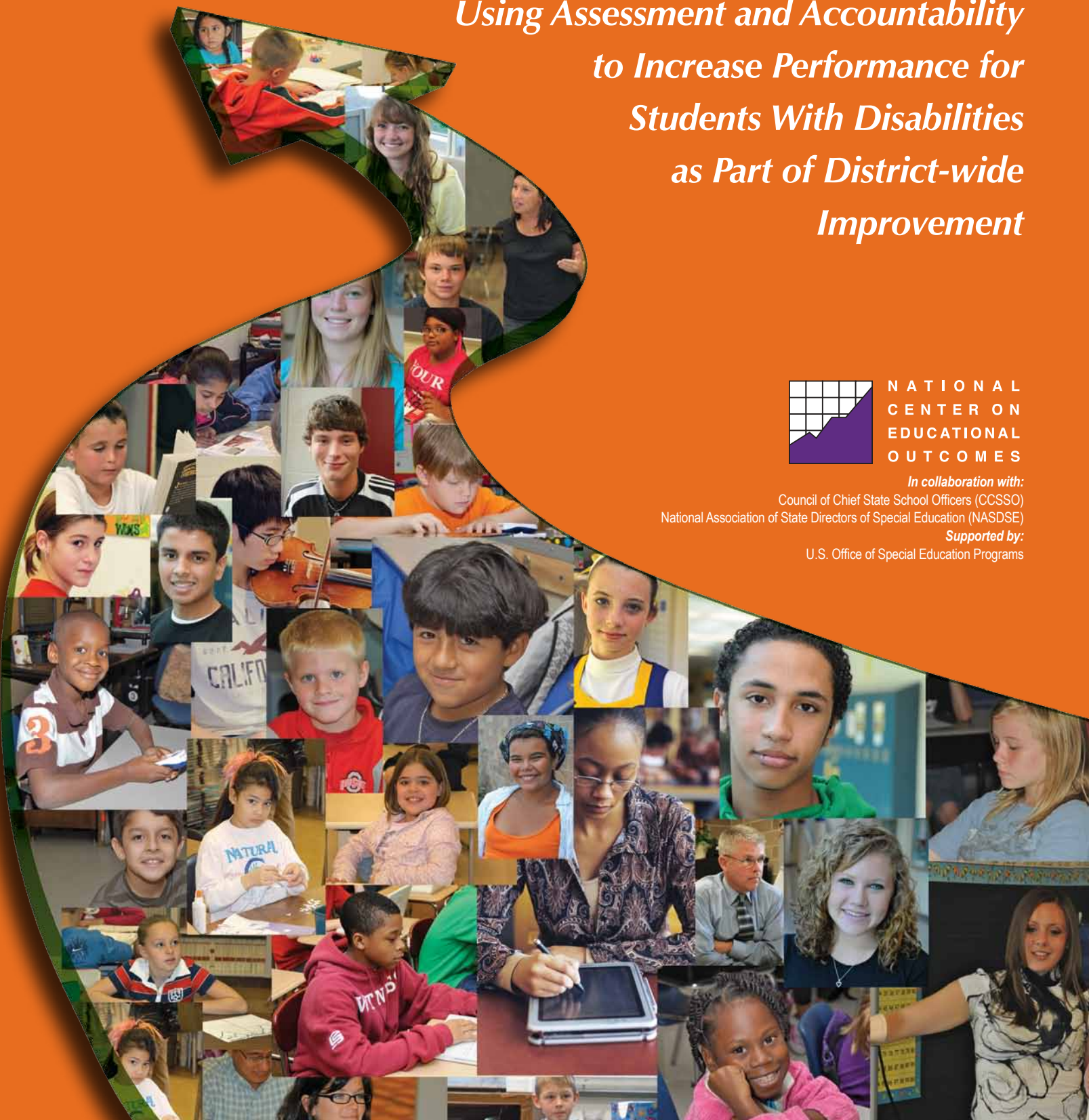
*In collaboration with:*

Council of Chief State School Officers (CCSSO)

National Association of State Directors of Special Education (NASDSE)

*Supported by:*

U.S. Office of Special Education Programs



# ABOUT MOVING YOUR NUMBERS

*Moving Your Numbers: Improving Learning for Students with Disabilities as Part of District-wide Reform*, examines how school districts with vastly different demographics increase the performance of students with disabilities and other at-risk learners as part of whole-district reform efforts. Case studies of featured districts, as described in the full report, provide evidence that students with disabilities, like all other students, can learn at higher levels when adults focus their collective efforts on improving instructional practice, consistently implement core work across the district, and use assessment and accountability as a lever for ongoing system and student learning and improvement.

*Moving Your Numbers* identifies six essential practices that must be in place to improve the performance of students with disabilities. Evidence suggests that these six practices, when used in an aligned and coherent manner, are associated with higher student achievement. These practices are *use data well*, *focus your goals*, *select and implement shared instructional practices (individually and collectively)*, *implement deeply*, *monitor and provide feedback and support*, and *inquire and learn*.

*Moving Your Numbers* was initiated and is supported through the National Center on Educational Outcomes (NCEO) under the leadership of Dr. Martha Thurlow, NCEO Director; Rachel Quenemoen, NCEO Senior Research Fellow; and Dr. Laurene Christensen, NCEO Research Associate. Dr. Deborah Telfer, Director, School of Education and Allied Professions Grant Center, University of Dayton, coordinates the development and review of *Moving Your Numbers* on behalf of NCEO. NCEO was established in 1990 to provide national leadership in designing and building educational assessments and accountability systems that appropriately monitor educational results for all students, including students with disabilities and English Language Learners (ELLs).

This *Higher Education Guide to Moving Your Numbers* was written by Dr. Aimee Howley, Educational Studies Department, Ohio University, and Marged Howley, Oz Educational Consulting. The document should be cited as:

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Photographs used in this publication have been provided courtesy of the districts featured and the Ohio Department of Education.

Additional case studies of featured districts will be added to the *Moving Your Numbers* website as they are developed. Go to [www.MovingYourNumbers.org](http://www.MovingYourNumbers.org) for the complete report and additional tools and resources, and to submit success stories.

NCEO is supported primarily through Cooperative Agreements (#H326G050007, #H326G11002) with the Research to Practice Division, Office of Special Education Programs, U.S. Department of Education. Additional support for targeted projects, including those on ELL students, is provided by other federal and state agencies. The Center is affiliated with the [Institute on Community Integration in the College of Education and Human Development, University of Minnesota](#). Opinions expressed in this publication do not necessarily reflect those of the U.S. Department of Education or Offices within it.

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## OVERVIEW

This higher education guide connects the report, *Moving Your Numbers*, to the curriculum of administrator preparation programs. It makes the connection by (1) showing how the booklet fits with curricula in such preparation programs (i.e., programs to prepare candidates for various



administrative roles), (2) providing discussion questions based on the case studies presented in the booklet, (3) suggesting activities that draw on and extend the content of the case studies, and (4) presenting additional resource materials for exploring the essential educational practices that the booklet targets.

*Moving Your Numbers* provides administrator preparation programs with real-world examples of districts in which a focus on the education of *all* children—including those with disabilities—guides educators' thinking and practice. These exemplar districts contrast with other districts in which *low expectations* about certain students' capabilities limit those students' opportunities for learning and eventually depress their academic achievement. Recent policy language characterizes this outcome as *the achievement gap*, and remedying achievement gaps has become a critical concern in many school districts.

Depending on the district, achievement data may reveal gaps between the achievement of students without major learning challenges and (1) students with disabilities, (2) students from economically disadvantaged backgrounds, (3) students from disadvantaged racial and ethnic groups, and (4) students who are learning English as a second language. In some districts, only some achievement gaps are evident; in others all four represent a source of concern. Whatever the nature of the achievement gaps a district faces, two insights are critical to the remedy. The first targets commitment: *closing achievement gaps occurs only in districts that commit energy and resources to the effort*. The second targets inclusiveness: *closing achievement gaps occurs only when educators take responsibility for providing effective, responsive instruction to all students*.

These insights undergird all initiatives directed toward the improvement of educational outcomes for students from marginalized groups. In recent years, educators have called these initiatives by different names and positioned them to address somewhat different aims: inclusion, response to intervention, culturally responsive pedagogy, and instruction of English Language Learners (ELLs) to name a few. Despite some important distinctions, the commonalities of these initiatives override their differences. These commonalities include (1) high expectations for all students; (2) systematic provision of high-quality feedback to students, teachers, and school leaders; (3) a rich set of opportunities for meaningful learning; and (4) the use of scaffolding to create bridges between what students already know and what they need to learn.

Focusing on districts whose reform efforts support widespread use of these instructional practices, *Moving Your Numbers* shows how high-quality education for students with disabilities can serve as a cornerstone for system-wide reform. Such efforts depend on three non-negotiable assumptions about the education of students with disabilities. These are:

- Successful outcomes (including college and career readiness) for students receiving special education services require their inclusion in standards-based reform efforts and their participation in statewide assessment and accountability systems.
- Improving the educational outcomes of students receiving special education services, as for any other student group, requires a sustained focus on teaching and learning, aligned actions across the district, and continuous monitoring of the degree of implementation of such actions to assess the impact on student learning.
- Students receiving special education services are as different from each other as the members of any other group;



assuming pre-determined levels of achievement based on disability status limits these students' opportunity to learn and diminishes the collective responsibility of adults to provide high quality instruction aligned with grade-level content to these students.

In addition, they depend on a realistic appraisal of the struggle that deep reform entails—a perspective put forward in a fourth assumption: Consistent, high quality implementation of effective practices is a challenge for many districts.

The districts showcased in *Moving Your Numbers* also subscribe to a particular evidence-based perspective on leadership—distributed leadership. This approach organizes educators into teams for the purpose of planning, using, and monitoring locally responsive instructional practices on behalf of all students. Educators on such teams hold themselves and one another accountable for using effective practices,

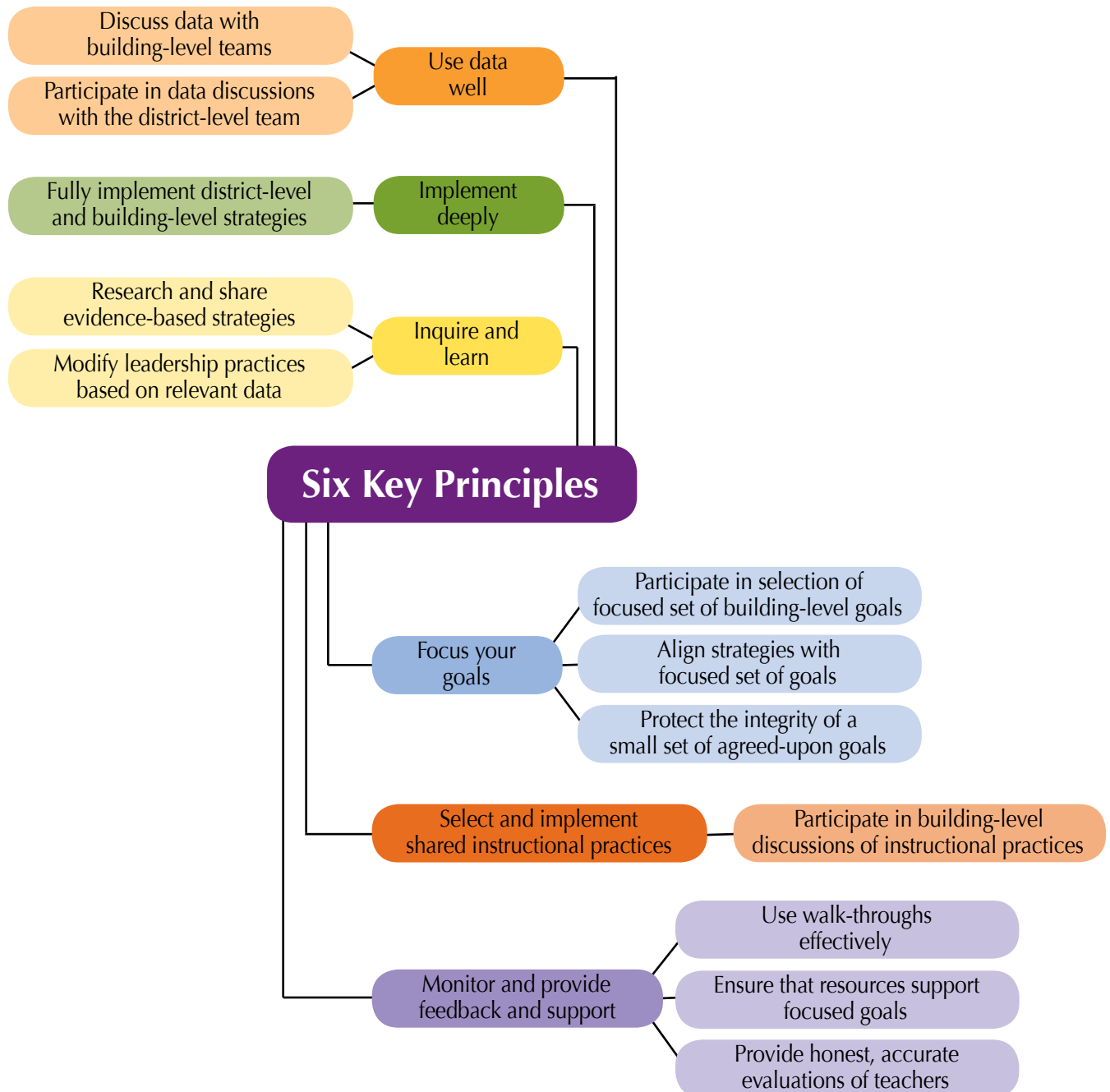
collecting and analyzing data in appropriate ways, and staying the course. Six principles guide this approach:

1. Use data well;
2. Focus your goals;
3. Select and implement shared instructional practices;
4. Implement deeply;
5. Monitor and provide feedback and support; and
6. Inquire and learn (at the district, school, and teacher team level).

Two diagrams, one demonstrating the direct applicability of these principles to the role of school principal and the other demonstrating their applicability to the role of district superintendent, are presented on the following two pages.

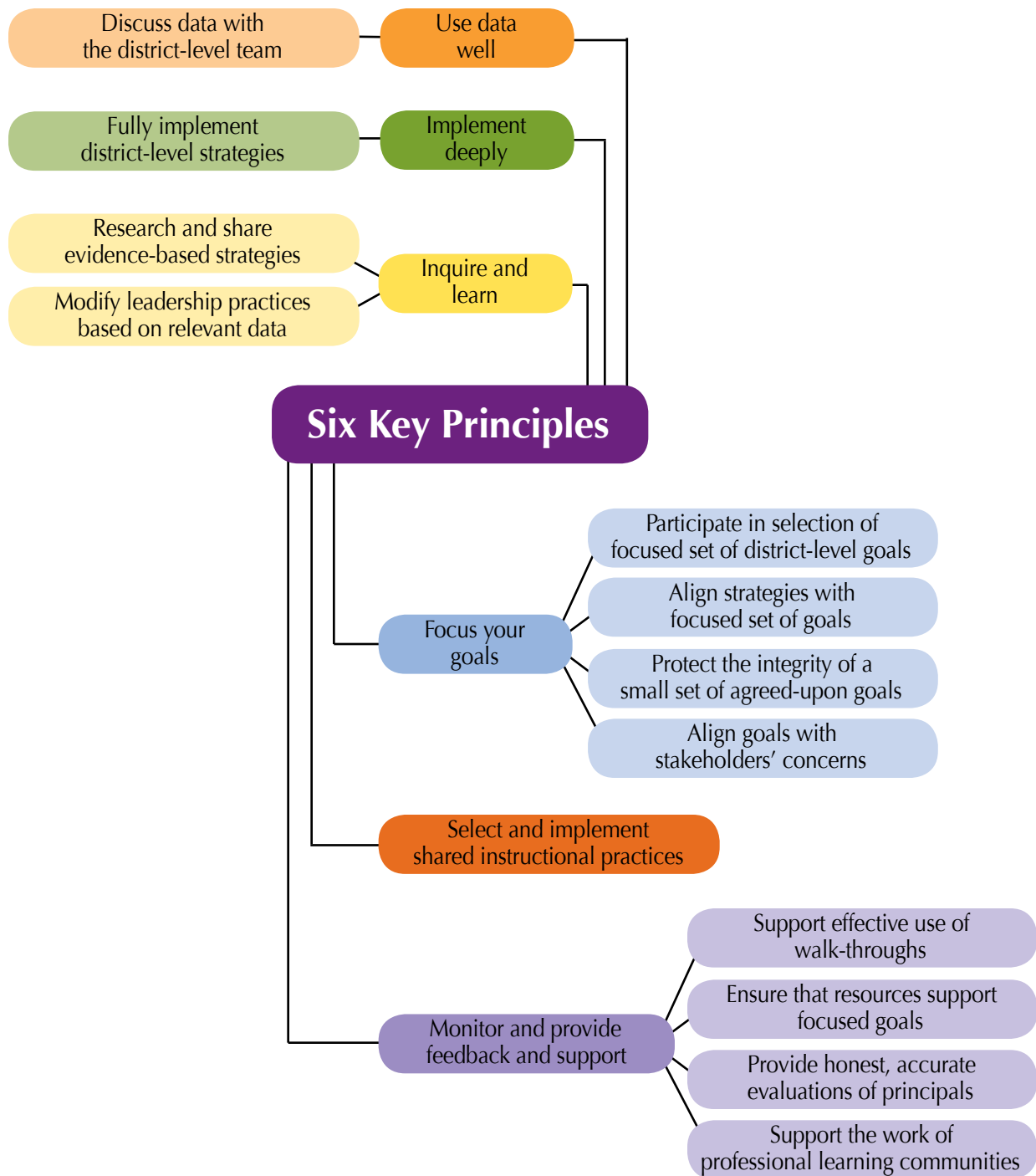


## Six Key Principles: A Starting Point for Beginning Principals



Principals need to be attentive to **all six principles** at the building level and to ensure that teacher-based teams use data to align instructional practices with a focused set of building-level goals and with agreed-upon instructional practices. Principals should take responsibility for ensuring that features of the school culture are supportive of goals and strategies. Instructional coaching of teachers as well as evaluation of teacher performance are critical roles for which principals take responsibility even when other school leaders such as lead teachers, supervisors, curriculum specialists, or assistant principals assist.

## Six Key Principles: A Starting Point for Beginning Superintendents



Superintendents need to be attentive to **all six principles** at the district level even though, in most cases, their work directly addresses five of the six. Only in some small districts do superintendents have time to play a role in selecting and implementing shared instructional practices. With responsibility for the organizational culture of their districts, superintendents set up conditions that support a culture of inquiry and the use of data in effective ways. They also hold other professionals accountable for selecting effective practices and implementing them with fidelity. Because superintendents serve as the bridge between the district and external stakeholders, their leadership is critical to the establishment and sustenance of a focused set of goals. They also must assure that the district deploys resources in ways that support the accomplishment of those goals.





# FINDING A PLACE FOR *MOVING YOUR NUMBERS* IN THE ADMINISTRATOR PREPARATION PROGRAM

The case studies presented in *Moving Your Numbers* and the accompanying activities included in this guide might be used as instructional materials in various courses in administrator preparation programs. In some programs, for example, prospective school leaders enroll in a course focusing on the use of data for decision-making. “Leadership for Data-Driven Change” (University of Missouri) exemplifies this type of course. Because *Moving Your Numbers* focuses on ways to improve performance through the thoughtful analysis and interpretation of data, its contents would fit well with the aims of such a course. In other programs, leadership of teacher teams—sometimes referred to as “distributed leadership”—represents the major topic of an educational leadership course such as the University of North Carolina’s “Empowerment Strategies for the School Executive” or Harvard’s “Teachers, Leadership, and Power: School Reform from the Classroom.” When included in such courses, *Moving Your Numbers* and the activities offered in this guide provide practical illustrations of the processes and outcomes of distributed leadership and give prospective administrators opportunities to reflect on how they might use this approach in the work of envisioning, implementing, and monitoring systemic reform of behalf of the learning of all students.

However *Moving Your Numbers* and its accompanying higher-education activities are used in an administrator preparation program, the primary value of these materials lies in their demonstration of ways that systemic reform practices—often seen as very difficult to implement—actually can be deployed successfully to improve the academic performance of all students. In the discipline of mathematics such a demonstration



is called an “existence proof.” The point of *Moving Your Numbers* is to show that effective district-wide reform does exist and therefore can come into existence more widely. The districts that the book showcases are not all the same size; they are located in different parts of the country and in different types of communities; their teachers and school leaders are not extraordinary. What has happened in those districts can happen elsewhere. Inevitably local circumstances will influence how such reform will take place, who will need to be involved, and even how quickly it can proceed. Nevertheless, the hopeful prospect that the *Moving Your Numbers* existence proof offers cannot be discounted: districts can make meaningful reforms, and such reforms can close achievement gaps.

## PREFERENCES INSTRUMENT

This instrument intends to measure preferences in three domains—all related to the work of increasing the achievement of *all* students. The first domain relates to preferred ways of dealing with educational change, the second relates to preferred approaches to the education of students with disabilities, and the third relates to preferred strategies for using data in educational decision-making.

Faculty in administrator preparation programs may see two uses of the instrument as well-aligned with their program's aims: (1) using the instrument as a pre- and post-assessment for courses or instructional units (e.g., the *Moving Your Numbers* booklet and related activities) that focus on educational reform, inclusion of students with disabilities, and/or data-based decision-making or (2) using the instrument to stimulate discussion among principal or superintendent candidates—perhaps as part of a class activity. Of course, the choice of one of these possible uses interferes with the other possible use of the instrument, so faculty members will want to determine which application is most valuable. However they choose to use the instrument, faculty members should keep in mind that the technical properties of the instrument (e.g., its reliability and validity) have not yet been investigated.



# Preferences Instrument: Addressing Critical Issues

INSTRUCTIONS FOR CANDIDATE: Please read each item and select the rating that best matches your preference or perspective.

CHANGE	<i>To what extent do you prefer the following strategies for supporting educational change?</i>					
	5 = very high extent 4 = high extent 3 = neither a high or low extent 2 = low extent 1 = very low extent					
	1. Involvement in decision-making about the change	5	4	3	2	1
	2. Collaboration with peers	5	4	3	2	1
	3. Encouragement from district leaders	5	4	3	2	1
	4. Time for experimentation with new practices	5	4	3	2	1
	<i>To what extent are you likely to retain an existing instructional practice that you believe is effective in the face of the following challenges to that practice?</i>					
	5 = very high extent 4 = high extent 3 = neither a high or low extent 2 = low extent 1 = very low extent					
	1. Research showing that it is less effective than another practice	5	4	3	2	1
	2. Critical feedback from your peers	5	4	3	2	1
	3. Critical feedback from students	5	4	3	2	1
	4. School-wide expectations	5	4	3	2	1
	<i>District-wide educational change is difficult and causes discomfort, but some circumstances warrant it. To what extent would each of the following circumstances persuade you that district-wide change is warranted?</i>					
5 = very high extent 4 = high extent 3 = neither a high or low extent 2 = low extent 1 = very low extent						
1. When the community is dissatisfied with current practices or performance	5	4	3	2	1	
2. When the state requires it	5	4	3	2	1	
3. When a significant number of students are struggling academically	5	4	3	2	1	
4. When the district needs to change in order to obtain funds	5	4	3	2	1	
5. When a majority of district stateholders conclude that current practices are not working well	5	4	3	2	1	
STUDENTS WITH DISABILITIES	<i>Educating students with disabilities demands a balance between requiring high levels of performance and providing support, and opinions about that balance vary. To what extent do you believe the following inclusion practices strike the right balance for students with MILD disabilities?</i>					
	5 = very high extent 4 = high extent 3 = neither a high or low extent 2 = low extent 1 = very low extent					
	1. Full time participation in general education classrooms	5	4	3	2	1
	2. Participation in the state testing program without accommodations	5	4	3	2	1
	3. Participation in school social events with same-age peers	5	4	3	2	1
	4. Involvement in the process of setting IEP goals and strategies	5	4	3	2	1
	<i>Educating students with disabilities demands a balance between requiring high levels of performance and providing support, and opinions about that balance vary. To what extent do you believe the following inclusion practices strike the right balance for students with MODERATE disabilities?</i>					
	5 = very high extent 4 = high extent 3 = neither a high or low extent 2 = low extent 1 = very low extent					
	1. Full time participation in general education classrooms	5	4	3	2	1
	2. Participation in the state testing program without accommodations	5	4	3	2	1
	3. Participation in school social events with same-age peers	5	4	3	2	1
	4. Involvement in the process of setting IEP goals and strategies	5	4	3	2	1
	<i>Educating students with disabilities demands a balance between requiring high levels of performance and providing support, and opinions about that balance vary. To what extent do you believe the following inclusion practices strike the right balance for students with SEVERE disabilities?</i>					
5 = very high extent 4 = high extent 3 = neither a high or low extent 2 = low extent 1 = very low extent						
1. Full time participation in general education classrooms	5	4	3	2	1	
2. Participation in the state testing program without accommodations	5	4	3	2	1	
3. Participation in school social events with same-age peers	5	4	3	2	1	
4. Involvement in the process of setting IEP goals and strategies	5	4	3	2	1	
DATA USE	<i>Educators vary in the extent to which they feel comfortable using different types of data to make instructional decisions. To what extent do you prefer using the following types of data for instructional decision-making?</i>					
	5 = very high extent 4 = high extent 3 = neither a high or low extent 2 = low extent 1 = very low extent					
	1. Data from informal classroom observations	5	4	3	2	1
	2. Data from classroom quizzes and tests	5	4	3	2	1
	3. Data from class projects	5	4	3	2	1
	4. Data from unit tests	5	4	3	2	1
	5. Data from collaboratively developed short-cycle assessments	5	4	3	2	1
	6. Data from assessments accompanying textbooks	5	4	3	2	1
	7. Data from standardized tests adopted by your local district (e.g., Terra Nova, Stanford Achievement Test)	5	4	3	2	1
	8. Data from state accountability tests	5	4	3	2	1
	9. Disaggregated data from standardized tests	5	4	3	2	1
10. Data from testing to determine eligibility for special education services	5	4	3	2	1	

# DISCUSSION QUESTIONS TO ACCOMPANY THE CASE STUDIES



## Bloom Vernon Local Schools, Ohio

1. How does the leadership team view poverty and its consequences? What theories and research justify their perspective? What are the benefits of their perspective?
2. Based on your knowledge of evidence-based practices, what instructional approaches are supportive of the general strategy of asking every teacher to take responsibility for the learning of every student?
3. The district uses various types of data to accomplish different purposes. Which types of data do they use and for which purposes? [Developing a grid showing data types and data uses might help you answer this question.]
4. One of Bloom Vernon's three focused goals is to increase the use of value-added data to help improve instructional practice. Looking beyond the case study to evidence about value-added assessment, what challenges do you think the district will face in addressing this goal?
5. A careful reading of the case studies shows features of the Bloom Vernon organizational culture that are supportive of its improvement efforts. What are those features and how strong is the research evidence that links them to improved academic performance?
6. Bloom Vernon uses an educational strategy that it calls "double instruction." What does this strategy entail? Think about another district that you know well. Would that district be receptive to the "double-instruction" strategy? Why or why not?



## Lake Villa School District #41, Illinois

1. The case study talks about Fullan's notion of "doing the right work." How would a district go about figuring out what the "right work" actually is?
2. What steps do principals need to take in order to help teachers increase the "cognitive demand" of the work required of students?
3. The case study suggests that the stability of building-level leadership has played a role in the improvement process. What can a district do to ensure the stability of its building-level leadership? What indicators would suggest the need to replace rather than maintain existing leadership?
4. Why is it important to balance fidelity of implementation with flexibility to meet student needs? In practice, how would a district leadership team ensure that this balance is working well for all schools in a district?
5. Lake Villa School District (LVSD) marshals its resources in a very centralized way; that is, LVSD controls building-level spending at the central office, rather than allowing each building to make decisions about its own spending. What might be some of the benefits of this practice in general? What might be some of its disadvantages in general? What might be some specific advantages and disadvantages with regard to the provision of special education services?



## Wooster City Schools, Ohio

1. In the boxed material at the bottom of page 29 are the “Core Messages/Non-Negotiables” of the Ohio Leadership Advisory Council and the Ohio Improvement Process. After reading through the list, first discuss what each statement means. Then consider what it means for a core message or value to be non-negotiable. Next evaluate why each of the core messages or values presented in this list ought to be considered “non-negotiable.” As an administrator, what steps would you need to take in order to infuse these non-negotiable core messages or values into workable practices in your school or district? How will you keep teachers and other administrators from trying to modify or displace these non-negotiable core messages or values and the practices they support?
2. Wooster City’s three focused goals are listed in a text box at the top of page 33. The first goal is to implement a *sustainable instructional process that will positively impact student achievement*. In consideration of the two major criteria implicit in the goal—namely that the instructional process be both sustainable and lead to improved student achievement—how might administrators go about finding and then testing the effectiveness of such an instructional process?
3. Wooster City asks each Teacher-based Team (TBT) to look at student data from all nine schools, not just from its own school. What do you see as possible reasons for using this approach? Can you think of any benefits or consequences of having TBTs engage in this broad-based analysis of *district-wide* data? As an administrator, what “focusing questions” might you share with TBTs to help them use **district-wide** data to improve performance at their *individual* schools?
4. On page 30, the superintendent states that being able to include the union president and the union grievance chairperson on the District Leadership Team (DLT) was very important to the success of the district’s improvement efforts. As a future administrator, why do you think it might be important for union leaders to be deeply involved in the collaborative processes needed for educational reform? What do you see as potential challenges associated with the practice of involving union leaders as major players in school and district improvement efforts?



## Brevard Public Schools, Florida

1. On page 43 in the upper right hand corner, you will see demographic data from the Brevard Public Schools, and on page 46 you will see disaggregated achievement data. How do these data compare and contrast with data from the other districts? Considering the characteristics of the students that BPS serves, what do you think are some of the special challenges that school leaders in Brevard face as they work to promote school improvement? What do you think are some of the community assets that these school leaders can draw on for promoting school improvement? What are some ways that administrators in your current district might use a community assets perspective to inform their improvement efforts?
2. According to the case study, professional learning communities at BPS’s Saturn Elementary School meet very frequently, including once a week with the principal. What do you see as challenges associated with holding this number of team meetings? What are the likely benefits of holding these meetings so frequently? What supports do administrators need to put into place in order to initiate and sustain such an arrangement?

3. The box in the middle of page 51 includes a list of five district-level changes that Linda Darling-Hammond claims are needed in order to create a new educational “paradigm.” What does each change entail? What would a superintendent need to do in order to bring about each of these changes? What role would a principal play in a district that was committed to implementing these changes?
4. The discussion on page 53 draws attention to possible economic and demographic changes that may affect the Brevard Public Schools in the near future. How do school districts go about planning for anticipated changes of this sort? How can districts sustain improvement efforts in the face of shifts in their economic base, population size, and/or the demographic characteristics of their residents?



### Gwinnett County Public Schools, Georgia

1. Given the size of the district, its number of schools, and its urban environment, what do you see as potential benefits of Gwinnett’s district-wide practice of limiting each school’s goals to three? What difficulties might the district encounter as it attempts to ensure this degree of focus? What steps might school leaders need to take in order to maintain this degree of focus?
2. The case study describes Gwinnett’s “theory of action” as a system of “defined accountability.” Based on your reading of the case study, what do you think “defined accountability” entails? What cultural changes might be necessary in a district in order for it to become ready to handle a system of “defined accountability” such as the one used in Gwinnett?
3. Improvement efforts in Gwinnett bring together educators from a cluster of schools, namely a high school and the middle schools and elementary schools whose students will eventually attend that high school. What do you see as the benefits of this approach and what do you see as its drawbacks? Why might this approach be useful in some types of districts but less useful in other types of districts?
4. On page 64 in the text box called *Advice from Gwinnett County Public Schools*, one piece of advice is, “integrate curriculum, instruction, and assessment in real ways.” What do you think is meant by “real” in this context? As a school principal, what steps would you take to ensure that teacher teams accomplish “real integration” of curriculum, instruction, and assessment?

# ACTIVITIES

## Activities Based on Reading of the Case Studies

### Structural Supports for School Improvement

**Description:** This activity engages administrator candidates in a discussion of the structural changes in *MYN* districts and schools that seem to be supportive of educational improvement. It also asks candidates to consider other structural changes that might be beneficial.

**Objectives:** (1) the administrator candidate will identify structural changes in schools and districts that are likely to be supportive of educational improvement and (2) the administrator candidate will identify methods to determine the likely benefits of various structural changes to schools and districts.

**Instructions for Faculty:** Start a class discussion with the following question: “What structural changes did *MYN* districts and schools use in order to promote educational improvement?” Then guide the discussion using additional questions such as “Why did they select these particular structural changes?” “In what ways do school and district structures influence educational productivity?” “Why do some

structural arrangements promote educational productivity while others impede it?” “What other structural changes beyond those adopted in *MYN* districts might schools or districts use in order to promote educational improvement?” “How would school leaders or school board members decide which structural features of the district or school are likely to promote educational improvement and which are likely to impede such improvement?”

**Instructions for Candidates:** Participate in a class discussion based on focusing questions that your instructor poses.

**Enrichment:** Read summaries of the research on the following structural arrangements: small school conversions, block scheduling, year-round schooling, multi-age grouping, co-teaching, and professional learning communities. Which of these structural arrangements seems most supportive of school improvement? What evidence supports your determination? Which of these structural arrangements seems least supportive of school improvement? What evidence supports your determination?



## The Importance of Context

**Description:** Educational improvement, like education in general, is highly dependent on context. And the context of a district is often reflected in circumstances such as the district's demographics, locale, number of schools, history, union dynamics, organizational culture, and so on. These contextual circumstances, moreover, all influence the selection and ultimately the effectiveness of strategies for improving educational performance. The case studies in *Moving Your Numbers* provide opportunities for examining how context may have influenced educational improvement efforts and outcomes in the five districts. This activity asks candidates in administrator preparation programs to map relevant contextual differences across the districts and to discuss how these contextual differences might have influenced the improvement process.

**Objectives:** (1) the administrator candidate will identify relevant features of context and (2) the administrator candidate will anticipate how different contextual features of a district will influence improvement efforts in the district.

**Instructions for Faculty:** Divide administrator candidates into small groups each with four or five members. Ask each group first to review the case studies and note all contextual features of the districts that are discussed. (Remind the groups to look at the material presented in charts and tables in each of the case studies.) Each group should produce a list of contextual features distinguishing the districts. Across the case studies, there are at least nine such features mentioned (% economically disadvantaged, % minority, % of students on IEPs, % ELL, % gifted, district enrollment, number of schools, locale, geographic size of the district), and other features may be mentioned as well. Once each group has a list of the contextual features, its members should discuss the possible relevance of each feature to the educational improvement process and/or outcomes. The group should identify the contextual features that are most likely to have an impact on the educational improvement process and/or outcomes. Concentrating on the *four* contextual features that seem most salient for district improvement overall, each small group should go back to the case studies to identify how the districts either made good use of a contextual feature or worked around it. For example, a group might determine that district size is a salient contextual feature. Small size offers some benefits and creates some challenges. The group would look at information in each case study showing how the educators were attentive to the opportunities and challenges associated with the size of their district. Each group should produce a chart listing the contextual features on

one axis and the five districts on the other. (Note: with four contextual features and five districts, the chart will have 20 cells altogether.) In each cell the group should describe how the particular district either made good use of a contextual feature or worked to address challenges associated with it. You may want groups to share their perspectives with the class as a whole, and/or you may want groups to turn in their work on this activity for a grade. If you plan to grade the assignment using the scoring rubric, the group should submit (1) its initial list of contextual features, (2) the list that is narrowed down to the five most salient contextual features, and (3) the chart.

**Instructions for Candidates:** In this activity you will analyze the case studies to identify contextual features of the districts that had an impact on their educational improvement processes and/or outcomes. To accomplish this task, your small group will first review the case studies and note all contextual features of the districts that are discussed. (Be sure to look for information in the text boxes and tables as well as the narrative portions of the case studies.) As a result of this review, your group will produce a list of contextual features distinguishing the districts. Once your group has its list of the contextual features, members should discuss the possible relevance of each feature to the educational improvement processes used in the districts and/or the improvement outcomes resulting from those processes. Through this discussion, your group should identify the *four* contextual features that are most likely to have an impact on the districts' educational improvement processes and/or outcomes. Once your group has listed the four contextual features, you should go back to the case studies to identify how the districts either exploited a contextual feature or worked around it. As a final step in the process of analyzing the case studies, your group should produce a chart listing the contextual features on one axis and the five districts on the other. (Note: with four contextual features and five districts, the chart will have 20 cells altogether.) In each cell your group should describe how the particular district either made good use of a contextual feature or worked to address challenges associated with it. Your instructor may ask you to share your analysis with the class as a whole and/or to submit your group's work on this activity for a grade.



### Scoring Rubric:

	Accomplished	Proficient	Developing
Thoroughness in identifying contextual features	The initial list included at least eight different contextual features from across all five case studies.	The initial list included at least six different contextual features.	The initial list included at least four different contextual features.
Insightfulness in identifying the most salient contextual features	The four salient features were highly relevant to the challenges that the district faced or to the opportunities it was able to exploit.	At least two of the salient features were highly relevant to district challenges and/or opportunities.	At least two of the salient features were somewhat relevant to district challenges and/or assets.
Perceptiveness in linking contextual features with improvement processes and/or outcomes	All 20 cells described accurately and with sufficient detail the way a district either exploited a contextual feature or worked around it.	At least 10 of the 20 cells described accurately and with sufficient detail the way a district either exploited a contextual feature or worked around it.	At least 5 of the 20 cells described accurately and with sufficient detail the way a district either exploited a contextual feature or worked around it.



## Monitoring the Improvement Effort

**Description:** An important role that administrators play in their schools and districts involves monitoring the work of the school-level and/or district-level teams that design and implement instructional improvements. To play this role effectively, administrators need to distinguish teams that are productive from teams that are unproductive. What indicators suggest that a team is working productively? What indicators signal possible difficulties? This activity asks administrator candidates to brainstorm two lists of possible indicators that principals, curriculum specialists, or superintendents might use. One list specifies indicators of productive team functioning; the other specifies indicators of unproductive team functioning.

**Objectives:** (1) the administrator candidate will identify indicators of school improvement teams that are functioning productively and (2) the administrator candidate will identify indicators of school improvement teams that are functioning unproductively.

**Instructions for Faculty:** This small-group brainstorming activity asks administrator candidates to reflect on the case studies presented in *Moving Your Numbers* as a basis for generating a list of indicators showing that a school-level or district-level improvement team is functioning productively. Following this first part of the activity, which depends on careful reading of the case studies, the second part of the activity asks candidates to create another list—this one focusing on indicators of unproductive team work. The lists that each small group generates can then be used as the basis for class discussion. Some indicators that point to productive team functioning include the following: (1) focus on relevant data, (2) commitment to use a set of evidence-based instructional practices, (3) attentiveness to the ideas of all group members, (4) willingness to evaluate the effectiveness of group decisions, (5) careful structuring of meetings, (6)

use of a procedure for monitoring the implementation of agreed-upon instructional practices, (7) development and use of methods to hold all team members accountable for implementing agreed-upon practices, (8) willingness to modify practices based on relevant evidence, (9) commitment to a set of core values, and (10) willingness to stay focused on a small number of “non-negotiable” goals. Some indicators that point to unproductive team functioning include the following: (1) unwillingness to focus the team’s goals, (2) infrequent team meetings, (3) disorganized team meetings, (4) unwillingness to commit to a set of instructional practices, (5) apathy among team members, (6) attentiveness to dominant team members only, (7) inappropriate interpretation of data, (8) failure to implement agreed-upon instructional practices, (9) failure to monitor implementation of agreed-upon practices, and (10) inability to identify or commit to a set of core values.

**Instructions for Candidates:** As an administrator, you will want to assure that your school or district improvement teams are functioning productively. To do so, you will need to be able to tell when a team is functioning productively and when a team is not functioning productively. This activity asks you to analyze the case studies in *Moving Your Numbers* as the basis for distinguishing between productive and unproductive school and/or district improvement teams. First, read all five case studies. Then work with a small group of classmates to generate a list of indicators of productive team functioning. The case studies provide examples of the work of productive teams, so careful reading should reveal a variety of indicators of team effectiveness. The activity also asks your small group to go beyond what’s presented in the case studies as the basis for generating a list of indicators of unproductive team functioning. Perhaps your group will want to share experiences of team work that was less productive or to imagine scenarios of teams that falter for one reason or another.

### Scoring Rubric:

	Accomplished	Proficient	Developing
Thoroughness	Each list includes at least 10 indicators.	Across the two lists, there are at least 12 indicators.	Across the two lists, there are at least 8 indicators.
Relevance	Most of the indicators reflect evidence from the research literature on school and district improvement teams.	At least half of the indicators reflect evidence from the research literature on school and district improvement teams.	At least half of the indicators make intuitive sense, even if they do not appear to reflect evidence from the research literature.

# ACTIVITIES

## Activities Expanding on Content within the Case Studies

### Looking at the Relevant Literature

**Description:** Through a search of empirical literature, small groups of candidates will develop depth of knowledge about several important education practices referenced either explicitly or implicitly in the case studies presented in *Moving Your Numbers*. These practices might include *research-based instructional practice, effective collaboration with teachers unions, cautious use of data, Response to Intervention, co-teaching, formative instructional practice, mastery learning, and/or differentiated instruction*.

**Objectives:** (1) the administrator candidate will perform an ERIC search to identify relevant empirical literature, (2) the administrator candidate will develop depth of knowledge about several important education practices, and (3) the administrator candidate will produce an accurate and concise summary of relevant empirical literature.

**Instructions for Faculty:** The activity involves dividing the class into small groups and assigning one education practice to each small group. Once groups have been formed and topics assigned, candidates should receive instruction showing them how to search the ERIC data base. At some institutions, librarians provide this instruction, while at others faculty members provide the instruction. Candidates can also use

on-line tutorials to learn how to search ERIC (e.g., <http://www.bedfordstmartins.com/Catalog/static/bsm/researchroom/databases/advanced.asp>). Using the set of abstracts produced by their search of the ERIC data base, the group should then use their university's library to obtain copies of the most relevant studies (perhaps 5, 8, or 10 of them, depending on the size of the small group). Once the group has found these studies, group members should determine how to divide up the work of reading and summarizing each study and then combining the summaries of each study into a coherent overview. Each group's final product can either be a written report or an oral presentation summarizing findings from the relevant literature.

**Instructions for Candidates:** First you will learn how to search the ERIC data base. Then you will work with a small group to conduct an ERIC search to find empirical studies relating to the important education practice that your group has been assigned. Your group will use the results of its ERIC search as the basis for gathering relevant resources. Then the group will divide up the work of reading and summarizing relevant studies and combining the summaries into a coherent overview. Depending on the way the professor structures the assignment, the group will share its synopsis of the literature either in a written report or an oral presentation.

### Scoring Rubric

	Accomplished	Proficient	Developing
Relevance of search strategy	The search strategy yielded empirical studies that provided detailed explanations of the value of the educational practice.	The search strategy yielded empirical studies that focused on the value of the educational practice.	The search strategy yielded literature (both empirical and non-empirical) that covered the value of the educational practice.
Depth of knowledge	The studies that the group reviewed contributed to a deep understanding of the educational practice.	The studies that the group reviewed provided important information about the educational practice.	The studies that the group reviewed provided cursory information about the educational practice.
Coherence of synopsis	The synopsis synthesizes and evaluates the evidence about the value of the educational process.	The synopsis describes what is known about the educational practice and what still needs to be learned about the practice.	The synopsis describes the educational practice.
Clarity of synopsis	The writing is clear, concise, and free from errors (e.g., grammar, spelling, diction, etc.).	The writing is clear and concise and includes no more than one error per page (on average).	The writing includes more than one error per page (on average) and includes unclear or wordy sentences or paragraphs.

## Chairing a Building-level Team

**Description:** This activity provides an opportunity for administrator candidates to analyze the role that a principal plays in chairing a building-level improvement team.

**Objectives:** (1) the administrator candidate will distinguish between more and less effective practices for chairing a building-level improvement team and (2) the administrator candidate will use data to identify school strengths and weaknesses.



**Instructions for Faculty:** Assemble relevant school data from a local district (e.g., aggregated and disaggregated achievement data, demographic data). Divide the class into groups of five or six. Ask one member of each group to play the role of principal. The person who plays this role will be the one to chair the building-level team. Assign roles to other members of each group (e.g., two or three might be general education teachers, one might be an intervention specialist, one might be a school counselor, and so on). Once the teams have been established, give each team a packet of school data and ask the members of the team to interpret the data in an effort to identify the school's greatest needs as well as the school's most obvious strengths. The person assigned to the principal role should structure the meeting and guide its progress. Allow the groups to review and discuss the data for approximately 30 minutes. Then ask each group to talk about the role that the "principal" played. What steps did the "principal" take to pull the group together? What did he or she do to maintain

focus, give all participants a chance to share their views, redirect discussion, steer the group away from landmines, resolve conflicts, and so on? Which principal practices were most effective and why? Which were least effective and why? When small groups have finished talking about the role of the "principal," ask each group to share its most important insights.

**Instructions for Candidates:** This simulation asks you to work in a small group to analyze school data. One person will play the role of "principal," and each of the other people in the group will play an assigned role. Following a team meeting that lasts for about 30 minutes, your instructor will ask you to end your discussion of data and turn attention to the role that the "principal" played. Finally, each group will share its insights with the class as a whole.

**Debriefing Questions:** In addition to a discussion of each group's insights, pose the following debriefing questions: (1) What is likely to happen if a principal does not play an active role in structuring a meeting of a building-level improvement team? (2) What is likely to happen if a principal dominates a meeting of a building-level team? (3) How might a principal's actions differ based on the experience level of a particular improvement team (e.g., a newly formed team versus a team that has been functioning for several years)? (4) What actions might a principal take in order to help a team evaluate its own effectiveness?



## Script for Simulated Interaction with a Resistant Teacher

**Description:** This activity provides a starter for a simulated discussion between a principal and a general education classroom teacher who is resistant to inclusion of students with disabilities.

**Objectives:** (1) the administrator candidate will develop active listening skills and (2) the administrator candidate will use assertive leadership techniques to persuade teachers to use inclusive practices.

**Instructions for Faculty:** This activity can be used either as a demonstration to a large group of administrator candidates or as the prompt for structuring a small-group discussion. For a large group demonstration, the faculty members should select two candidates to read the script, which sets the stage for a simulated discussion. Alternately, for a small group of three, two candidates can read the script and then continue with a simulated dialog, while one candidate acts as an observer. Following the large-group demonstration or the small group simulation, the candidates can use the debriefing questions as a basis for reflecting on the issues that the role-play brought to the surface.

**Instructions for Candidates:** Two candidates should read the script aloud to start a discussion between a resistant teacher and a principal. Once the readers come to the end of the script, the two should continue to improvise the rest of the discussion, with the teacher expressing resentment at being asked to differentiate instruction and the principal using active listening and assertive leadership skills in order to persuade the teacher of the importance of including students with disabilities in the general education program and of differentiating instruction on their behalf.

### Script:

**Mrs. Baker:** I'm wondering if we could talk about some alternative placements for four students who have been placed this year in my third period section of Biology.

**Principal:** Certainly. What seems to be the problem?

**Mrs. Baker:** Well, I know we're supposed to be doing inclusion, but these students just don't have the skills to keep up. All of them are in the LD program, and they can't read the book, answer questions in class, or do the homework. They don't belong in the general education program. They'd be much better off with the LD teacher giving them their science instruction.

**Principal:** I hear you saying that you are frustrated by having some students in your class who aren't keeping up.

**Mrs. Baker:** I'm frustrated because these students don't belong in my biology class.

**Principal:** I also heard you acknowledge awareness that our school has adopted an inclusion model. It sounds like you might disagree with that approach.

**Mrs. Baker:** I guess you're right. I never would have voted for an inclusion model if we'd been able to vote.

**Principal:** I can understand your perspective. It's a common point of view among high school teachers. Let me remind you, though, about why we moved to an inclusion model and how it's supposed to work...

**Debriefing Questions:** (1) What does Mrs. Baker hope to accomplish by talking to the principal? (2) How and why does the principal reframe the purpose of the conversation? (3) Why does the principal start off the discussion with an "active listening" approach? (4) How can the principal help Mrs. Baker end up "buying into" the inclusion model rather than simply complying with it?



## Script for Simulated Discussion with a Fearful Parent

**Description:** This activity provides a starter for a simulated discussion between a principal and a parent who is afraid to allow his or her child to participate in activities within a general education classroom.

**Objectives:** (1) the administrator candidate will gain appreciation for the complex perspectives of parents of children with disabilities and (2) the administrator candidate will talk sympathetically yet persuasively to a concerned parent of a child with disabilities.

**Instructions for Faculty:** This activity can be used either as a demonstration to a large group of administrator candidates or as the prompt for structuring a small-group discussion. For a large group demonstration, the faculty members should select two candidates to read the script, which sets the stage for a simulated discussion. Alternately, for a small group of three, two candidates can read the script and then continue with a simulated dialog, while one candidate acts as an observer. Following the large-group demonstration or the small group simulation, the candidates can use the debriefing questions as a basis for reflecting on the issues that the role-play brought to the surface.

**Instructions for Candidates:** Two candidates should read the script aloud to start a discussion between a distressed parent and a principal. Once the readers come to the end of the script, the two should continue to improvise the rest of the discussion, with the parent expressing fears and the principal trying to allay those fears.

### Script:

**Principal:** Good morning, Mr. Smith. Welcome to Oak Elementary School. We are very pleased to have Nicky here this year. We think his adjustment has been very successful. Our teachers are finding ways to include him in as many activities as possible.

**Mr. Smith:** Well, actually, that's why I'm here. My wife and I are concerned that the regular sixth grade is too scary for Nicky. He doesn't seem to have any friends, and he doesn't like having homework. We think he should be back in the self-contained room for special kids.

**Principal:** I can understand your concern, Mr. Smith. Nicky has been in a very good special education placement, and he has learned a great deal there. Making a change is difficult. We are watching his adjustment, though, and Mrs. Clay, the special education consultant is providing suggestions to the teachers who are working with Nicky. Here at school, we think things are going well.

**Mr. Smith:** That's really not what we want to hear. I know my rights, and Nicky belongs back at the Lakewood Center. My wife and I know that's the best place for him. He'll never be able to function on his own when he grows up, so why do we have to pretend that he can function on his own in the sixth grade classroom?

**Principal:** ...

**Mr. Smith:** ...

**Debriefing Questions:** (1) Why was Mr. Smith concerned? (2) In what ways was his concern legitimate? (3) In what ways might it have been misguided? (4) Why did the principal want Nicky to stay in the general education classroom? (5) In what ways was this perspective legitimate? (6) In what ways might his perspective have been misguided? (7) What were the most persuasive points that the principal made? (8) What were the most persuasive points that Mr. Smith made? (9) What was the outcome of the discussion? (10) Was it a good outcome? Why or why not?



# GLOSSARY OF TERMS

**Academic Knowledge and Skills Curriculum (AKS) (p. 56):** Gwinnett County, Georgia's curriculum for K-12 students. As the website indicates, teachers developed the curriculum with input from parents and community beginning in 1995. For more information visit <http://www.gwinnett.k12.ga.us/aks.nsf/pages/AKSHOME>

**Accountability designations (p. 8):** In the state of Ohio these categorizations of school performance rely on four measures used to assess school effectiveness. The four measures include (1) the Performance Index (PI), (2) Adequate Yearly Progress (AYP), (3) State indicators, and (4) a value-added indicator (see separate entries in the glossary for each of these terms).

**Accountability Task Force (p. 18):** In Lake Villa School District the Accountability Task Force refers to the team of teachers, principals, central office personnel, community members, parents, and others (established in 2006) who work together to identify a limited number of district goals and a coordinated set of district-wide, central office, and school indicators for improvement and accountability.

**ACT Quality Core (p. 13):** A set of high school reading, writing, speaking, and listening; language; math; social studies; and science standards that are aligned to the Common Core State Standards. For more information visit <http://www.act.org/qualitycore/>

**Achievement gaps (p. 4):** "Achievement gaps occur when one group of students outperforms another group, and the difference in average scores for the two groups is statistically significant." (<http://nces.ed.gov/nationsreportcard/studies/gaps/>)

**Align/alignment (p. 10):** The process of connecting curriculum with standards and/or test content. Schools can base alignment on any set of standards or any achievement test. Also see entries for horizontal alignment and vertical alignment.

**Assessment trend data (p. 8):** The patterns of school performance that become evident over time through examination of multi-year scores from achievement tests and other relevant measures.

**Association of School Business Officials (p. 43):** An international association with state-level affiliates in the United States that provides programs and services to support the business management of schools and school district. For more information see <http://www.asbointl.org>

**AYP (Adequate Yearly Progress) (p. 7):** "A measurement defined by the United States federal No Child Left Behind Act that allows the US Department of Education to determine how every public school and school district is performing academically according to results on standardized tests." ([http://en.wikipedia.org/wiki/Adequate\\_Yearly\\_Progress](http://en.wikipedia.org/wiki/Adequate_Yearly_Progress))

**Benchmarks (p. 19):** Targets for the attainment of instructional goals at the classroom, school, or district level.

**BLT (Building leadership teams) (p. 21):** Teams comprised of school administrators, teacher leaders, and other relevant stakeholders who meet regularly to plan and monitor school improvement processes. BLTs differ by school based on site-specific needs.

**BPS Continuous Improvement Model (p. 46):** Brevard Public Schools' system for planning and implementing continuous improvement processes. Use of the model is one of three indicators of the district's progress.

**Brevard's Effective Strategies for Teaching (BEST) (p. 47):** Initiated in 2009, BEST is a research-based professional development program. Beginning in 2011, the BEST program will incorporate elements of lesson study and effective use of formative assessment.

**Buckeye Association of School Administrators (BASA) (p. 29):** Ohio's state-level affiliate of the national professional association whose members are local superintendents of schools. The national organization is the American Association of School Administrators (AASA).

**CCSSO (Council of Chief State School Officers):** A professional organization whose members include the chief executives of all state education agencies across the United States and its territories.

**Central Office Administrative Team (COAT) (p. 20):** In Lake Villa school district this team comprised of the superintendent, assistant superintendent, special education director, and business manager meets regularly to district improvement needs and initiative.

**CIP (Continuous Improvement Plan) (p. 11):** A written document summarizing decisions regarding school or district improvement that result from an on-going process of using data to improve performance.

**Collective ownership (p. 18):** The perspective of a group of educators who engage in collaborative planning and make a commitment to employ particular instructional practices.

**Common Core State Standards (CCSS) (p. 10, p. 13):** A set of academic standards developed by the United States Department of Education and adopted on a voluntary basis by a number of state education agencies.

**Comprehensive Accountability Plan (p. 18):** Shared-accountability plans adopted by the Learning Teams (i.e., the Professional Learning Communities) in Lake Villa School District.

**Core academic subjects (p. 17):** The academic subjects that federal and state governments determine to be most important for students' eventual adult functioning. Currently, language arts, mathematics, science, and social studies constitute the core academic subjects in most states.

**Core values (p. 11):** The fundamental beliefs underlying the practices that a school or district adopts in order to promote improved processes and outcomes.

**Culture of inquiry (p. 20):** An established approach to educational planning and decision-making that combines systematic use of various types of data with the collective adoption and testing of evidence-based instructional practices. The aim of such a culture of inquiry is to foster continuous improvement of educational performance.

**Data-driven needs assessment (insert p. 2):** The use of one or more measures to identify the needs for educational programs or services. Formal needs assessments can be used to identify the needs of any educational unit (classroom, school, district, intermediate unit, state), but they are most often used at the school or district level.

**Data teams (p. 61):** Another term for Professional Learning Communities or Teacher-based Teams.

**Defined autonomy (p. 56):** This phrase is used by Gwinnett Public Schools to explain the roles of principals and school leadership teams in taking responsibility for meeting district expectations.

**District Report Card (p. 26):** A term used in various states to refer to a document that the state education agency disseminates annually in order to communicate information to stakeholders about district-level performance.

**DLT (District Leadership Team) (p. 15):** A term used in some states to describe the group of district and school leaders, teachers, and other constituents that meets routinely to plan and monitor district-level improvement efforts.

**Double instruction (p. 12):** The practice of providing twice the amount of instruction to students in certain crucial academic subjects, such as reading and math. Some schools provide double instruction by enrolling students simultaneously in two courses within the same academic content area (e.g., an Algebra I class and an applied mathematics class).

**ED (Economically Disadvantaged) (p. 10, p. 17, p. 62):** A category for classifying students whose families' limited financial resources may contribute to learning challenges. Typically, states base operational definitions of ED on federal requirements for student eligibility for subsidized meals (i.e., free and reduced lunch).

**Efficacy (p. 23):** The degree to which an educator believes his or her professional practices will result in desired educational outcomes. This belief might apply to an individual educator (i.e., individual efficacy) or it may be shared among a group of educators (i.e., collective efficacy).

**Elements (p. 60):** A program used in Gwinnett County Public Schools that "allows teachers and others to determine on which standards students are successful at the indicator level." The indicator level is the minimum level of acceptable performance.

**ELL (English Language Learner) (p. 22):** A student in an English-speaking school whose native language is something other than English.

**End of course (EOC) exam: (p. 13, p. 60):** An approach used in some states in lieu of or in addition to achievement tests to measure the performance of middle- and/or high-school students once they have completed a semester-long or year-long course such as "Algebra I" or "Biology."

**ESC (Educational Service Center) (p. 7):** The term used in Ohio to refer to "intermediate units"—education agencies that liaise between the state education agency and the local education agency (i.e., district). In many states, intermediate units provide technical assistance to local districts or offer programs that are too costly for individual districts to provide, but that become affordable when they are offered as shared services.

**Exceptional Student Education (ESE) (p. 43):** A term used in Florida to refer to programs for the education of students with disabilities.

**Extrinsic motivation:** The desire to engage work and complete tasks in anticipation of an external reward. Contrast with definition of intrinsic motivation.

**Fidelity of Implementation (p. 25):** The degree to which teachers follow a specified instructional protocol. Educational theorists and researchers are divided over the value of fidelity of implementation in comparison to the value of inventive teaching.

**Florida Assessment for Instruction in Reading (FAIR) (p. 47):** A Florida-specific assessment given three times per year in elementary schools in the Brevard Public Schools.

**Florida Comprehensive Assessment Tests (FCAT) (p. 43):** Florida's state-adopted measure of student achievement of the "Sunshine State Standards."

**Florida Diagnostic and Learning Resources System (p. 51):** A statewide network designed to provide support for exceptional education teachers, general education teachers with ESE (i.e., students with disabilities), parents, and agency personnel.

**Florida Kindergarten Readiness Screener (FLKRS) (p. 47):** An assessment given in the Brevard Public Schools to determine school readiness.

**Formative assessment (p. 10):** Teachers' use of on-going, often informal measures to improve the accuracy of decisions about instruction for individual students and groups of students.

**GCPS Quality-Plus Teaching Strategies (p. 61):** A collection of research-based instructional strategies used by each school in the Gwinnett County Public School district. "These strategies are cross-content strategies that are used to facilitate student engagement and the consistent integration of reading, writing, and mathematics into all content areas."

**Horizontal alignment:** Refers to the process of aligning curriculum and assessments in response to a given set of standards across departments within a particular grade level.

**HQPD (High Quality Professional Development) (p. 10):** A term referring to professional development that is focused, sustained, and subject to on-going evaluation.

**HQT (Highly Qualified Teacher) (p. 10):** A teacher "who is fully certified and/or licensed by the state, holds at least a bachelor's degree from a four-year institution, and demonstrates competence in each core academic subject area..." (<http://www.dpi.state.nc.us/nclb/highly/faqs/>)

**IEP (p. 10):** An acronym standing alternately for Individual Education Plan or Individualized Education Program. These plans specify the educational goals and instructional services for a student with disabilities.

**Illinois Standards Achievement Tests (ISAT) (p. 19):** Illinois' required tests of achievement, assessing reading and mathematics in grades three through eight and science in grades four and seven.

**Implementation gap (p. 4):** Gap between the instructional strategies adopted by a school or district and the use of those strategies in classrooms.

**Indicator (p. 18) (see also Results indicator):** Measurements that provide evidence of performance.

**Intrinsic motivation (p. 17):** The desire to engage work and complete tasks because of the inherent value of the work or tasks. Contrast with definition of extrinsic motivation.

**K-12 Literacy Framework (p. 34):** A Wooster City School initiative for the improvement of reading and writing through the implementation of district-wide practices and related professional development.

**K-12 Literacy Plan (p. 51):** One of two district-wide initiatives used in the Brevard Public Schools; it establishes common expectations for literacy among all children in the district's schools.





**School Improvement Plan (SIP) (p. 45):** A set of strategies, designed to address a limited set of goals, that a school implements in order to build sustained improvement in student academic performance, often aligned with district-level improvement plans.

**Secondary Schools of National Prominence (pp. 51-52):** An initiative in place in the Brevard Public Schools to identify “strategies for ensuring that every child would be career, workforce of college ready.”

**Shared responsibility:** “A departmental or programmatic orientation to a more collaborative organization where adults at all levels of the education enterprise work together to build each other’s capacity around the common goal of supporting the learning of all student groups at significantly higher levels” (p. 4).

**Short cycle assessment (p. 8, p. 10):** Assessments given at commonly decided intervals (e.g. every four weeks, every nine weeks, and so on) in order to gauge student progress and guide instruction accordingly. In some cases, schools align these assessments with the state’s accountability exams.

**Silos (p. 43):** Refers to the insulation of different units within a school or district. For example, the math department in a school can become a silo if the math teachers never interact with teachers in other departments.

**Special education students (p. 5):** Refers to students identified as having special instructional needs that call for the creation of an Individualized Education Plans (IEPs). The term is commonly used to refer to the federal categories of exceptionality (e.g., serious emotional disturbance, learning disability) but not to giftedness.

**SST (State Support Team) (p. 7):** Ohio’s coordinated structure for providing technical assistance for the support of school improvement teams at individual schools

**State indicators (p. 8):** Measurements that provide evidence of a state’s educational performance.

**Stewardship (p. 56):** The practice of managing resources carefully, with sustainability in mind. (See also <http://www.merriam-webster.com/dictionary/stewardship>.)

**Strand area (p. 59):** A focused area of learning (such as vocabulary or mathematical operations) that can be woven into the content of various courses across a curriculum.

**Strategic Priorities (p. 55):** In Gwinnett County Public Schools, a focused set of desired district characteristics developed through consensus among a variety of stakeholders. The ten components addressed in the Strategic Priorities are linked to each school’s individual improvement plan.

**Subgroup data (p. 35):** Data from short- or long-cycle assessments that pertains to the performance of particular subpopulations within a given population group. For example, in a fifth grade classroom, a teacher might want to compare the performance of students on free- and reduced lunch with those who are not in that group. Another term for subgroup data is “disaggregated data.”

**Suburban (p. 17):** According to the National Center for Education Statistics, “suburban areas are categorized as those portions of metropolitan areas that are situated outside central cities.” (<http://nces.ed.gov/programs/crimeindicators/crimeindicators2009/glossary.asp>.) Each district and school has a locale code based on its classification. (See the search engine at <http://nces.ed.gov/ccd/districtsearch/> for district searches or <http://nces.ed.gov/ccd/schoolsearch/> for school searches.)

**SWD (Students with Disabilities) (p. 57):** The abbreviation for Gwinnett County Public School’s term for the subgroup of students who receive special education services.

**TBT (Teacher Based Team) (p. 30):** The term used in Ohio to refer to school-level Professional Learning Communities (PLCs).

**Trend data (p. 10):** Student achievement data that are gathered and assessed over time. These data can demonstrate the performance of an individual student or of a group of students.

**Universal Design Principles (p. 60):** A set of instructional beliefs and strategies used by Gwinnett County Public Schools to attend to the learning needs of individual students. More information about Universal Design for Learning can be found at <http://www.udlcenter.org/aboutudl/udlguidelines>.

**Urban (p. 56):** According to the National Center for Education Statistics, “urbanized areas and urban clusters are densely settled cores of census-defined blocks with adjacent densely settled surrounding areas.” (<http://nces.ed.gov/surveys/urbaned/page2.asp>.) Each district and school has a locale code based on its classification. (See the search engine at <http://nces.ed.gov/ccd/districtsearch/> for district searches or <http://nces.ed.gov/ccd/schoolsearch/> for school searches.)

**Value added (p. 8):** A term borrowed from the field of microeconomics; in the field of education it refers to the practice of measuring teacher or school performance based on student achievement gains over time, usually yearly.

**Vertical alignment:** Refers to the process of aligning curriculum and assessments in response to a given set of standards within a department across a range of grade levels.

**Vertical team (Insert, p. 1; p. 40):** A team of teachers that meets to discuss relevant data, curriculum issues, instructional practices, and assessments pertinent to one discipline (or subject area) across multiple grade levels.

**Vision (p. 10):** A statement orienting a school or district to its desired level of instruction and student performance. It is typically derived through a process of engaging stakeholders and then becomes the focal point guiding school and district improvement efforts.

**Waiver day (p. 14):** A term used in Ohio to refer to a professional development day for which teachers are paid their regular salary.

**Walk-throughs (p. 40):** The practice of observing teaching in classrooms based on a rubric or protocol that focuses on a particular set of instructional strategies. This approach can be more or less formal and more or less administrative in purpose.



# ANNOTATED BIBLIOGRAPHY OF RESOURCES ALIGNED WITH THE SIX KEY PRACTICES

Buffum, A., Mattos, M., & Weber, C. (2012). *Simplifying Response to Intervention: Four essential guiding principles*. Bloomington, IN: Solution Tree Press.

Providing useful recommendations for implementing Response to Intervention, an experienced team of educators focuses on essential practices for making this potentially complicated strategy work effectively. Their recommendations not only reflect up-to-date research, they also respond to the practical concerns of the school personnel with whom they have worked either as teacher colleagues, administrators, or, in more recent years, consultants. The book starts by reminding readers of the true purposes of education and by reiterating a fundamental premise about the nature of learning, namely that learning requires targeted instruction plus sufficient time. Discussion then moves on to the four principles of the authors' simplified version of RtI: collective responsibility, concentrated instruction, convergent assessment, and certain access. As it turns out, this simplified approach to RtI relies on data teams, focused goals, evidence-based instructional methods, and shared accountability—practices that the *Moving Your Numbers* districts also draw on in order to provide high quality education to all students. The book's approach to RtI also requires educators to become skilled at differentiating instruction to meet the needs of individual learners as well as to remain committed to differentiating instruction even when the needs of certain learners challenge them to abandon familiar instructional methods in favor of new, more effective alternatives.

Keywords: Response to Intervention, differentiating instruction, data teams, focused goals, shared instructional practices, inquiry and learning, inclusion

Hehir, T., & Katzman, L.I. (2012). *Effective inclusive schools: Designing successful schoolwide programs*. New York: John Wiley & Sons.

This book reports on a study of three urban and two suburban schools that are known for their inclusive practices. Although each is different from the others, all are notable for their records of high performance. Drawing on practices used at these schools, the authors show how a collaborative culture facilitates sustainable inclusion leading to the improved academic performance of all students. Chapters on leadership and the policy environment make this book particularly useful for candidates in administrator preparation programs. Detailed descriptions of specific practices, such as Response to Intervention, also enable candidates in teacher preparation programs to see what various practices look like when they are implemented in actual schools.

Keywords: shared instructional practices, inquiry and learning, inclusion, collaboration, Response to Intervention

Holcomb, E. (2011). *Data dynamics: Aligning teacher team, school, and district efforts*. Bloomington, IN: Solution Tree Press.

A resource useful for educational leaders in particular, this book offers practical guidelines for helping a school or district make structural and cultural changes to support data-driven decision making. Including illustrative examples, such as agendas and checklists, the book explains how teams of educators can use data to increase the achievement of all students. Although the book does not explicitly focus on students with disabilities, it does address the problem of achievement gaps by emphasizing “achievement for all.” Chapters 1, 2, 5, 6, 7, 9 and 10 are the ones that may be helpful primarily to building and district leaders. Chapters 3, 4 and 8 seem relevant to the concerns of teacher teams as well as those of administrators.

Keywords: data-based decision making, using data well, inquiry and learning

Kunkel, S.H. (2012). *Advancing co-teaching practices: Strategies for success*. Cromwell, CT: Cromwell Consulting Services.

This sourcebook provides practical guidance for addressing a variety of potential challenges associated with co-teaching. These challenges relate to communication, arrangement of physical space, classroom management, instructional planning, instructional delivery, and assessment. The book provides an assortment of practical suggestions relating to each challenge. Although readers may find certain features of the book somewhat frustrating—in particular the sketchy overviews at the beginning of each chapter and the patronizing “recipes” for effective co-teaching practice, teacher and administrator candidates should appreciate the tools that the author shares. Especially useful are the chart to help teachers identify their co-teaching stage coupled with strategies for use at each stage.

Keywords: shared instructional practices, inquiry and learning, collaboration, co-teaching

Lezotte, L.W., & Snyder, L.M. (2011). *What effective schools do: Re-envisioning the correlates*. Bloomington, IN: Solution Tree Press.

The “Effective Schools” research of the 1970s and 1980s was perhaps the first set of investigations positioned to identify the educational practices common across high-achieving schools that served large numbers of low-income students. Criticized by some for its focus on outliers, this body of research nevertheless provided guidance to schools that wanted to improve achievement despite significant challenges. From a birds-eye perspective, the effective schools research might look like the first step in a 40-year quest to discover the practices needed to promote high achievement while at the same time closing achievement gaps. First author, Larry Lezotte, one of the notables among effective schools researchers of the 1970s and 1980s, no doubt took this birds-eye perspective when deciding to revisit the correlates of effective schools in light of more recent work on educational reform. Do the correlates stand the test of time? Lezotte believes they do, and, in this book, he and his co-author update findings about the effective-school correlates in consideration of important changes in the education landscape, namely the increased focus on accountability and the more current interest in fostering systemic rather than school-by-school reform. Even though the landscape has changed, educators who are steeped in current strategies for school improvement will find that many of the effective-schools correlates are remarkably familiar: in particular, high expectations, focused goals and strategies, instructional leadership, and frequent monitoring of student performance. Administrator candidates may find this book especially useful for the work of distinguishing between transitory reform initiatives (i.e., fads) and durable reform strategies.

Keywords: high expectations, instructional leadership, focused goals, using data well, shared instructional practices, deep implementation

McNulty, B.A., & Besser, L. (2011). *Leaders make it happen! An administrator's guide to data teams*. Englewood, CO: The Leadership and Learning Center.

Grounded in the work of Ohio districts that have adopted a structured improvement process, this book describes a reform strategy with two major features: collaboration and data-driven decision-making. Central to the strategy are data teams at the district level, school level, and teacher level. Although a district's teams are all connected, each pays attention to the data that relate to its specific improvement targets. Furthermore, the team remains focused on a limited set of goals and strategies, works collaboratively to identify effective instructional strategies, implements instructional strategies deeply and monitors their use, and engages in continuous inquiry and learning. Bringing together a wide range of recommendations from recent literature on school reform, McNulty and Besser's work represents a practical synthesis of effective practices. Not only does the book review this literature, it also describes how a collaborative, data-driven improvement process can actually work. This description focuses on both the processes of collaborative improvement and the relevance of different kinds of data to the work of school improvement. The ideas presented in *Leaders Make it Happen* are likely to sound familiar to readers of *Moving Your Numbers* because the books share common inspiration in the work of the districts in Ohio that pioneered the use of the strategy that McNulty and Besser advocate.

Keywords: data-based decision-making, focused goals, using data well, shared instructional practices, inquiry and learning, collaboration, deep implementation



**Available *MOVING YOUR NUMBERS* Publications:**

- **Administrator Preparation Guide: Using Assessment and Accountability to Increase Performance for Students with Disabilities as Part of District-wide Improvement.**
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