

Strengthening Your School's Accountability Plan
A Technical Assistance Manual for Cleveland Community Schools*

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Introduction

This manual will help schools design and implement frameworks for systematic evaluative inquiry that will satisfy the demands of both external accountability and internal decision making and continuous improvement. It is designed to supplement and extend the information provided to Cleveland Community Schools* in the technical assistance workshops and accompanying School Evaluation Kit, as well as serve as a resource for any school seeking to strengthen its accountability and self-evaluation capacity. The manual provides both the important theoretical concepts and the concrete strategies schools need to put effective accountability and self-evaluation systems in place. The core of the manual is a 10-step process for designing, implementing, and communicating an effective school accountability plan. Each step in the process includes both general advice and strategies and more specific resources such as checklists and tools that schools can use to work through the step.

The 10 steps in this manual take schools through data collection and analysis all the way to the development of their annual report. Three additional steps will be covered in the companion manual, *Institutionalizing Evaluation in Schools: Becoming a Learning Organization through Data-Based Decision Making*. These additional steps emphasize how schools can take their accountability plan from a once-a-year event to an ongoing self-evaluation process, a framework for continuing dialogue and systematic inquiry about what the school does and how it could do it better.

Before getting into the specifics of developing and/or strengthening an effective school accountability plan, this introduction briefly touches on three questions that schools may have about the accountability process and the purpose of these manuals:

- (1) What is accountability?
- (2) Why focus on strengthening accountability?
- (3) How is accountability different in charter schools?

(1) What is accountability?

For most educators, accountability is not a word with positive associations. Most often, “accountability” is linked with “reporting” (and specifically with test scores), with boiling down all the complexity of the teaching/learning process into a few stark numbers, which are then used to rank and judge and criticize schools and educators rather than to improve outcomes for students. Too often accountability reporting is a one-way communication over which school-level educators have little control or ownership. This manual emphasizes strongly that accountability does not have to be a blame game but should be a framework for dialogue about how to make schools work better. At the heart of accountability is the concept of responsibility, of professional educators defining and pursuing a vision of student learning, assessing the results of their efforts, and taking ownership for improving them. Although “count” is at the root of the word, *true accountability goes beyond simply counting results to taking responsibility for doing something about them.*

To get beyond this general definition to a more concrete sense of what accountability means for your school, it may help to answer the following questions:

- To *whom* are we accountable?

* In Ohio, charter schools are known as “community schools.” However, throughout this manual, we use the more general term “charter schools.”

Answering the “who” question requires you to consider both the external and internal aspects of accountability. External accountability involves formal reporting relationships to outside bodies such as the authority that granted your school’s charter, the district, and the state. Internal accountability involves honoring the commitments you have made with everyone who is a part of your school’s efforts: governing board, administrators, teachers, parents, and students.

- **What** are we accountable for?

Answering the “what” question requires translating your school’s mission statement into the specific outcomes you are working to achieve with students and agree to have your work valued by.

- **How** will we demonstrate our accountability?

Answering the “how” question means defining how you will measure progress toward those outcomes and committing to use that information to continuously improve performance.

The action steps that follow in this manual will help you answer these questions much more concretely. As you begin to think about them now, keep in mind that true accountability, because it involves ownership and follow-through for improving outcomes, is an ongoing process, not a one-time event.

(2) Why focus on strengthening accountability?

Unlike traditional public schools, charter schools literally live or die by accountability. Given that the continued existence of a charter school can hinge on how compelling its accountability report is, most charter schools probably need little encouragement to make their accountability process as effective as possible. Even with these powerful incentives in place, too many schools find participation in evaluation or accountability processes to be a frustrating experience. In some cases they may perceive the process to be busywork, imposed on them from above and casting little light on the questions that are truly important at the site level. In other cases schools may find accountability systems actively unfair because they make judgments based on externally defined goals rather than on the specific goals the school is working toward with students. The steps presented in this manual will allow you to define and build your own systematic accountability process rather than simply following a standard template. This allows you to take control of the dynamics of accountability and produce both more actionable information about your weaknesses and more concrete and meaningful information about your successes.

(3) How is accountability different in charter schools?

As noted above, accountability takes on a special urgency in charter schools because of the possibility that the school can be closed if it does not perform up to expected levels. Accountability is one side of the essential “bargain” that defines charter schools: in exchange for increased autonomy over the process of education, charter schools agree to increased accountability for results. This central bargain gives accountability a unique role in charter schools, creating special opportunities for an effective accountability process to contribute to the school’s success:

- Because they are starting with a blank slate, charter schools are better positioned than traditional schools to concretely specify the educational outcomes they seek and the strategies they will use to get there. In schools with years of history and no formal accountability for results, outcomes and strategies are often taken for granted and not clearly defined.
- Because charter schools are held accountable for their results, not the process they follow, they have an opportunity to use the accountability process to focus on performance, not compliance with regulations.

- Because educators and families are in a charter school by choice rather than assignment, there is likely to be greater agreement about the school's core goals, making for a more focused accountability process.
- Because charter schools define the outcomes they agree to be held accountable for, they have an opportunity to move beyond standardized test scores as the sole measure of school performance and model how valid alternative assessments can be used to assess performance on a richer array of learning outcomes.
- Because of the central role accountability and competition play in defining charter schools, charters have the opportunity to model for the rest of the public education system how accountability can be used, not just to judge schools, but to leverage improvement.

All of these reasons create the potential for the accountability process to be uniquely effective in generating insight and powerful in driving improvement in charter schools.

Characteristics of an Effective Accountability Plan

Whether your school is just beginning to construct an accountability system or you have been through the cycle of data collection and reporting one or more times and wish to step back and assess the effectiveness of your work, it is helpful to start with a broader perspective on proven practices for making the most of school accountability plans. The following checklist of “Characteristics of an Effective Accountability Plan,” is based on an extensive review of the literature on school accountability plans (see the RESOURCES section of this manual for citations of specific reports, articles, and books that you may find useful). Most of the resources reviewed to put together this checklist look at accountability from the school level. In other words, rather than defining accountability from the point of view of the state, district, or charter authorizers, this list is meant to help individual schools design accountability plans that work for them.

Start by reading through the checklist and thinking about how well each characteristic reflects what your school is doing or plans to do in terms of accountability. Each characteristic is explained in greater detail in the section below. These explanations will give you a framework for assessing how well your school's accountability system matches with these proven strategies and for envisioning specifically what you need to do to strengthen the effectiveness of your plan.

Checklist: Characteristics of an Effective School Accountability Plan

- ✓ Serves both accountability and improvement purposes
- ✓ Becomes a built-in process, rather than a singular event
- ✓ Clearly spells out the school's obligations to its authorizers and how those will be measured
- ✓ Embodies expectations that are both reasonable (challenging but attainable) and measurable
- ✓ Is teacher-driven and generates information that is relevant to classroom practice
- ✓ Has goals that are focused on student learning
- ✓ Provides for multiple measures of key goals (key decisions do not hinge on a single test score)
- ✓ Rooted in a shared understanding (by both internal and external stakeholders) of what the school is trying to measure and why
- ✓ Provides a common language and conceptual framework about the school's goals and strategies
- ✓ Supported by appropriate infrastructure (training, information systems, schedule changes to allow teachers time to work together, etc.)
- ✓ Provides timely information for decision making
- ✓ Sheds light not just on *what* the school is doing but *how* (includes inputs, process, and outcomes)
- ✓ Contains built-in mechanisms for communication and use of findings

✓ **Serves both accountability and improvement purposes**

An effective school accountability plan is not a ritual performed solely for the benefit of external audiences. If gathering and reporting data is perceived to be just a hoop to jump through, if school staff do not perceive the process to be meaningful and relevant to them, the data generated are unlikely to give a true picture of the school to anyone, inside or outside. By definition, accountability plans must produce data that help outsiders assess how well the school is performing.

This external purpose of the accountability plan is particularly crucial for charter schools, whose very survival may depend on how convincing those data are. But just because the plan meets the needs of external audiences doesn't mean it has to be irrelevant to the internal audience of the school's teachers, administrators, and parents. With careful planning, an accountability plan can be designed around indicators that are helpful not just in *judging* the school's performance but also in *improving* it. For this dual function to happen, however, the needs of both internal and external audiences need to be considered at the outset when designing the accountability plan and deciding what kinds of data to gather. It is much more difficult to take data that were gathered for one purpose alone (external reporting) and then try to make use of them for another (internal improvement planning). It is important that teachers be involved in designing the plan so that it will reflect the questions they most want answered and the information they most need to do their jobs better (*see Step #1 for ideas about identifying the potential users and uses of your accountability plan*). Given the commitment of time and effort necessary to produce good accountability data, it makes sense to plan from the beginning for the data to be used within the school, not just handed over to outsiders. Also, if school staff believe from the beginning that these data will be useful to them, they will be far more committed to the process, increasing the quality of the information produced.

✓ **A process, not an event: becomes built into school functioning**

Similarly, an effective accountability plan is not a mad, once-a-year scramble to generate whatever numbers are required to be reported to external authorities. If an accountability plan is designed with internal improvement purposes in mind, it can serve as a framework for ongoing discussion about the school's progress. By investing the time to reach consensus about what progress indicators are most important, school staff develop a common language for talking about how well they are doing and how they can do even better. The indicators then serve as guideposts for regular conversations—formal and informal—about school performance, becoming part of the way people do and talk about their jobs. The school staff can use the indicators throughout the year to “take its (school's) temperature” and then use that diagnostic information to make any changes they think are necessary to stay on track toward their goals. When the time comes to report the accountability data externally, there are no nasty surprises and school staff feel comfortable that the data accurately reflect what they have been working toward all year.

✓ **Clearly spells out the school's obligations to its authorizers and how those will be measured**

To serve its external accountability function effectively, it is important for an accountability plan to be as clear and specific as possible about *what* the school is being held accountable for and *how* it is being held accountable. The bottom line is that both the school and its authorizers should understand up-front what will be required for the school's charter to be renewed, both in terms of what goals the decision will hinge on (*indicators- See Step #4*) and how good is good enough (*performance levels- See Step #5*). With everything else involved in starting and running a new school, it may be tempting to leave that bottom line fuzzy. Putting promises in black and white for the world to see can be intimidating. Even authorizers, at this early stage, may not push schools to go beyond presenting a mission statement and agreeing that renewal will depend on attaining that mission. Ultimately, however, leaving goals at the very general level of a school mission statement does no one any favors. The authorizer and the school may have very different interpretations of how that broad mission should be translated into specific goals and measured. Leaving those different assumptions unspoken until the renewal process begins is bound to lead to hard feelings, if not

litigation. For charter schools, specifying measurable indicators and performance levels up-front in their accountability plan, although scary, has three critical advantages.

- First, it helps the school set the terms of debate for its own renewal rather than waiting for the unspoken assumptions of the authorizers to be revealed.
- Second, the clearer the up-front goals, the better the school can focus its efforts on the things that matter most for its continued existence.
- Third, clear goals allow the school to set milestones and check their progress along the way, reducing the “all or nothing” terror of submitting its final accountability report at the end of the charter period.

✓ **Embodies expectations that are both reasonable (challenging but attainable) and measurable**

Effective accountability goals strike a balance between being exciting and challenging enough to make the school a compelling educational choice and being realistically attainable within the charter period. On the one hand, goals need to be ambitious enough to warrant the school's existence relative to other schools and to motivate administrators, teachers, parents, and students to want to be a part of the school and to work hard toward attaining the goals. On the other hand, goals that are unrealistically ambitious, given the school's resources and the time frame of the charter, will quickly lead to cynicism, burnout, and frustration. Charter schools seem much likelier to err on the overly ambitious side, but it is important not to “promise the moon” when caught up in the excitement of envisioning a new school. The balance between ambition and attainability is a delicate one to strike, but vital for the school's functioning and ultimately its survival. “Reality checking” the goals with experienced educators who have no stake in this particular school may help. Making sure the goals are measurable also helps strike the right balance by forcing everyone involved in the accountability plan to answer specific questions about goals, such as “How will we know it when we see it?” and “How good is good enough?” Of course, making the goals in an accountability plan measurable is also important in its own right. If a school agrees to be held accountable for goals that are not measurable, it becomes vulnerable to the subjective perspectives and interpretations of authorizers who may have very different understandings of the goals at stake. *See Step #2 for specific strategies for defining the goals that anchor your accountability system.*

✓ **Is teacher-driven and generates information that is relevant to classroom practice**

School staff are much more likely to put forth the considerable effort required to generate high-quality accountability data if they have a genuine stake in the process and are not simply doing it for the benefit of outsiders. Teachers need to see from the outset how the data will help them do their jobs. Thus, teachers must be involved in designing the system to ensure that it reflects what they believe are the most educationally significant indicators. Teachers are often frustrated that the standardized tests used to judge their students' performance (and therefore their own) do not fully reflect the learning going on in their classrooms. Getting involved in the design of their school's accountability plan gives teachers more control over what they will be held accountable for. Realistically, standardized tests will probably always be part of the accountability equation, but a teacher-driven accountability system will put those scores in the context of indicators that are more tailored to specific schools and classrooms. Teacher involvement also lets them help craft indicators that are useful, not just for judging performance, but also for providing feedback and designing improvement strategies in their own classrooms. Asking teachers what information would be most useful to them is a great way to ensure that everyone in the school is committed to working with the accountability plan and that the data generated actually get used.

✓ **Goals are focused on student learning**

Schools are complicated organizations with multiple constituencies and purposes. Ultimately, however, schools exist to help students learn. The bottom line of an effective school accountability plan stays focused on how well students are learning. While schools often find it useful to include other types of goals in their accountability plans (attendance rates and parent involvement are common examples), the plan should make clear how these are related to the core goals reflecting student learning. Student learning should not be obscured by being one among many goals in an accountability plan; it should be the central focus of the accountability plan and all the school's efforts.

✓ **Provides for multiple measures of key goals (key decisions do not hinge on a single test score)**

Educators know the complexity of the learning process and often resent seeing it reduced to a single number, particularly a standardized test score that reflects a snapshot of a student's performance on a single day. When designing their accountability plans, schools have an opportunity to construct a more nuanced and multifaceted representation of what students have learned. Many experts recommend balancing standardized test scores with performance assessments, which are more open-ended tasks requiring students to show that they can use what they have learned, not just repeat it. The handbook *What Should We Do? A Practical Guide to Assessment and Accountability in Schools* (see *RESOURCES* section for more information on how to obtain it) is an excellent resource on designing multiple assessment measures tailored to a school's specific learning goals and contains numerous concrete examples of how other schools have done it.

✓ **Rooted in a shared understanding (by both internal and external stakeholders) of what the school is trying to measure and why**

The design of an accountability plan is a vital moment for reaching consensus—both within a school and between the school and its authorizer—about the school's priorities. The old adage “what gets measured gets done” reflects the truth of human nature that people tend to focus their energies where they know there will be consequences. Unfortunately, too often it is measurement systems that drive priorities and not the other way around. The design of an accountability plan is an opportunity to turn this dynamic around and ensure that what is going to be measured reflects what stakeholders believe to be most important about the school.

✓ **Provides a common language and conceptual framework about the school's goals and strategies**

Beyond solidifying agreement on a general level about the school's purpose and priorities, the accountability plan should provide a framework and language that becomes a day-to-day part of how people in the school do their jobs and how they talk to people on the outside about what the school is doing. If the indicators in an accountability plan reflect genuine consensus about what is most educationally important, they become vital reference points for internal and external conversations about progress and strategies.

✓ **Supported by appropriate infrastructure (training, information systems, schedule changes to allow teachers time to work together, etc.)**

Accountability plans that produce accurate and useful data require a serious commitment of time and energy from school staff. In order for their efforts to be effective they need to be supported by appropriate tools, specifically:

- Training in how to gather, interpret, and use data
- Well-designed information systems that keep the data organized and accessible for decision making
- Designated time for teachers to work together at every stage of the process: from designing the system, to gathering the data, to interpreting it, to using it to design improvement strategies

The most important component of an accountability system is always the human element—the professional judgment of educators that takes raw *data* and makes it into meaningful *information* about performance and improvement opportunities. Infrastructure such as training, information systems, and collaborative time creates the right conditions for school staff to make meaning from the data. Without these elements, an accountability plan risks simply generating numbers, not answers.

✓ **Provides timely information for decision making**

An effective accountability system pays attention not just to *what* decisions need to be made with the data but *when* those decisions need to be made. The most elegant indicators are useless if they cannot be produced until after important decisions (for example, what topics need to be emphasized in 3rd grade math, how to allocate the school's technology resources, which professional development investments will have the greatest payoff) are made. One of teachers' greatest complaints about standardized test data is that they often come too late to be instructionally useful. As schools produce their own accountability indicators, they should endeavor not to make the same mistake. Effective accountability plans should include specific time lines that relate the data-gathering and analysis process to particular decisions that need to be made with these data internally and externally. Although the external decision of charter renewal is an obvious focus of such time lines, internal decision needs should not be ignored.

✓ **Sheds light not just on *what* the school is doing but *how* (includes inputs, process, and outcomes)**

Many schools make the mistake of limiting their accountability systems to information about outcomes. Certainly, outcomes are what schools should be held accountable for. One of the great innovations of the charter school movement is the premise that schools should be held accountable for educationally significant outcomes but be able to use their discretion about how to go about achieving those outcomes. Across public education, and indeed government in general, there is a movement away from being held accountable for using certain inputs or following a detailed bureaucratic process and toward accountability for results. This does not mean, however, that information about inputs and process is irrelevant to understanding outcomes. Outcomes data alone tell us little about why a school did or didn't achieve certain results and how those outcomes can be improved. By including data about inputs and processes in their accountability system, schools can maximize their utility as a diagnostic and improvement tool. *See Step #3 for ideas about how to structure your accountability plan around a comprehensive map of how your school functions.*

✓ **Contains built-in mechanisms for communication and use of findings**

An effective accountability plan does not stop with the production of numbers. To drive improvement, data need to be communicated and used. Communication means going beyond reporting raw data to putting those data in context (for example, by talking about trends and how outcomes relate to important inputs and processes) and translating the data for the specific decision-making needs of different internal and external audiences. Use means going beyond making sure everyone has a copy of the report to providing structured opportunities to use accountability information to make decisions, not just when a report comes out, but on an ongoing basis.

See Step #10 for more ideas about how to report and communicate your findings for maximum utility and impact.

10 Steps to an Effective Accountability Plan

The table below summarizes a comprehensive 10-step process for designing and implementing an effective school accountability and improvement plan, along with three additional steps to help schools move from accountability reporting to self-evaluation. Each step is accompanied by key questions your school will need to answer to complete the step. The rest of this manual consists of short chapters on each step, taking you up to the point of submitting your annual report. In addition to general strategies, each chapter includes checklists, tools, and other resources designed to help schools put the step in practice.

The three additional steps in the table below will be the focus of the companion manual, *Institutionalizing Evaluation in Schools: Becoming a Learning Organization Through Data-Based Decision Making*. This second manual focuses on how schools can use their accountability systems as a lever for internal improvement, a framework for ongoing dialogue about what the school does and how it can do it better.

ACTION STEP	KEY QUESTIONS
(1) Identify intended users and uses of the information (both external and internal)	Who needs to know what about the school? What decisions will they make using this information?
(2) Reach stakeholder consensus about the school's core goals	What is the school committed to achieving?
(3) Map the school's functioning by identifying the inputs and processes that are key to reaching your goals	How does the school go about achieving its goals? How does the school meet students' common and differential needs? With what resources and strategies?
(4) Develop indicators	How can each variable be measured?
(5) Set performance benchmarks	How good is good enough? What will be the standard of comparison?
(6) Identify data sources for each indicator	Where will the data come from? What relevant information already exists?
(7) Establish a data management system	How will we store the data so it is timely and accessible for decision making?
(8) Collect the data	Who is responsible for collecting the data for each indicator? By when?
(9) Analyze/interpret the data	Is the school reaching its goals? Which strategies are most and least effective?
(10) Report/communicate findings	How well did the school do? Why?

Develop improvement strategies	What do these findings say about how the school can improve its performance?
Monitor implementation and performance	Are new strategies being implemented effectively? Are they working?
Ask more questions	What unexpected findings emerged? What else do these data suggest we need to learn in order to reach our goals?

Covered in the 2nd manual

ACTION STEP #1:**Identify Intended Users and Uses of the Information (both external and internal)****Key Questions:**

- **Who needs to know what about the school?**
- **What decisions will they make using this information?**

The logical first step for designing a useful accountability plan is to be as clear and specific as possible about *who* needs to use the information and *what* they need to use it for. Asking these questions up-front and keeping the answers in mind throughout the rest of the process result in an accountability system that is tailor-made for specific users and uses. Such a system is much likelier to actually be used than a generic one based on no one's needs in particular.

This section of the manual will help schools launch the process of strengthening their accountability plans by answering the two critical questions of users and uses, starting first with the “who?” then moving on to the “what?”.

Identifying and involving stakeholders in the accountability process: Who needs to know what about the school?

The best way to identify potential users of information from your school's accountability plan is to think about all the people who have a stake in your school's performance. To whom does the performance of your school matter? What groups or individuals are either directly impacted by your school's performance or take an active interest in it? In terms of the most traditional use of accountability information—the reporting of data to judge or compare the school's performance—two groups are likely to be central stakeholders for every charter school's accountability plan:

- (1) *The body that authorized the charter and holds the power of renewal*
- (2) *Current parents and students*

These two groups will use accountability information to make decisions that affect the very survival of the school: for authorizers, whether or not to renew the school's charter, and for parents and students, whether or not to continue choosing the school. Clearly, the information needs of these two groups must be central considerations when designing an accountability system. A third group, however, is an equally central user of an accountability system designed not just to judge school performance but to improve it:

- (3) *Current school administration and staff*

In addition to these three core groups that will be important stakeholders for every school's accountability plan, schools may wish to take into account the information needs of other constituencies such as the community they serve, the media, or prospective parents and students. Later in this section we present a tool showing a range of potential stakeholders and the kinds of questions they may need to answer using information about the school's performance.

Simply identifying who needs to use information from a school accountability plan is not enough to ensure that the plan will meet their needs. So the next step in laying the foundation for an effective accountability plan is to move from *identifying* potential users of the plan to *involving* them in developing the plan. Rather than speculating about what information stakeholders might want from

an accountability plan, ask them! Involving stakeholders in the development of your accountability plan has a number of crucial advantages; foremost among them is that it keeps stakeholder needs front and center and that it builds commitment to carrying out and using the process. Involvement does not mean that every meeting needs to be a wide-open town-hall style affair—this is rarely a format in which much real work gets done. It does mean, however, that the core group carrying out most of the work described in this manual includes representatives from the most important potential users of the accountability plan and solicits and respects the input of other key stakeholders.

When designing or strengthening an accountability plan, it is critical for schools to ensure broad participation in and awareness of the effort. Although in some cases it is true that too many cooks spoil the soup, in the case of accountability data, having too few cooks will guarantee that the soup gets left uneaten. Perhaps this is because the most effective accountability plan is emphatically not a product but an ongoing process. The principal sitting alone in his or her office looking at spreadsheets and then devising new policies is rarely the most effective way to use data for school improvement. An improvement-oriented accountability plan is not intended to result in a single report or set of dictates (although producing a compelling annual report for the school's chartering authorities is one central goal). In addition to that single report, the process described here yields a common framework for everyone in the school community to analyze on an ongoing basis what they, individually and collectively, are trying to do, how they are going about it, and how well they are doing. For such a framework to function effectively, early buy-in from significant stakeholders is essential. While the accountability plan team itself should be of a manageable size to process information and make group decisions efficiently, information about the process should be widely distributed and channels for feedback to the team should be well publicized and easily accessible.

Developing a comprehensive accountability process is a vital opportunity for a school to establish and/or deepen goal consensus (*see Step #2 for more on specifying goals*). By bringing a broad group of people to the table to talk as explicitly as possible about what the school is trying to achieve with students, the group can uncover areas where the focus of their activities needs to be tightened. This won't happen, however, if the accountability process is conducted by the same core group that tends to sit on all school committees and who already agree with each other anyway. If the process is to yield a shared framework for continuous improvement that will be widely used, all key constituencies should have opportunities for input.

There are also key practical advantages to broad involvement in and awareness of the self-assessment process:

- The more people who are involved, the more hidden data sources will be uncovered, minimizing the need for time-consuming new data collection.
- The more people who buy into the process up-front, the more people will find the results credible and act on them.

Identifying uses of accountability data: What decisions will stakeholders make using this information?

Having identified the most important potential users of the accountability plan and hopefully involved them in the process, your school should be in a strong position to get specific about how those users will need to use information from the system. The best way to do this is to get stakeholders to identify specific decisions they will need to make using information about school

performance and then brainstorm with them about how they go about making those kinds of decisions. These conversations should help reveal what kinds of information would be most useful in their decision-making processes. Ideally, you should try to pin down three things about your stakeholders' information needs:

- (1) The *content* of the information they need—what specifically do they need to know about the school's performance?
- (2) The *format* that would make the information most useful to them
- (3) The *timing* of the information flow that meets their decision-making needs

When thinking about stakeholders for a charter school's accountability plan, it is hard not to think of the charter authorizer as “first among equals.” After all, authorizers will use accountability information to make the ultimate decision: whether or not to renew the school's charter. Given the centrality of this decision, it is particularly vital for charter schools working on an accountability plan to be clear about the information needs of their authorizers. If at all possible, involve the authorizer directly in the design of the system, or at least run it by them, rather than trying to guess whether or not it will generate the information they need. Schools should be proactive in making sure they understand exactly how accountability information will be used by the authorizer for renewal and oversight and making sure their accountability system serves that process.

Although stakeholders and their information needs will be different in every school, the following tool identifies a range of potential users and uses for school accountability plans. Schools can use this tool as a springboard for thinking about the users and uses their school's plan needs to serve.

TOOL: Potential Users and Uses for School Accountability Information	
Information User	Questions They Need to Answer
Chartering agency	Is the school fulfilling the terms of its charter?
Current parents and students	How well is the school meeting student needs? Should we stay enrolled?
Staff	How can the school improve its practice to better meet student needs?
Governing board	Is the school fulfilling the terms of its charter? What policy changes are needed?
State	Is the school living up to the expectations the state has for all public schools?
External evaluation	Is the school improving student performance?
Local community	Does the school provide a valuable choice and resource for our community? Should we support it?
Media/broader public	How does the performance of this school compare to that of other schools (charter and noncharter)? What is this school doing differently, for better or worse?
Prospective parents and students	Would this school meet our needs?

Finally, before moving on to the next step, schools should review the users and uses they have identified for their accountability plan and ask themselves the following questions:

- Which audiences should be served by this accountability plan?
- Have we established mutual understanding of their key questions? Do we have a common definition of terms like “improvement” and “performance?”
- What kinds of information will be most useful to them?

ACTION STEP #2:

Reach Stakeholder Consensus About the School's Core Goals

Key Questions:

- **What is the school committed to achieving?**

Many schools find the clear specification of goals the most difficult or intimidating step in developing an accountability process. Particularly in a charter school, which is likely newer and smaller than most schools, staff, parents, and students may think that everyone is already on the same page about the school's goals. While charter schools probably do have more built-in cohesiveness around goals than traditional schools, they should not skip this step of trying to put their shared understanding of the school's purpose down on paper in a way that is accessible to outsiders.

From mission statement to goals

To specify their goals in a format in which they can serve as the cornerstones of an accountability plan, schools should begin with the objectives embodied in their mission statements. The key task is to *operationalize* that mission statement, which may be framed in fairly broad terms, into specific goals that can be measured and monitored both within the school and by external authorities. The question "How will we know it when we see it?" may help schools get to the right level of specificity. Working through this process, you may find that there is more internal disagreement about key terms than you expected. For example, parents and teachers or different faculty groups may have very different visions of what "literacy" or "respect for diversity" look like and how good is good enough. Although confronting these differences in vision and working together to reach a consensus can be difficult, this is the time to face and reconcile those hard questions. An investment in reaching substantive consensus now pays off later because it establishes the framework for an accountability plan that is more useful and meaningful.

Defining key terms: Goals, Indicators, Performance Benchmarks

Before proceeding any further with the "how-to" of specifying goals, it is important to clarify how certain key terms will be used in this manual. "Goals" is one of the most frequently used terms in education and can represent anything from sweeping national aspirations to the objectives of a 3rd grade spelling lesson. In this manual we use the dictionary definition of "goal," which is "***the end toward which effort is directed.***" In the context of an individual school, then, goals are the outcomes toward which everyone in the school is working and for which they agree to be held accountable. Goals drive the accountability process described in this manual, but they remain fairly general guides. Three more steps are needed for goals to yield specific accountability information. In Step #3 we discuss how to map your school's functioning to identify the key *inputs and processes* that affect your school's ability to reach your goals. By inputs and processes we mean any factor—from student demographics to resources to instructional strategies—that plays a part in achieving your goals. In Step #4 we describe how to select *indicators*, or specific measurement tools, for your goals. Then in Step #5 we lay out a process for setting *performance benchmarks*—the specific levels of achievement or standard of comparison you agree to be held accountable for on each key indicator. The chart below provides examples of how each key term is used in the progression from goals to related inputs and processes to indicators to performance benchmarks.

DEFINITIONS: Moving from Goals to Benchmarks				
Key term	Step	Definition	Example 1	Example 2
GOAL	#2	The core outcomes for students toward which a school's efforts are directed	Students will reach state standards in the core areas of reading and math.	Students will communicate clearly and persuasively in writing.
INPUTS AND PROCESSES	#3	Any factor that affects the ability of a school to reach its goals	Student achievement on entry to school, curriculum, instructional strategies, class size	Opportunities to practice writing in many contexts, one-on-one feedback, teacher training
INDICATOR	#4	A tool for measuring an input, process, or goal	State test scores	School-developed rubric for student writing portfolios
PERFORMANCE BENCHMARK	#5	The specific level of achievement that the school is aiming to reach	90% of students at grade level or above after being in our school at least 2 years	80% of 6 th graders score at least "Proficient"

Naturally, these steps are not as clearly separate as they look when laying out a step-by-step accountability process. When establishing goals in Step #2, it is useful to already be thinking ahead to how those goals will be measured and what level of performance the school wants to achieve. We present them as separate steps, however, to help schools make sure they have pushed their thinking to the right level of clarity and specificity that they will need to move forward.

Establishing goals: Striking balances

Establishing goals that will serve as a useful foundation for an accountability plan requires schools to strike a number of balances. This section may help you think through some of the trade-offs you need to make when specifying your goals:

CHECKLIST: Factors to balance when defining goals

- ✓ Results vs. compliance
- ✓ Academic vs. nonacademic outcomes
- ✓ State- or districtwide vs. school-specific goals
- ✓ Standardized test scores vs. performance measures
- ✓ Easily available data vs. educationally meaningful goals
- ✓ Comprehensiveness vs. focus
- ✓ Scope vs. measurability

- **Results vs. compliance:** The central premise of charter schools is that in exchange for being held accountable for results, charters are freed from compliance with a number of specific regulations that other public schools must follow. Clearly, the central focus of charter school accountability plans should be student results. The fact remains, however, that charter schools are still held accountable for things other than results, most often the items listed below:
 - Organizational factors like financial viability, governance practices, and management stability
 - Compliance with laws that are not waived in areas such as health and safety and special education

Without taking their focus off student outcomes, charter schools should be very clear about the other factors that will weigh into their renewal decisions and ensure that their accountability plans produce compelling evidence in these areas. Nationally, many more charter schools have been closed for financial or regulatory problems than for failure to meet student achievement goals.

- **Academic vs. nonacademic outcomes:** Within the area of results, accountability plans should strike a balance between academic and nonacademic goals. While student learning should be at the center of a school's accountability plan (and of its efforts), many schools have nonacademic goals for their students that they believe are important either in their own right or because they contribute to achievement. Depending on a school's population, these might include goals such as raising attendance, decreasing disciplinary incidents, or increasing community service. Even if the accountability criteria laid out by the charter authorizer focus narrowly on achievement, schools should give goals that are central to their mission and the needs of their students a prominent place in the accountability plan they negotiate.
- **State- or districtwide vs. school-specific goals:** Some charter authorizers may have achievement criteria or cut-offs that they use to rate the performance of charter schools relative to that of other schools (for example, half of students must read on grade level on state tests). While charters cannot ignore such standards and should make sure their accountability plans are geared toward demonstrating achievement of them, they should also use their plans as an opportunity to establish and define the school-specific goals they wish to be held accountable for.
- **Standardized test scores vs. performance measures:** Similarly, although standardized test scores will almost inevitably be part of the way that charters are held accountable, schools should not shy away from goals they believe are important but that cannot be measured in standard ways. Important school-specific learning goals may require schools to develop performance measures (rubrics, portfolios, structured tasks, etc.) that will allow the school to demonstrate to outsiders how well students are achieving these goals. *See Step #4 for more on using alternative forms of assessment in your accountability plan.*
- **Easily available data vs. educationally meaningful goals:** Schools should avoid the temptation to let their goals be defined by what data are easily available. Instead, they should begin by thinking broadly about what they hope to achieve with students and then get concrete about the information needed to know if those goals are being met. On the other hand, schools need to be realistic in establishing goals for which they will actually be able to provide evidence.

It should be possible to measure at least some goals in the plan using readily available data sources such as state tests and attendance records. For a few vitally important school-specific goals, it will probably be worthwhile to do original data collection such as surveys of parents or rating of school-developed student performance assessments.

- **Comprehensiveness vs. focus:** Identifying an unmanageably large number of priorities is a common pitfall. Schools should resist the temptation to include everyone's favorite outcome on a laundry list. It may be easier in the short run to keep everything on the list than to debate competing assumptions about what the school should be doing, but this ultimately undermines the effectiveness of the accountability process by diluting it. Also, schools set themselves up for failure by agreeing to be held accountable for too much. One way to keep the list manageable is to focus on quality learning outcomes that cut across grades, programs, and disciplines, rather than thinking in terms of detailed curriculum standards at this stage. The National Study of School Evaluation publication *Indicators of School Quality* (see *RESOURCES* section) provides numerous examples of how broad schoolwide learning goals can be translated into measurable performance indicators.
- **Scope vs. measurability:** Good goals are broad enough to be meaningful but specific enough to be measurable. The most challenging part of operationalizing a mission statement is translating inspirational but vague ideas (e.g., "Students should learn how to learn") into concrete goals. Such statements may be a good launching point, but the discussion should quickly move to specifics. Teachers know that learners do better when they know what is expected of them; the same is true of learning organizations. Overly vague goal statements simply don't provide the kind of guidance that people can base their actions on. Again, asking questions like "How do you know it when you see it?" or "How will it be different than what we do now?" can be effective strategies for bringing a goal to a more useful level of concreteness.

Before moving on: Evaluating the Usability of your Goals

Before moving on to Step #3, take a few minutes to review the goals that you have established. The checklist on the following page will help ensure that your goals will serve you well as the central orienting point of your accountability plan. Goals that do not meet the following criteria may need to be rethought or at least rephrased.

Checklist: Questions to Ask about School Goals*

- ✓ Are the goals *aligned* with the chartering authorizers' expectations for renewal?
- ✓ Are the goals *measurable and specific* enough so that we will know if they have been attained?
- ✓ Are the goals *meaningful and clear* to all stakeholders?
- ✓ Are the goals *attainable* during the period of the charter and given our resources?
- ✓ Are the goals *ambitious* enough to challenge our staff and students and provide a clear educational choice?
- ✓ Are the goals *grounded* in an assessment of our students' needs and where we are starting from?
- ✓ Do our goals address the specific needs of important *subgroups* within the school (e.g., LEP or special education students)?
- ✓ Are the goals *prioritized* so that we know where it is most important to focus our attention and resources?
- ✓ Are the goals *complementary* so that each one reinforces the others and our overall mission?

* The following sources were useful in the development of this checklist and may help schools think through these issues further:

Holding Schools Accountable Toolkit, Annie E. Casey Foundation, p. 26

At Your Fingertips: Using Everyday Data to Improve Schools, MPR Associates, p. 47.

ACTION STEP #3:

Map the School's Functioning by Identifying the Inputs and Processes That are Key to Achieving Your Goals

Key Questions:

- **How does the school go about achieving its goals?**
- **How does the school meet students' common and differential needs?**
- **With what resources and strategies?**

In the last step you specified a set of measurable goals for your school that will serve as the focal point for your accountability system. This step asks you to think concretely about what your school does or needs to do to reach those goals. Mapping your school's functioning means, as management gurus would put it, "beginning with the ends in mind" and then working back from there to understand what resources and activities the school uses to reach those ends. Simply put, this step helps schools get specific about what they need to do to reach desired outcomes and what they have to work with.

Why bother to include inputs and processes in an accountability plan?

Many schools may be tempted to skip this step, reasoning that accountability is all about outcomes. Certainly the bottom line of external accountability reporting is outcomes, but the usefulness of an accountability plan will be greatly diminished if it looks only at results and not at what led to those results. Having an accurate map of your school's functioning is a crucial starting point if you want to be able to use accountability data, not just to judge performance, but also to understand and improve it. Failure to look beyond outcomes is one reason so many accountability reports get filed in a drawer and never looked at again. If everything the school is and does is treated as a "black box" and results are reported without that vital context, the value and utility of those results is sharply limited.

There are three main reasons why including the inputs and processes most relevant to your goals will make your accountability plan more useful:

(1) **Information about inputs and processes will make the data useful for school**

improvement planning: Changes in your school's results will be much easier to interpret and act on if your accountability plan also supplies information about your school's resources and strategies and how they are changing. The National Study of School Evaluation publication *Indicators of School Quality* emphasizes the importance of schools understanding their own work processes:

If schools only devote their attention to defining the goals and performance standards for student learning, without taking into account the instructional practices and organizational conditions required to support students' achievement, then the goals for student learning will simply remain as such-goals, not achievements (p. 10).

- (2) **Talking about what inputs and processes are most important for reaching your goals helps surface assumptions about how your school works and identify areas of disagreement and consensus:** Many schools find the collective exercise of sitting down and talking about key inputs and processes to be a valuable staff development activity. Even when firm consensus on goals has been reached, stakeholders may have very different ideas and assumptions about what it takes to get there. Identifying these assumptions up-front helps to ensure that everyone is working together.
- (3) **Talking about what inputs and processes are most important for reaching your goals may reveal the need for greater focus or alignment, kick starting the improvement process:** This step can be a valuable part of the school improvement process in its own right if it reveals, as it often does, that the school's resources and strategies are not as tightly focused as they could be on its central goals. Drawing a map of your school's functioning may suggest ways to reallocate resources and energy more effectively toward your goals, thus beginning the improvement process before the first round of accountability data is even in.

Strategies for mapping your school's functioning

Education is a complex process and schools are complicated organizations. At first the task of trying to draw a picture that captures this complexity may seem overwhelming. The following three strategies should help your team focus on the most important factors and draw a useful map of your school's functioning.

- (1) Schools may find it useful to organize their map into three sections: **inputs, processes, and goals/outcomes**. Although such a mechanistic model is an oversimplification of the complex educational process, it can help schools start to define how they work. The **inputs** are what a school is given to work with (financial resources, personnel, student demographics, etc.). Although inputs are generally factors over which a school has no direct control, tracking them is crucial to understanding how a school functions. For example, is a change in reading scores due to new instructional practices or a shift in student demographics? **Processes** are everything a school deliberately does to reach its goals, including activities, policies, resource deployment, time allocation, and norms/expectations. Schools may want to focus most of their attention on this section of the map since, unlike inputs and outcomes, processes are in the direct control of the school. When shifts in inputs or disappointing results on outcomes indicate to a school that it needs to change, the process section of the map is where it will have to start. **Goals/outcomes** are everything a school "produces" using its particular combination of inputs and processes including, most crucially, student learning, but also related results like attendance, retention, and student attitudes and engagement.
- (2) Figuring out which variables are most relevant to a school's particular goals can best be accomplished by trying to articulate the school's assumptions about **cause/effect relationships**. The inputs/processes/outcomes framework implies some causal order, but schools can make their models even more useful by talking about the specific inputs and processes they think are most strongly related to their desired outcomes. Perhaps the most useful thing about this strategy is that it reveals, and forces schools to confront, divergent or conflicting assumptions about what matters most in the work they do. For example, some members of the school community may assume that small class sizes are the key to early literacy development, while others may think teachers with advanced degrees or other specialized training are the most important factor. These two theories imply very different ideal resource

allocations, so schools need to articulate and if possible reconcile such divergent assumptions before proceeding.

- (3) As a school draws its map, it should begin to **think pragmatically about the data that will be required** to fill it out. While it is important not to exclude vital concepts simply because it will be difficult to obtain data on them, it is equally important not to overload the map with abstract concepts that no one has any concrete ideas about how to measure. An overly abstract map could stall the accountability plan at the level of theory rather than allowing the map to become a practical tool for monitoring and decision making.

Identifying the most important factors to include

The most important strategy for completing this step is to begin with your school-specific goals and work backwards, asking what resources and strategies affect your ability to get there. Staying focused on the goals you identified in Step #2 will keep the process manageable and help avoid getting bogged down in producing an elaborate general theory of the educational process. However, it is not necessary to work in a vacuum or reinvent the wheel when trying to identify inputs and processes to include in your map. Many of the resources on school accountability, self-assessment, and performance indicator systems that are listed in the RESOURCES section of this manual contain checklists of possible indicators for use in school accountability plans. The checklist on pages 61-63 of *At Your Fingertips: Using Everyday Data to Improve Schools* (MPR Associates, 1998) is particularly well thought out and comprehensive. As you begin to brainstorm about what to include in your maps, you may wish to consult some of these sources directly to see what kinds of indicators other schools have found relevant and useful. As a start, we reviewed a number of resources and compiled an overview table of the kinds of factors schools may want to include in each section of their maps:

Checklist: Menu of Possible Factors		
INPUTS	PROCESSES	GOALS/OUTCOMES
<ul style="list-style-type: none"> ✓ Resources ✓ Community demographics ✓ Class size/teaching load ✓ Student demographics ✓ Teacher quality 	<ul style="list-style-type: none"> ✓ Safe/orderly climate ✓ Positive/learning focused climate ✓ Parent support and involvement ✓ Curriculum ✓ Instruction ✓ Assessment ✓ Access/equity ✓ Professional development ✓ Professional culture ✓ Use of time ✓ Administration/leadership ✓ High expectations ✓ Community partnerships 	<ul style="list-style-type: none"> ✓ Attendance ✓ Completion vs. dropout rates ✓ Standardized test scores ✓ Course grades ✓ Performance assessments of school-specific learning goals ✓ Student engagement ✓ Attitudes ✓ Preparation (for next level of education or work)

In Step # 4 (Developing Indicators) we describe how to turn broad concepts like those in the table above into concrete indicators, and in Appendix A we give specific examples of how each concept

in the table could be measured. It is important to emphasize that we present this checklist only to spur your thinking about the range of factors to consider. Do not feel compelled to include every possible factor in your map. Rather, use this list to stimulate your thinking about the much shorter list of factors that are most relevant to your own goals and therefore worthy of inclusion in your accountability plan and ongoing improvement process. Stay focused on the factors that matter most for your school-specific goals, and avoid drowning in data.

While the table above attempted to present a comprehensive range of school inputs, processes, and outcomes, recent research can help schools focus on the factors that matter most. While you should always stay grounded in the specific context of your school's goals, resources, and needs, general findings about what contributes most to school quality could be helpful in paring down the list of factors to include on your map. The recent National Center for Education Statistics publication *Monitoring School Quality: An Indicators Report* is an especially good summary of research on the factors that most affect school quality. The research summarized in this report suggests that to understand and improve student performance, it is particularly important for schools to keep track of the following factors:

TOOL: Factors that Matter Most for School Quality		
<i>Source: Monitoring School Quality: An Indicators Report, National Center for Education Statistics, December 2000</i>		
TEACHERS	CLASSROOMS	SCHOOLS
<ul style="list-style-type: none"> ▪ Academic skills ▪ Teaching assignments ▪ Experience ▪ Professional development 	<ul style="list-style-type: none"> ▪ Course content ▪ Pedagogy ▪ Technology ▪ Class size 	<ul style="list-style-type: none"> ▪ Leadership ▪ Goals ▪ Professional community ▪ Discipline ▪ Academic environment

Refer to the publication for explanations of why each of these factors is so important and how schools might go about defining and measuring them. It is interesting to note that almost all of these factors fall in the "Processes" section of the map of school functioning. In other words, these are factors that are within schools' control. Schools can not only measure them, but can do something about them.

ACTION STEP #4:

Develop Indicators

Key Questions:

- **How will each key input, process, and goal be measured?**

Filling out the map: From ideas to indicators

Now that you have identified the inputs, processes, and goals that best represent what and how your school is working toward, it is time to get specific about how each of those concepts can be measured. This step thus involves the admittedly hard work of translating the concepts on the map you developed in Step #3 (e.g., “student demographics”) into specific indicators (e.g., “% of students eligible for free or reduced-price lunch,” “% of students for whom English is a second language,” etc.). Most commonly, indicators are numerical in nature (totals, rates, percents, etc.). Quantitative indicators are convenient because they allow for quick comparisons over time or across subgroups and because there tends to be less disagreement about their meaning. Thus, they are easier for external audiences such as the media or charter authorizers to understand and work with. However, not everything that a school thinks it is important to do is easy to count. Schools should not shy away from concepts that are important parts of their strategies or goals just because they are less easy to quantify. “Softer” concepts, such as expectations and attitudes, can be measured using surveys or more informal means of tallying the judgments of relevant people.

Many of the inputs, processes, and goals you identified as central to your school’s functioning may have fairly obvious indicators associated with them. For example, attendance can be measured with the average daily attendance records you are already required to keep and report, and at least some of your student learning goals can probably be measured by standardized tests students are already taking. To help you get started, Appendix A takes the menu of Inputs, Processes, and Goals/Outcomes presented in Step #3 and provides specific examples of indicators that could be used to measure each concept. You may be able to use or adapt some of these indicators directly or at least use them to spur your thinking about how to translate the particular concepts you are working with in your accountability plan into concrete indicators.

Using alternative assessment in an accountability plan

By using indicators like those suggested in Appendix A and practicing creative data recycling (*see Step # 6 for suggestions on sources*), schools may find that they can create indicators for the majority of concepts in their accountability plan by drawing on data that are already collected for one reason or another. Although existing data may be available for the *majority* of indicators, many schools find that there is no ready-made source for some of the ideas they consider most *important*. One area where new data are particularly likely to be needed and valuable is school-specific goals for student learning. One of the most frequent complaints about state or district accountability systems is that they rely too heavily on standardized test scores that fail to measure the full range of important learning outcomes that schools work to help students achieve. Many schools developing their own accountability process find that they need to implement performance assessments designed around their specific learning goals for students. Indeed, indicators that measure school-specific learning goals may be the single most important piece of information in the accountability plan, the one that best reflects what students and teachers are working toward in classrooms, but there is often no ready-made data source. However, gathering these particular data should be viewed as opportunities

for organizational learning and professional development rather than a burden. Many schools discover that writing and scoring performance assessments that reflect their own school's learning goals is crucial in helping them articulate and apply their common standards.

In developing assessments to be used as indicators of school-specific learning goals, schools should bear two general principles in mind:

- (1) Developing performance assessments is an ***opportunity to set the terms of the debate about what matters most for student learning***. Well-designed performance assessments based on clearly articulated standards help districts, schools, teachers, and students look beyond the kinds of student outcomes easily measured on standardized tests.
- (2) Performance assessments should be designed to ***address any gaps between what state or district tests measure and what the school sees as its mission*** and key goals for students. For example, a school may invest a great deal of time and energy in developing students' critical thinking skills, but find that these skills are not well measured by the kinds of tests used to assess its students. For this school to be fairly judged, its performance assessments must provide compelling data of how students have developed in this area.

Although developing alternative or performance assessments is a vital opportunity for charter schools to reframe the debate about student learning, doing it right is a considerable challenge. The *Authorizer's Guide to Charter School Accountability* (developed by U.S. Charter Schools) identifies four major challenges that schools must master to make alternative assessments an effective part of school accountability plans:

- (1) Clearly specifying the performance the school expects from its students
- (2) Creating rubrics that help teachers or others score student performance consistently
- (3) Training graders to use these rubrics reliably
- (4) Conveying assessment information in a way that is understandable and useful to audiences outside the school

Source: Adapted from *Authorizer's Guide to Charter School Accountability*, U.S. Charter Schools, "Gathering Data," p. 3.

Fortunately, there are numerous well-developed resources, many available on the Web, that can guide schools through the process of developing high-quality performance assessment tools for use in an accountability system. For example, the Pioneer Institute Charter School Resource Center has developed a "Charter School Accountability Action Guide" (available at www.pioneerinstitute.org/csrc/accountability/acctguide) that includes guidelines and examples for the use of portfolios in an accountability plan. They suggest that to work as accountability tools, portfolio systems should

- (1) Measure student performance in the integrated context of school standards, curriculum, and assessment
- (2) Allow teachers and students to work together over the course of the year to collect, select, and reflect on the best examples of their work
- (3) Have well-understood public criteria for judging student performance
- (4) Be reviewed not just by the classroom teacher but by a team to ensure validity, reliability, and consistency
- (5) Follow students from grade to grade

Source: Adapted from *Charter School Accountability Action Guide*, Pioneer Institute, "Step 5: Select Appropriate Measurement Tools," p. 7.

Other resources that will be valuable to schools as they develop the performance assessment component of their accountability plans include

- A database of sample rubrics collected by alternative assessment expert Grant Wiggins, available at <www.classnj.org>
- The web site for the Coalition of Essential Schools, which uses alternative assessments as an integral part of their design: <www.ces.brown.edu>
- A database of alternative assessment tools maintained by CRESST, a federally funded assessment research consortium:
<http://cresst96.cse.ucla.edu/database.htm>

Assessing the quality of your indicators

The choice of indicators is highly significant. These are the tools that will be used to boil down the complexity of all that your school is and does into easily digestible numbers or facts. Just as the results of a scientific experiment can be strongly influenced by the quality of the instruments used, so the success of a school accountability plan rests heavily on the quality of the indicators selected. How accurately and consistently and fairly do they measure what they are meant to measure? The resource guide *At Your Fingertips* offers an excellent brief overview on ensuring indicator quality. The following table summarizes the main principles:

TOOL: Ensuring Indicator Quality		
<i>Source: Adapted from At Your Fingertips: Using Everyday Data to Improve Schools, pp. 86-88.</i>		
KEY PRINCIPLE OF INDICATOR QUALITY	DEFINITION	QUESTIONS TO ASK
<i>Validity</i>	“The extent to which a performance indicator actually measures the underlying phenomenon of interest.”	<ul style="list-style-type: none"> ▪ Does this really measure what we care about measuring? ▪ What kinds of decisions will be made using this indicator? Will this indicator support them?
<i>Reliability</i>	“The consistency with which an indicator produces the same results on different occasions or in different circumstances.”	<ul style="list-style-type: none"> ▪ How consistently or accurately are these data reported and collected? ▪ Do we have standard definitions and data collection practices?
<i>Fairness</i>	“The extent to which an indicator is free of bias.”	<ul style="list-style-type: none"> ▪ Does it treat all subgroups or populations similarly with respect to the key factor being assessed? ▪ Does it disadvantage or benefit certain groups? ▪ Are irrelevant factors likely to influence performance on this indicator?

<p><i>Avoidance of unintended incentives</i></p>	<p>Avoiding “incentives to improve the indicator data themselves, without improving underlying performance.”</p>	<ul style="list-style-type: none"> ▪ Is this indicator subject to distortion or outright cheating? ▪ Who is subject to what pressures associated with performance on this indicator? ▪ What actions might affect performance on this indicator? How will we know if this is a change in the indicator or in the underlying performance? ▪ Are the stakes or consequences in balance with the indicator’s importance and quality?
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Before moving on: Assessing the utility of your indicators

Before going on to Step #5, use the following checklist to review your indicators:

CHECKLIST: Questions to ask about indicators

- ✓ Do we have multiple measures of our most important goals?
- ✓ Do we have a clear plan in place for assessing the progress of LEP and special education students?
- ✓ Do our indicators address any gaps between what state/district tests measure and the school-specific goals we have for our students?
- ✓ How will we make the indicators we have developed for school-specific goals credible to outsiders?
- ✓ Is the way we are measuring common indicators compatible with relevant local, state, or national reporting requirements?
- ✓ Do we have or know how will we get good baseline data on our indicators so we know where we are starting from?

If you answered no to any of these questions, you may want to revisit your indicators to make sure they will serve you as well as possible. Remember, indicators are the “language” of your accountability plan, the vocabulary that you will use to talk about your performance both within the school and to external authorities. It is worth investing the time up-front to ensure that the vocabulary of your accountability plan is as clear, specific, and well-developed as possible.

ACTION STEP #5:**Set Performance Benchmarks (For Process and Goals Indicators)****Key Questions:**

- **How good is good enough?**

Now that you have turned your goals (and the most important inputs and practices related to them) into measurable indicators, the next step is to specify the level of performance you are shooting for. So, for example, if one of your goals is for students to reach or exceed state literacy standards and the indicator you selected as the best way to measure that goal is scores on the state's annual reading test, your performance benchmark will need to specify *how many* of your students will score at *what level* on the test and *by when*.

Performance benchmarks are the real teeth of an accountability system, because this is where you get specific about exactly what you agree to be held accountable for. Having guiding goals is important, but it is equally important to establish a clear understanding, both inside the school and with external audiences, of how good is good enough. For external audiences, stating your performance indicators as clearly and specifically as possible is the best way to avoid misunderstandings and unpleasant surprises in the charter renewal process. But performance benchmarks are not for external consumption only. Benchmarks are critical for internal improvement too. Knowing exactly what you are shooting for can help everyone in the school focus their efforts more effectively.

The most visible and “high-stakes” performance indicators you choose will be those associated with your outcomes goals. For charter schools, these will be the measuring sticks used to evaluate your school in the renewal process. It is also important, however, to establish performance benchmarks for any of the process indicators you have identified as central to reaching your goals. For example, if you think time in the writing lab or small class sizes in the early grades are key strategies for reaching your school's goals for students' writing, you should establish specific performance benchmarks for these strategies (average hours in the writing lab per student per month, % of K-3 students in classes of 20 students or fewer). Having performance benchmarks for your key strategies as well as your targeted outcomes will allow you to monitor your progress and keep your efforts on track.

Five key decisions need to be made as you turn each key process and outcomes indicators into performance benchmarks:

- (1) Knowing your baseline**
- (2) Establishing a standard of comparison**
- (3) Identifying important subgroup comparisons**
- (4) Deciding how often to measure**
- (5) Determining the format of the benchmark**

This section of the manual will review each decision in turn, concluding with a tool you can use for recording your decisions as you transform each indicator into a benchmark.

(1) Knowing your baseline

Since the benchmarks you establish are the levels of performance for which you agree to be held accountable, it is vital to be realistic in setting them. Don't pick a number out of the air or feel pressured to commit to a politically popular or rhetorically appealing standard (as in the infamous Lake Wobegone effect which apparently requires 100% of children to be above average!). Begin by getting any information you can about your baseline performance. Use that information and your assessment about the resources you have to work with and how much time you have to do it to establish a benchmark that is grounded in reality, not wishful thinking. As with your guiding goals (refer back to Step #2), it is important to strike a balance between a benchmark that is ambitious enough to motivate and inspire people and one that is realistically attainable.

(2) Establishing a standard of comparison

Knowing your baseline performance is one vital part of keeping your benchmarks grounded in reality. Another key component of defining "How good is good enough?" is to think about the most appropriate standard of comparison. Your school's performance will not be judged in a vacuum; without some standard of comparison, the meaning of any number your accountability system produces would be difficult to assess. Performance information is made meaningful only when it is judged relative to some standard of comparison. There are four basic choices:

- An absolute level of performance (such as a targeted average percentile on a standardized test)
- Gains made from your own school's baseline, indicating the school's "value added"
- Relative to average state or district performance
- Relative to demographically similar schools

All of these strategies for comparison have their strengths and weaknesses. Targeting an absolute level of performance is perhaps the most widely understood kind of goal, but it may actually tell you the least about how your school is performing. For example, a school that serves students with very low test scores on entry may make impressive gains but still fail to reach the targeted score, while another school serving more advantaged students may actually see declines in test scores but remain above the target. On the other hand, many people worry that looking only at gain scores institutionalizes low expectations for some students by not even expecting them to reach the same levels as others. Similarly, straight comparisons between your school and state or district averages leave out important information about differences in student populations served, but comparisons only to schools with similar demographics may send an implicit message that less is expected of poor and minority children. Many education researchers find comparisons to demographically similar schools the most meaningful way of assessing how a school is performing. However, they caution that establishing a valid comparison can be tricky (especially for charter schools, which tend to be small and unique in many ways) and that such techniques can be difficult to explain to parents and the public.

(3) Identifying important subgroup comparisons

No matter which kind of standard of comparison is selected, you may want to think about breaking down the results to set and analyze targets for specific subgroups within your school. The problem with having a single, schoolwide number as your sole performance benchmark is that it can mask critical differences in the performance of different groups. It is possible for schoolwide performance to be improving, while the performance of certain kinds of students is stagnant or even declining. Again bearing in mind the maxim that "what gets measured gets done," you may find that

setting targets for student subgroups helps ensure that the differential needs of those groups are not ignored in your school's improvement efforts. Factors that you may want to consider in setting benchmarks for specific subgroups include

- (1) Race
- (2) Gender
- (3) Income
- (4) English proficiency
- (5) Special education status

(4) Deciding how often to measure

Different indicators may require different measurement cycles, depending on the availability of data and its expected uses for both external reporting and internal improvement planning. Obviously, it is important to time your data collection to meet external deadlines, but you may also want to choose interim measurement points to track your progress toward key benchmarks to give you time to make adjustments in strategy. In deciding how often to “take your temperature” on each indicator, try to strike a balance of doing it often enough to give you useful feedback on your progress for making course corrections but not so often that the data collection process itself becomes burdensome and in danger of being taken less seriously (this is particularly a concern for data collection instruments like student performance assessments, classroom observation protocols, or parent surveys that require extensive human input).

(5) Determining the format of the benchmark

Finally, choose the numerical format for your benchmark that provides the most important information. The guidebook *At Your Fingertips* provides a good example of how a single indicator could be translated into four common numerical forms for benchmarking purposes:

EXAMPLE: Four common benchmark formats

Source: Adapted from *At Your Fingertips: Using Everyday Data to Improve Schools*, MPR Associates, 1998, p. 82.

COUNT	Number of students completing high-level mathematics courses
AVERAGE	Average number of credits students earned in high-level mathematics courses
PERCENTAGE	Percent of students completing high-level mathematics courses
RATE	Rate of completion of high-level mathematics courses

For any given indicator, each of these benchmark formats will answer slightly different questions. When deciding how to express your benchmark, think carefully about what each format does and doesn't tell you about the underlying goal. In this example, the percent of students completing high-level mathematics courses tells you how widely distributed such behavior is, but not how many such courses students are taking. The average number of credits earned tells you how many of the target courses students are taking on average but masks the fact that some students may be taking many such courses and some none at all. For important outcome indicators, you may want to choose two or even more formats or “lenses” to get the best perspective on your benchmark.

As you work to transform the indicators you developed in Step #4 into performance benchmarks, you should find the tool on the following page useful for framing and recording your decisions.

TOOL: Decisions to Make When Establishing Benchmarks

Process or outcome indicator	Baseline: Where are we now?	Most appropriate standard of comparison	Important subgroup comparisons?	How often to measure	Benchmark
#1 _____		<input type="checkbox"/> Absolute level <input type="checkbox"/> Gains from baseline <input type="checkbox"/> Relative to district or state <input type="checkbox"/> Relative to demographically comparable schools <input type="checkbox"/> Other: _____	<input type="checkbox"/> Race <input type="checkbox"/> Gender <input type="checkbox"/> Income <input type="checkbox"/> LEP <input type="checkbox"/> Special ed. status <input type="checkbox"/> Other: _____	<input type="checkbox"/> Monthly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> At end of charter period <input type="checkbox"/> Other: _____	<input type="checkbox"/> Count: _____ <input type="checkbox"/> Average _____ <input type="checkbox"/> Rate _____ <input type="checkbox"/> Percentage _____ <input type="checkbox"/> Other _____
#2 _____		<input type="checkbox"/> Absolute level <input type="checkbox"/> Gains from baseline <input type="checkbox"/> Relative to district or state <input type="checkbox"/> Relative to demographically comparable schools <input type="checkbox"/> Other: _____	<input type="checkbox"/> Race <input type="checkbox"/> Gender <input type="checkbox"/> Income <input type="checkbox"/> LEP <input type="checkbox"/> Special ed. status <input type="checkbox"/> Other: _____	<input type="checkbox"/> Monthly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> At end of charter period <input type="checkbox"/> Other: _____	<input type="checkbox"/> Count: _____ <input type="checkbox"/> Average _____ <input type="checkbox"/> Rate _____ <input type="checkbox"/> Percentage _____ <input type="checkbox"/> Other _____
#3 _____		<input type="checkbox"/> Absolute level <input type="checkbox"/> Gains from baseline <input type="checkbox"/> Relative to district or state <input type="checkbox"/> Relative to demographically comparable schools <input type="checkbox"/> Other: _____	<input type="checkbox"/> Race <input type="checkbox"/> Gender <input type="checkbox"/> Income <input type="checkbox"/> LEP <input type="checkbox"/> Special ed. status <input type="checkbox"/> Other: _____	<input type="checkbox"/> Monthly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> At end of charter period <input type="checkbox"/> Other: _____	<input type="checkbox"/> Count: _____ <input type="checkbox"/> Average _____ <input type="checkbox"/> Rate _____ <input type="checkbox"/> Percentage _____ <input type="checkbox"/> Other _____

ACTION STEP #6:

Identify Data Sources for Each Indicator

Key Questions:

- **Where will the data come from?**
- **What relevant information already exists?**

If you have been as specific as possible about your indicators and benchmarks in the preceding steps, many of the appropriate data sources should follow directly from how you defined the indicators, making this one of the easiest steps in the process to complete. In some cases the data sources may actually be identified in how you have defined an indicator or benchmark. For example, if one of your benchmarks is “75 percent of students will meet or exceed the grade level median on the state reading test,” it is clear that your accountability system will need to include student test scores on the state reading test in order to measure your attainment of this benchmark. In other cases, an indicator’s definition may need to be pushed just a little further in order to identify the right data source. For example, if one of your benchmarks is “Attendance of 92 percent or higher at each grade level,” you should specify the source and form of the attendance data you will use to measure that benchmark, such as “Average daily attendance figures as reported to the district on form A-2.”

Practicing creative data recycling

Even if identifying the sources seems relatively straightforward, the prospect of actually gathering data on all of a school’s key inputs, processes, and outcomes you identified in your map in Step #3 may seem daunting. Keeping the map relatively simple in the first place is one way to minimize the burden, but all educators know that a meaningful diagram of the schooling process cannot be overly simple. Once the map has been drawn, the most effective strategy for accomplishing this step without making the data collection itself too burdensome is to plan for creative data recycling. Brainstorm about any information that is being collected in or about the school, no matter what the original purpose of the data collection might be. School-level staff more often collect data for other parts of the system than use it themselves. Developing a school-level accountability plan is a mechanism for taking control of that data and using it to cast light on questions that are most important to the school. With creative thinking, even data that are now seen purely as a paperwork burden, collected only to serve external administrative needs, can be useful. The handbook *At Your Fingertips* provides some good examples of how data that are routinely collected for external reporting purposes can also be put to use in an accountability plan for internal improvement purposes:

EXAMPLE: Double-Duty Data (Serving Reporting and Improvement Purposes)		
<i>Source: Table reproduced from At Your Fingertips: Using Everyday Data to Improve Schools, p. 4</i>		
DATA SOURCE	REPORTING PURPOSE	IMPROVEMENT PURPOSE
Attendance records	Obtain reimbursement from state education agency	Reduce student absences
Transcripts	Support student applications to colleges	Increase on-time graduation Encourage challenging course-taking
Grades	Prepare quarterly report cards	Reduce failure rates

DATA SOURCE	REPORTING PURPOSE	IMPROVEMENT PURPOSE
Test scores	Meet state requirement to assess students Maintain good public relations	Assess and modify curriculum and instructional strategies

With these examples in mind, think through all of the information that is already collected about your school, searching for ways you can make the data serve the purposes of your accountability plan. As you develop your data inventory, bear in mind that important information that already exists about your school may be collected at a variety of levels (in individual classrooms, at the school level, or by outside agencies such as the school district or the state or federal governments) and in a variety of formats (ranging from paper files kept on individual students to large electronic databases). The following tool provides a menu of possible data sources for your accountability system, including both existing sources and new ones you can develop yourself. As you try to match sources with each indicator, make every effort to mine the most value out of the existing sources listed in the left column. At the same time, bear in mind that some of your most important indicators, especially those that represent your school-specific vision of student learning, may require the development of tailor-made data sources such as those suggested in the right column.

TOOL: Suggested Data Sources	
EXISTING/STANDARD	NEW/SCHOOL-SPECIFIC
<ul style="list-style-type: none"> ▪ Test score data (district, state, national, college entrance exams) ▪ Student work samples/portfolios ▪ Enrollment records ▪ Attendance records ▪ Student transcripts ▪ Guidance office records ▪ Disciplinary action records ▪ Compliance data kept for state/federal programs ▪ Records/surveys from parent groups ▪ Demographic and budgetary information kept by district 	<ul style="list-style-type: none"> ▪ Student performance assessments designed around school-specific learning goals ▪ Surveys of <ul style="list-style-type: none"> - students - teachers - parents - community members - employers - receiving institutions ▪ Focus groups/interviews with the above constituencies ▪ Student course evaluations ▪ Student follow-up surveys ▪ Teacher logs/journals designed to capture time allocation, classroom practice ▪ Videotaped lessons ▪ Classroom observation protocol

Rely as much as possible on data recycling rather than new data gathering because the real value of the accountability and improvement process comes in subsequent steps where the data are analyzed

and acted on. Although some new data will most likely have to be collected, schools are often surprised by how much value there is in bringing together bits of information that various people in the building or other parts of the system already have. Facts and figures that may have seemed meaningless in isolation suddenly yield insights when seen in the context of the inputs/processes/outcomes map. Ideally, the accountability plan you have designed will provide a framework that reveals relationships among pieces of information and opportunities for action.

Be careful, however, not to go overboard with creative data recycling. Schools should resist the temptation to wedge every bit of available data into their framework somewhere, bearing in mind that just because they have a piece of data doesn't mean they have to use it. By sticking to their original map of the inputs, processes, and outcomes they consider most important to their particular school, accountability teams can keep the process on track. One suggested strategy for maintaining focus: when considering whether or not a particular piece of data warrants inclusion in the school's ongoing monitoring system, schools should ask whether that information is relevant to their specific goals for student learning and whether teachers find it useful at the classroom level for diagnosing their own and their students' performance. And if, as is often the case, there are simply no existing data that really measure the learning goals your group thinks are most central, using one or more of the techniques listed in the table above (under "New/School-Specific" data sources) to develop such data can be a vital part of your accountability system and a valuable professional development and consensus-building exercise (refer back to Step #4 for more resources and perspectives on using alternative performance measures in your accountability plan).

Ensuring good fit between data sources and your school's indicators

Although identifying data sources may seem fairly obvious for most of your indicators, it is important not to skip this step. Going through the process of spelling out where the data will come from for each indicator will keep your team from assuming that certain kinds of data will just be there when they need them for accountability reporting. Often, data that a school has counted on to be part of its accountability plan are not available in the right format or at the right time to suit school-level accountability needs. Thinking through in advance what data are available and whether or not they truly map on to the way you have defined your school's indicators and benchmarks will reduce unpleasant surprises later in the process. Clearly identifying the best data sources for the indicators you think are most significant to your school's performance, even if it means doing some digging and/or original data collection, keeps you from being judged by data that are poor matches for what matters most to your school. So even when selecting a data source for a given indicator seems to be a "no brainer," it is important to spend time evaluating how well the data source will allow you to assess performance as you have defined it in your specific benchmarks. The following checklist should help you make this evaluation and determine whether a data source is useful "as is" or whether the data will need some transformation or manipulation to be able to answer your school's critical questions:

Checklist: Questions to ask about the “fit” of each data source with your accountability plan

- ✓ Will the data be available in time to allow us to analyze them and include them in our accountability report?
- ✓ If we need individual-level student data to measure attainment of our benchmarks, will this source provide it or is it just a school-level average?
- ✓ Does this data source allow us to make the subgroup comparisons we think are important (by grade, demographic group, etc.)?
- ✓ Does this data source allow us to make comparable measurements at different points in time so we can show growth?
- ✓ Can we translate these data into the benchmark format (count, average, rate, percentage, etc.) we think is most meaningful and appropriate for measuring our performance?

ACTION STEP #7:**Establish a Data Management System****Key Questions:**

- **How will we store the data so it is timely and accessible for decision making?**

Once you have clearly identified your data sources, but before you actually begin data collection, it is important to plan in advance for what you are going to do with the data once you have them. Will your data management system be a spare office cluttered with towering stacks of files, or will it be an electronic system allowing you quick access to all of your important indicators and the relationships among them? The key differences between these two scenarios are technology and careful planning. In this day and age, it would be foolish not to take advantage of technology's potential to streamline the data management process. On the other hand, it is vital not to let available technology become the driving force of your data management system. Begin by being clear about how you want to use the system, what questions you need to answer and when, and let those questions dictate how you structure your data. By keeping the needs of the system's users—both for external reporting and internal improvement—front and center, you can avoid getting stuck with a system that may be very sophisticated but doesn't really allow you to get at your school's most important questions. If it answers your key questions and is accessible and comprehensible to teachers, a simple spreadsheet that you set up yourself can be a more powerful data management system than an elaborate and expensive commercial product.

The market for school data management products and services is a hot one, with new products and services being introduced every week. Whether you decide to buy an "off-the-shelf" data management system or to design one specific to your school, an Internet search on this topic will give you a sense of the range of options and valuable perspectives on factors to consider in setting up such systems. A recent report by the National Center for Education Statistics titled *Building an Automated Student Record System*, although aimed at district and state education agencies rather than individual schools, is particularly helpful in laying out the technical considerations involved. This report is available at <<http://nces.ed.gov/pubs2000/building>>.

As you set up your system, make sure that you can answer each of the following questions:

CHECKLIST: Questions for setting up a useful data management system

- ✓ Who will be responsible for developing the system?
- ✓ How will the system identify and maintain individual student records?
- ✓ How will the system facilitate comparisons over time?
- ✓ What software will we use?
- ✓ Does the system allow us to produce clear, informative graphics for reporting purposes?
- ✓ How can we minimize data entry drudgery by importing data from other electronic sources?
- ✓ Who will be responsible for maintaining the system?

- ✓ How will we protect the integrity of the data?
- ✓ How can we make the system as useful and accessible to teachers as possible?
- ✓ How can we keep the system flexible to respond to new questions and emerging priorities?

✓ **Who will be responsible for developing the system?**

Whether you buy an off-the-shelf product and customize it to your needs, hire an external consultant to help you design a system, or build one in-house, it is important to have one central point person responsible for the system's overall design. This ensures that the design stays coherent and focused on the questions that your accountability plan needs answered. It is equally important that the person with this responsibility be someone well-versed in issues of teaching and learning, not just technology. If there is a teacher in your school with sufficient technical expertise to take on this responsibility, it is well worth it to free up enough of his or her time to take the lead on this project. Having an insider responsible for data design is the best possible way to ensure that the system is responsive to your school's particular needs and questions. If this strategy is not feasible, make sure that any external consultants you work with understand education issues and are open to the questions and suggestions of teachers about how the system will work. If possible, "partner" the external consultant with a teacher to make sure that the classroom perspective stays front and center in the design process.

✓ **How will the system identify and maintain individual student records?**

One of the most important design elements of a school's data management is the ability to look at individual student data, relating outcomes to their characteristics and educational experiences. Make sure that any system you buy or design has a fail-safe way to identify individual students and keep all of their data together.

✓ **How will the system facilitate comparisons over time?**

For both accountability and improvement uses, it is vital that your system enable you to go beyond taking "snapshots" of your school's performance at one point in time to being able to document changes over time. If your system enables you to track individual students, it should make longitudinal comparisons possible, but make sure that you understand how the system handles comparisons over time before you sign off on it.

✓ **What software will we use?**

The range of software products specifically designed to help schools manage and analyze performance data is far too extensive to review here, and new options are constantly coming on the market. The April 2001 on-line edition of *School Administrator* magazine reviewed three software packages found to be comprehensive and affordable tools for schools' accountability and improvement decision-making needs. The review is available at <http://www.aasa.org/publications/sa/200104/creightonsidesoftware.htm> and includes links to demos and more information about each product described. All three of the products described here have two features that are important to look for in school data management software:

- (1) They facilitate the analysis of multiple kinds of data, not just quantitative indicators like test scores and demographics.
- (2) They are flexible enough to allow schools to ask their own questions and produce customized reports, so schools are not locked into a predetermined format.

Such products are an option worth considering, and the process of investigating them may help you clarify what you really need from a data management system. You should not feel compelled, however, to buy a specially designed piece of software. Many schools find that spreadsheet or database software they already have and use are perfectly adequate for managing their accountability data. Using a familiar desktop application has the important advantage that many people in the school are already comfortable with the application, making your data more accessible for professional decision making.

✓ **Does the system allow us to produce clear, informative graphics for reporting purposes?**

Before buying software or signing off on the design of an in-house system, try generating some examples of the kinds of charts and other data displays you think will be most compelling in communicating your accountability results to both internal and external audiences. See *Appendix B* for some samples of the kinds of charts that are most useful in analyzing and reporting data. Your software should allow you to display data in a variety of formats (scatterplots, bar graphs, pie charts, etc.) both to facilitate the analysis of relationships and trends and to ensure the kind of displays most appropriate to the questions you are trying to answer. Most desktop spreadsheet programs have excellent graphics capability built right in. Whatever type of software you choose, you may want to consider a training session for your staff designed to highlight the power of graphic displays to make meaning of and communicate data.

✓ **How can we minimize data entry drudgery by importing data from other electronic sources?**

Make sure that the software you select makes it easy to import data from other kinds of software. Developing an accountability plan is enough work without having to retype hundreds of student ID numbers and test scores. Entering rather than importing data also dramatically increases the possibility for errors in the data. As a test, try importing test score data in whatever electronic format you receive it from the state, district, or testing company into your new system. Test score data are likely to be the largest chunk of preexisting data you will want to incorporate into your accountability system, so you want to ensure this can be done smoothly.

✓ **Who will be responsible for maintaining the system?**

Whether or not you used an outsider to help design or set up your data management system, you will need someone on your own staff to be responsible for maintaining it. Having a single point person in charge of entering your data and keeping it secure ensures that standard procedures are followed and is the best way to keep the data “clean.” The value of this role can be greatly enhanced if the person filling it has the time, interest, and skills to move beyond the technical aspects of maintaining the system to take the lead in using it for analysis and decision making. Having a central person to go to for help greatly enhances the odds that your staff will become comfortable using the data for professional decision making. Of course, to play this role most effectively, your data person will need some release time from other duties.

✓ **How will we protect the integrity of the data?**

Since your system will include test score and demographic information about individual students, maintaining confidentiality is a concern. Security is also important to ensure that unauthorized changes are not made in your data or that the data are not corrupted by multiple changes being made by multiple people. For all of these reasons, you will probably want to make your data accessible by password only. Since these data are designed for accountability reporting and for

internal decision making, make them accessible to all your staff. While all staff should be able to use the data, only a few should be authorized to enter or change data, and only under prespecified conditions.

✓ **How can we make the system as useful and accessible to teachers as possible?**

Using software such as a spreadsheet program that is already familiar to teachers is one obvious strategy for making the data accessible. However, most commercial data management systems also have highly user-friendly interfaces that are designed to make it easy for teachers to interact with the data and get the answers they need. In either case, training is key to getting your whole staff familiar and comfortable with the contents and layout of the data and to showing them how they can answer their questions and help them do their jobs more effectively. Make sure that school leadership and staff who have been involved in developing your accountability plan take every opportunity to model how the data can be used for school improvement and everyday decision making. When questions are raised in staff meetings about students, resources, or performance, demonstrate how your new system can generate quick and insightful answers rather than relying on hunches or anecdotes.

✓ **How can we keep the system flexible to respond to new questions and emerging priorities?**

Make sure that the data management system you build or buy does not lock you into only being able to answer this year's questions. An effective accountability system will not only generate answers but will raise new questions. What you learn about your school's performance this year may shift or entirely change the questions you think it is most important to pursue. You should always have the capability to add new kinds of information to your system, and you should avoid systems that limit you to predetermined reporting formats.

ACTION STEP #8:

Collect the Data

Key Questions:

- **Who is responsible for collecting the data for each indicator?**
- **By when?**

If you have been as clear as possible in specifying your data sources in Step #6, this step should be the most straightforward one in the process. That is not to say, however, that it will be the shortest or easiest! Although you shouldn't have any difficult decisions to make at this point, actually going out and getting the data can be a time-consuming process. Use the following suggestions to make the process go as smoothly as possible:

CHECKLIST: Tips for managing the data collection process

- ✓ Assign specific responsibility for each indicator
- ✓ Distribute responsibility
- ✓ Establish a clear time line
- ✓ Do data entry as you go
- ✓ Space out new data collection activities, and ensure they don't conflict with other school priorities
- ✓ Establish midpoint checks
- ✓ Balance data collection with data reflection

✓ **Assign specific responsibility for each indicator**

Even when you are recycling data that the school already collects for another purpose, designate one person to make sure that the data for each indicator are available when you need them and in a format ready to be incorporated into your data management system. Never just assume the data will be there when you need them.

✓ **Distribute responsibility**

Get your entire staff involved in the data collection process, and avoid overburdening any one individual with responsibility for too many indicators. Be especially careful that people taking the lead on indicators that will require new data collection (like a survey or rubrics for student portfolios) can concentrate on that task and not be distracted by too many other responsibilities.

✓ **Establish a clear time line**

Consider when data for each indicator will be available and build in clear deadlines. Try to space out the deadlines faced by any one person. Getting the data for each indicator as soon as feasible after they become available will have the twin benefits of allowing you to show measurable progress in filling out your data system throughout the year and of avoiding a last minute crunch.

✓ Do data entry as you go

As soon as the data for each indicator are available, get them into whatever electronic format you have devised. Doing data entry as you go allows you to spend more time on the more significant step of analyzing and interpreting the data at the end of the process.

✓ Space out new data collection activities and ensure they don't conflict with other school priorities

The indicators requiring the most time-consuming data collection by far will be those where existing data are not available. As we discussed in Step #4 on defining indicators, these are likely to be indicators of your school-specific goals in areas like student learning, school climate, and parent or community involvement. Depending on how you have defined them, getting data on these indicators may require administering surveys and/or scoring student work based on rubrics, structured classroom observations, or a variety of other more qualitative assessment tools. All of these techniques require thoughtfulness from participants; to get good data, it is vital for people not to feel rushed. If you are making more than one such effort, space them out throughout the year to get the maximum energy and commitment from respondents. Also be careful to schedule them so they don't conflict with crunch times like holidays or standardized testing season.

✓ Establish midpoint checks

Set aside several opportunities along the way for staff to meet as a group and report their progress on the indicators they are responsible for. Tracking your progress as you go allows you the satisfaction of crossing things off the list. It also allows you to identify unanticipated problems in getting certain data while there is still time to come up with another data collection strategy or identify an alternate indicator.

✓ Balance data collection with data reflection

Try not to get so caught up in the logistics of assembling the data that you miss the chance to reflect on what it all means. Rather than seeing data collection and data analysis as two separate steps, be on the lookout as you are collecting the data for patterns, trends, and relationships. Paying attention to the data as you are collecting them means you will bring to the table not just the data, but informed questions and hypotheses. New data collection activities such as rubrics or observations are particularly rich opportunities for reflection. Since they are integrated into the teaching and learning process and provide a structure for thinking about quality teaching and learning, they have at least as much importance for professional development experiences as they do for data-collection activities.

ACTION STEP #9:**Analyze/Interpret the Data****Key Questions:**

- **Is the school reaching its goals?**
- **Which strategies are most and least effective?**

After all the effort you've invested in mapping your school's functioning, defining indicators and benchmarks to measure your performance, structuring a data system, and gathering the data, now comes the fun part. You can now fill out the map you drew of how your school works with the real data you've assembled, allowing you to begin to diagnose your performance relative to specific goals. Now is the time when questions get answered, when decisions can be made. Now is the time when mere data (which can be just a mass of numbers with no order or context) get turned into usable information through the ideas and insights of those who know the school best. Investing your staff's collective wisdom in "making meaning" from the data before submitting your accountability report helps to ensure that your school's performance will be judged in the context of its specific resources, strategies, and goals. In addition to presenting the strongest and most meaningful external accountability report possible, careful data analysis also identifies strengths and weaknesses that set the stage for the internal improvement planning described in the additional steps of the accountability process presented in the companion manual, *Institutionalizing Evaluation in Schools: Becoming a Learning Organization through Data-Based Decision Making*.

In this section we present a variety of tested strategies for productive, insight-generating data analysis.* These strategies and related techniques are summarized in the tool on the next page and then discussed in more detail in the paragraphs that follow. You may want to divide your staff into several working groups to try out different strategies. This will guarantee multiple perspectives on the data at hand and is likely to generate the most valuable interpretations.

* In addition to this list, you may find it helpful to consult the section on "Examining Your Data" in the manual *At Your Fingertips: Using Everyday Data to Improve Schools*, pages 115-127. Their coverage of this topic contains more details on some of the strategies examined here, as well as helpful examples and sample charts.

TOOL: Strategies for Analyzing and Interpreting Data	
STRATEGY	KEY TECHNIQUES
Focus on relationships	<ul style="list-style-type: none"> ▪ Revisit hypotheses about which inputs and processes are most important to reaching your desired outcomes (from Step #3) ▪ For outcomes that are higher or lower than anticipated, look at what is happening with related inputs and processes
Map resources and activities onto desired outcomes	<ul style="list-style-type: none"> ▪ Compare your stated goals with how you actually spend your money and time ▪ For outcomes that are lower than hoped, look for opportunities to allocate more resources and time
Graph the data	<ul style="list-style-type: none"> ▪ Scatterplots to map the relationship between two variables ▪ Histograms to look at the distribution of outcomes on a single variable ▪ Line graphs to emphasize trends over time ▪ Bar charts to compare how different groups are performing on the same indicator
Compare different groups	<ul style="list-style-type: none"> ▪ Revisit the subgroups you decided (in Step #5) were particularly relevant for a given benchmark ▪ Disaggregate your schoolwide outcomes indicators to examine the performance of relevant subgroups ▪ Identify the size and direction of any performance gaps among groups ▪ Determine which if any of these gaps are large enough to warrant concern ▪ Consider whether the differential use of resources or strategies could be contributing to significant gaps
Assess strategy implementation	<ul style="list-style-type: none"> ▪ For indicators that are lower than hoped, assess how well related strategies have actually been implemented and where there are opportunities to improve ▪ For benchmarks that have been met or exceeded, consider what can be learned from the implementation of the strategies that got you there
Look for external comparisons	<ul style="list-style-type: none"> ▪ Revisit relevant external comparisons selected to help you benchmark your performance (in Step #5) ▪ For indicators where your performance falls below the benchmark, what can be learned about the strategies and practices of the comparison group?
Apply relevant theory and research	<ul style="list-style-type: none"> ▪ For indicators that are lower than hoped, seek out theory or research on what factors most influence those outcomes ▪ Examine your school's choices and strategies about the factors highlighted by theory and research ▪ Compare your school's choices to identified best practices
Translate into concrete terms	<ul style="list-style-type: none"> ▪ Express percentages in terms of the actual number of days, students, classes, etc. that are involved ▪ Consider the size of the impact in practical terms
Look for trends over time	<ul style="list-style-type: none"> ▪ For all outcomes where you have data from two or more points in time, look at the size and direction of the change ▪ For indicators where there is a significant change, look at how related resources and strategies changed over the same period
Examine the distribution, not just a single point	<ul style="list-style-type: none"> ▪ Break down summary statistics into performance levels or categories ▪ Identify categories that are larger or smaller than you would like ▪ Consider what resources and strategies are needed to move more students into higher performance categories

Focus on relationships

The real power of an accountability plan that considers not just outcomes but related inputs and processes is that it allows you to focus on relationships among data points rather than discrete pieces of information. If a particular outcome indicator is higher or lower than expected, attack the analysis by examining related input and process indicators, particularly those that were predicted (in Step #3) to have causal relationships to the indicator in question. The point of drawing a conceptual map of how the school functions is to provide a framework for analysis, highlighting relationships and causal pathways. Individual bits of data are much more revealing in this context than they would be in isolation. For example, low student engagement among a particular grade, group, or track may be related to that group's perceptions of the school climate or to the heavy use of instructional strategies that place them in passive roles. Filling in the map with real data on such variables gives schools the opportunity to test (and perhaps revise) their understanding of how the school's resources and activities are related to its outcomes.

Map resources and activities onto desired outcomes

Data analysis is really all about seeing patterns in information. One of the most important of these patterns to detect is the fit (or lack thereof) between your school's desired learning outcomes and the allocation of your time, money, and personnel. Looking at data about inputs, processes, and outcomes in a single framework can help schools assess how well available resources are being deployed to reach core goals. Large chunks of resources in the inputs and processes sections of the map that cannot be clearly connected to specific learning outcomes may be ripe for reallocation. For example, how much instructional time is being spent on activities that are not reflected in the school's central learning goals for students?

Graph the data

As all educators know, human beings have different learning styles. When it comes to numbers, many people are visual learners; that is, they are better able to see patterns and trends in a well-designed chart than by looking at a table of raw numbers. Charts are an excellent way to summarize a large amount of information in a way that brings out patterns and relationships. Often a chart will allow more people to see the bottom line or most important conclusion about a set of data, making it a valuable analytical shortcut. Thus, you should consider the graphical presentation of data an important part of your data analysis, not just something to think about when it is time to produce a report. Desktop spreadsheet programs have graphics capabilities that allow you to quickly try out a variety of chart formats to see which one best represents a given set of data. In Appendix B at the end of this manual we present examples of a variety of common, useful chart formats for analyzing and presenting your accountability data. Some graphing strategies that may be particularly useful at the analysis stage include these:

- If you want to examine the **relationship** between two variables (if one goes up, does the other go up or down or is there no clear relationship?), try a *scatterplot*, otherwise known as an XY chart (because the values for one variable are plotted on the X axis of the graph and the values for the second variable on the Y axis).
- If you want to look at the **distribution** of outcomes on a single variable (for example, how many students scored at each performance level on a test), try a *histogram*, also known as a frequency distribution (because it displays the frequency or actual count of individual data points in each category).

- If you want to get a feel for **trends over time**, try a simple *line graph*, in which the performance level is shown at each successive time period, with a line connecting the points to emphasize the size and direction of change.
- If you want to **compare how different groups are performing** on the same indicator, chart their performance next to each other on a *bar graph*.

All of these types of displays can be accomplished and customized with a few clicks of the mouse in most spreadsheet programs.

Compare different groups

Evaluating the school's performance on a given outcome by looking at a single number may not be particularly enlightening. Instead, try breaking down the results by such categories as race, gender, grade, track, or program. Begin with the subgroups you decided (in Step #5) were most relevant for a specific benchmark, but don't be limited to those comparisons. Now that you have real data to play with—not just hunches—exploring different subgroup comparisons may reveal unexpected gaps and discrepancies. Disaggregated data often reveal problems or inequities that are masked by schoolwide numbers, allowing you to hone in on the size and direction of performance gaps among groups. Furthermore, the more precise the diagnosis, the more targeted and efficient the remedy is likely to be. When considering improvement strategies to address any performance gaps you have identified, you should use the same subgroup comparisons to examine the differential distribution or impact of the resources and strategies most related to the outcome you are targeting. Disaggregation to compare results for different groups also works well for attitudinal data like perceptions of school climate or expectations. Comparing results from groups that have different roles in the school (students, parents, teachers, administrators) may reveal areas that need work. For example, survey data may reveal that while teachers believe they have high expectations for all students regardless of background, students and/or parents feel otherwise.

Assess strategy implementation

As you mapped your schools functioning in Step #3, you most likely talked, not just about how your school works now, but how you would like it to work ideally. One of the benefits of an accountability system that lays out key processes and strategies next to the outcomes you are shooting for is that it allows you to get a head start on improvement planning. Now that you have real data on your outcomes, you have the opportunity to assess that in the light of the data you have also collected on your school's processes. If some of your outcome indicators are not as high as you hoped, the first place to look is to the strategies and processes you identified as critical to getting there. How completely or effectively were they actually implemented? Does a disappointing result on a given outcome suggest that your strategies were the wrong ones, or that you didn't really give those strategies a fair test? For example, does the reading program you adopted really not target the skills your students most need to work on, or was the amount of teacher training or instructional time devoted to the program insufficient for it to work? Education policy has a history of jumping from program to program when results don't change fast enough, without considering that it might not be the program's design but how it was put in place that was lacking. Your accountability system should allow you to assess how well you are implementing your key strategies, giving you an opportunity to strengthen implementation rather than make a radical shift of direction. You should also make a point of learning from strategy implementation in cases where you have met or exceeded your performance benchmark. What did you do right in terms of implementing the strategies that got you there, and how can you apply those lessons to other challenges?

Look for external comparisons

Part of the process of establishing your performance benchmarks in Step #5 was identifying relevant comparisons such as the performance levels of the state or district as a whole or of demographically similar schools. Use those external benchmarks now to put your own school's performance in context. Wherever possible, make comparisons not just of outcomes but of important inputs and processes, so you can focus in on the most important and actionable differences between your school and your comparison group. You may find at this point that you need additional, perhaps more precise or better matched, comparisons to really make sense of your performance data and evaluate how good is good enough. If there are indicators where your performance data are of particular concern, you may want to seek out a school with a similar student population that is known for strong performance on your target indicator. Electronic searches of school report card data may allow you to identify an appropriate comparison school; or a contact at a state or district office, technical assistance center, or local university may have suggestions. Once you have identified an appropriate comparison school, try to establish personal contact and learn as much as you can about their strategies and practices in the area you are targeting.

Apply relevant theory and research

If some of your results have you stymied, unsure how to interpret them or what might be done to change them, tap into the large body of theory and research on educational practice that is now available from your desktop via the Internet. It is almost certain that other schools have faced the same challenges and just as likely that the question has been studied by education researchers. While education research does not have a sterling record of making its findings useful and accessible to practitioners, technology makes it increasingly easy to sort through studies and find the ones of direct relevance and practical value to your particular situation. One good place to start is the database of the Educational Resources Information Center (ERIC), a federally funded national clearinghouse of education research and information available on the web at <<http://ericir.syr.edu/>>. ERIC is a massive index of journal articles, conference papers, research reports, and other forms of education research. The keyword searching function allows you to go right to studies on the issue you are investigating. While many of the documents indexed in ERIC may be too theoretical or academic for your needs, the abstracts of each document make it relatively easy to tell which reports are practitioner-focused. Another excellent place to start your search is the home page for *Education Week* at <www.edweek.org>. *Education Week* provides perhaps the most comprehensive coverage anywhere of developments in educational policy and practice and they are also strong on providing summaries of new research. Their entire archives are searchable by keyword. Even better, most of the relevant articles you find will probably have electronic links allowing you to investigate the topic in more detail or look directly at the research that is being summarized. As you search for theory and research relevant to the indicators you most want to move, you may also find it useful to tap into contacts at a local university's college of education. Once you have located promising outside sources, use that research to identify resources and strategies that have been found to be most powerfully related to the outcome of concern and to compare your school's choices to identified best practices.

Translate into concrete terms

The manual *At Your Fingertips: Using Everyday Data to Improve Schools* provides several examples of how translating your data into concrete terms can make it easier to understand and act on (see page 122). For example, they note that an average daily attendance rate of 92 percent may sound good until you realize that this translates into each student missing an average of 14 days per year. Putting a specific

number on school days missed per student makes the potential impact of attendance on student learning much more vivid and may cause you to rethink your benchmark level or the strategies you are using to change this indicator. Wherever possible, try expressing broad percentages in terms of the actual number of students, days, courses, teachers, etc. that are being affected. This is likely to give you a powerful perspective on the practical size of an indicator's impact.

Look for trends over time

For all outcomes where you have data from two or more points in time, analyze the size and direction of the change. Graphing longitudinal data in a simple line chart showing the trend over time may make the data easier to interpret. The key assessment you need to make here is whether the changes you are seeing are the normal "blips" or fluctuations in any data over time or whether they are large or persistent enough to constitute a real trend. In the first case, the change can be considered just "noise" in the data and is not a cause for action (if it is a negative shift) or celebration (if it is a positive one); in the second case it represents a fundamental underlying shift in your school's performance and may indicate the need for a shift in strategy and practice. Making such distinctions requires human judgment, particularly the insight of those who know the school's functioning best. There is no hard and fast rule for determining when a change in the data represents a real trend; but the more data points you accumulate over time, the easier it is to distinguish significant trends from random shifts. It may also help to look at trends over the same time period in the resources and strategies most closely related to the outcome you are probing. If other indicators are moving in tandem, this is evidence of a meaningful trend. It also helps you to diagnose what needs to be done to turn a negative trend around or reinforce a positive one.

Examine the distribution, not just a single point

While a single summary indicator such as a schoolwide average may be a quick and comprehensible way to represent a lot of information, it also hides important differences. Two schools with the same overall performance level on an indicator may actually be in very different situations, with different implications for action. For example, let's say your school has an average SAT score of 1000. Are most of your students scoring right around this average, with just a few scoring much higher and much lower? Or does this average result from distinct clusters of students, with one large group scoring in the 800s and another hovering around 1200? These two scenarios would have very different implications for your school's college preparation and counseling strategies. Furthermore, when looking at the distribution within a given indicator, it is important to know how much of the relevant population is and is not reflected in the average. For example, is that average SAT score based on 10 percent of your students taking the test or 80 percent? Again, the implications for action based on an indicator could be very different once you examine the underlying distribution. Generating a histogram or frequency distribution is a quick way to make a visual assessment of the distribution of performance within an indicator. Most spreadsheet or statistics programs will automatically divide your data into even categories such as deciles or quartiles for the purposes of presenting a frequency distribution. Or you can specify the categories yourself depending on what you think the relevant divisions or performance levels are. Once you see how many students fall into each category, you can begin to think about how you would like the distribution to change and what resources and strategies will be needed to move more students into higher categories.

ACTION STEP #10:**Report/Communicate Findings****Key Questions:**

- **How well did the school do?**
- **Why?**

The end is in sight! One of the major emphases of the accountability process presented in this manual and its companion (*Institutionalizing Evaluation in Schools: Becoming a Learning Organization through Data-Based Decision Making*) is that collecting and using performance data about your school should be an ongoing process rather than a once-a-year event and that it should be used as much for internal improvement planning as for external performance reporting. Nonetheless, developing your annual report is a significant milestone in your accountability process and a natural place to stop and reflect on all you have accomplished before continuing with the cycle of using data for planning and improvement. Since the annual report is a required end product of charter schools' accountability plans, this manual concludes with a discussion of effective strategies for external reporting and communication of your findings. In the second manual we present the final three steps of the accountability process, focusing on internal use of the data, along with other perspectives and strategies for making evaluation and data-based decision making a routine part of the way your school functions.

In the previous steps you have collected and analyzed a wealth of valuable information about your school's performance, leaving you with an enhanced understanding of how well your school works and why. In this section, we discuss three key questions that you will need to answer in order to report and communicate your findings effectively to external audiences:

- (1) What information should we include in our external reporting?**
- (2) What is the most powerful way to present the data?**
- (3) In what forum(s) should our external reporting take place?**

As you develop answers to each of these questions, it will be useful for you to refer back to Step #1 in this manual, where you identified the intended users and uses of your school's accountability information. Thinking back to this analysis of your school's stakeholders will help you tailor which information to highlight, shape the presentation of that data, and identify the most appropriate forum or forums to convey the information.

(1) What information should we include in our external reporting?

The accountability plan you have developed by following the steps in this manual is rich in data. It is not necessary, nor appropriate, to include every piece of this information in your external reporting. Many of the indicators for which you now have data are vital for the internal understanding and improving of school performance, but not necessary for external accountability reporting. Simply handing over all the data you generated and calling it an accountability report would be likely to backfire for two related reasons:

- External audiences would be overwhelmed by the amount and detail of the data.
- They might miss the data you most want to highlight.

The following checklist presents 7 strategies for selecting the information that will make up the most powerful accountability report.

CHECKLIST: Strategies for selecting what information to include in your accountability report

- ✓ Ensure you are covering required bases
- ✓ Put required outcomes information (usually test scores) in a broader context
- ✓ Highlight the information the public most wants to know
- ✓ Don't drown external audiences in data
- ✓ Make and explain comparisons
- ✓ Use demographic data sensitively
- ✓ Identify action steps

A number of these strategies were suggested by research conducted by *Education Week* on what the public most wants to see in school report cards. The results of this study can be found on the Internet in a report called "Reporting Results: What the Public Wants to Know" at <http://www.edweek.org/sreports/qc99/opinion/aplus1.htm>. This is a highly recommended resource for schools at the point of shaping their accountability findings into a formal report. Along with strategies for what to report and how to report it, you will also find a prototype school report card that is likely to give you useful ideas about both content and format of your own report. Although we include some of the highlights of this research below, you are encouraged to look at it in more detail.

✓ Ensure you are covering required bases

Obviously your accountability report must include (but not necessarily be limited to) the information that your charter's authorizer will use to make renewal decisions, along with any other indicators that are required to be reported by your state or district. You identified these required indicators and included them in your accountability process up-front, but it is worth double-checking at this point to make sure that you are clear on external expectations about reporting. It may be worth a quick phone call to the office where you will submit your report to review the required elements.

✓ Put required outcomes information (usually test scores) in a broader context

You are unlikely to put your school in the best light by simply reporting what is required and leaving it at that. The school-specific accountability plan you have developed by following the steps in this manual gives you the power to provide much more nuanced information about your school's performance. Put the required outcomes—almost always test scores—into a broader context by reporting other outcomes such as attendance and promotion rates. Even if it is not required, you may also want to provide trend data on key outcomes rather than a one-year snapshot. Your customized accountability process should also put you in a strong position to present compelling, credible information about your school-specific learning outcomes. Finally, although external accountability reports should be focused on outcomes, you may want to include some of the information you have gathered about your school's resources (inputs) and strategies (processes). Although external audiences do not need the level of detail that is useful for your own internal improvement planning, sharing some of this information will give them a richer understanding of not just whether your school works but why and how.

✓ Highlight the information the public most wants to know

The “Reporting Results” study found that in addition to student performance data, parents and taxpayers are most concerned about school safety and teacher qualifications. Specifically, they recommend using indicators of safety such as

- Number of suspensions
- Number of violent incidents per 100 students

and indicators of teacher qualifications such as

- Average number of years’ experience
- Certification status
- % of teachers teaching in the field in which they were trained

Although your own stakeholder analysis should have given you insight into what your particular constituents care about most, these are two areas that users of your accountability report are likely to find most relevant.

✓ Don’t drown external audiences in data

When it comes to assessing school performance, people outside your school are likely to have a limited attention span and a limited ability to hone in on what is most important among a sea of indicators. Do it for them by keeping your accountability report tight and focused on what matters most for student learning. The “Reporting Results” study suggests using an “onion peel” strategy in which you highlight critical findings in a brief top-layer report, while letting people know what more detailed information is available and where to get it if they wish to peel down to the next layer.

✓ Make and explain comparisons

As part of defining performance benchmarks in Step #5, you identified relevant comparisons (over time, to the state or district, to demographically similar schools) for key indicators. The “Reporting Results” study confirmed that the public finds such comparisons extremely useful in evaluating school performance results and wants to see them included in accountability reports. Charter authorizers are likely to find comparisons equally valuable in putting performance into context and assessing how good is good enough. To ensure that your performance is assessed fairly, however, it is vital to explain your comparisons. Make sure your report establishes why you selected each comparison and interprets the implications of each comparison for your performance.

✓ Use demographic data sensitively

The accountability process suggested in this manual recommended the inclusion of demographic data as central to understanding how your school’s inputs affect its outcomes. Most educators agree that demographic data is an important part of the context of a school’s outcomes. However, as confirmed strongly by the “Reporting Results” study, external audiences may not interpret the inclusion of demographic data the same way. Some may see it as an excuse for poor performance while others fear that it institutionalizes lower expectations for some children. While policymakers such as charter authorizers are likely to have a more nuanced understanding than the general public of the relationship between demographics and school performance and to view such information as relevant and important in an accountability report, be sensitive to how you present and interpret demographic data.

✓ Identify action steps

Let your readers know that all the effort you put into collecting and analyzing accountability data is not purely retrospective. Although at this stage you are just beginning to develop the implications of your findings and devise improvement plans, signal your direction. Through the data analysis you conducted to develop your report, you identified a number of strengths and weaknesses in your school performance and also likely began to hypothesize about what you need to do next. Perhaps the strongest way you can demonstrate true accountability for your school's performance is to conclude your report by talking about the implications of your findings for future action.

(2) What is the most powerful way to present the data?

Now that you have narrowed down the data that are most important to include in your accountability report, consider the following keys to maximizing the power of your data presentations:

- (a) Selectivity
- (b) Appropriate format
- (c) Clarity
- (d) Analysis

(a) Selectivity

The impact of the data you present in your accountability report begins with selectivity. The more tables and charts you cram in, the less attention any one of them is likely to get. A few well-chosen charts will bring your most important findings dramatically to life for your readers, but page after page of charts will likely end up being ignored. Although you may have generated dozens of interesting charts as part of your data analysis process, don't fall into the trap of thinking that just because you have a chart you must include it in your report. Some of your charts may have great insight-generating power for your internal improvement planning but provide too much information for most external audiences. Use the tips in the section above to focus in on the most important findings to highlight in your report, then save the presentation of more detailed data for an appendix or a separate technical report available on request.

(b) Appropriate format

Although everyone in a group is likely to have their own personal preferences for the types of data displays they think are easiest to interpret, choose the data display format for each indicator based on the amount and type of data you have and the kind of analytical point you are making. In general, tables are better than charts for presenting a lot of data in a limited amount of space and for presenting a full array of information so that readers can draw their own conclusions from it. If you want to present the percentage of students performing at each level in several different grades, a simple table is probably a better bet than a chart, which can easily get cluttered and difficult to interpret when you have too many different data points. In cases where you want to emphasize a particular relationship, difference, or trend, however, charts are almost always more powerful. Review the tips under Step #9 for which kinds of charts are most helpful in highlighting which kinds of relationships and refer to APPENDIX B for specific examples of how different kinds of charts can help you make your points.

(c) Clarity

Whatever kind of data display you choose, be as clear and specific as possible about what data are represented. Use your titles and data labels to let readers know what population you are talking

about (10th graders or all students), what time period is covered, the size of the total group and any subgroups represented (the “n”), the unit of measurement (percentage, total number, dollars, scaled scores, etc.), and the data source. All of this information will help your reader make a more accurate interpretation of the data you are presenting and avoid drawing invalid conclusions.

(d) Analysis

Always remember that presenting *data* is NOT the same thing as presenting *findings*. After all the work you've done to get to this point, don't make the mistake of just putting your data out there in big tables and hoping for the best. Use the analytical framework you've developed and your deep knowledge of how your school works to interpret and explain each data display. You may want to present a few bullet points under each table or chart highlighting the most important findings and their implications. Don't assume that the data will speak for themselves or that all readers will interpret tables and charts in the same way. Take the opportunity to turn data into information by talking about what it means for school performance.

(3) In what forum(s) should our external reporting take place?

Now that you've gathered and analyzed all this data, focused in on the most important indicators for your external audiences, and selected the most powerful data presentation formats, where and how should you share it? A required annual report to your chartering agency is the obvious answer, but it need not be the only one. The data you have gathered and the analysis you have conducted constitute a valuable resource for communicating with all of your key stakeholder groups. Refer back to the potential users and uses for school performance data you identified in Step #1 and consider the most appropriate means for sharing your findings with each group. Simply photocopying your annual report and distributing more copies may not be the best way to reach all of your key stakeholders. With minimal incremental effort you can vary the formality, level of detail, and means of communication (written, oral, multimedia) to customize the most meaningful presentation of results for different groups. In addition to your formal annual report, consider the following methods:

- Following up the submission of your written report with a debriefing session for policymakers
- Formal presentation of results, followed by a question and answer session
- Panel discussions in which several members of your school team discuss the accountability process and findings and field questions
- Informal discussion settings such as a coffee hour with the principal to which parents and community members are invited
- Fact sheets distributed to local media
- Newsletters
- Posting results on your school web page
- Making accountability results the topic of professional development sessions for teachers
- Developing a school marketing video

These methods can be used separately or in combination to develop a communication strategy that addresses all of your stakeholder groups. Having a comprehensive communication strategy ensures that you will get the maximum payoff from all the hard work you put into your accountability plan.

APPENDIX A:
Sample Indicators for Key Input, Process, and Outcomes Factors

INPUTS

• **Resources**

- per pupil \$
- average teacher salary
- new teacher salary

(For each of the above: absolute \$, as a % of national average, as a % of state average)

- annual per pupil \$ spent on instructional materials
- # of computers
- # of books in library

• **Community demographics**

- per capita income
- % of adults high school/college graduates

• **Class size/teaching load**

• **Student demographics**

- race/ethnicity
- socioeconomic status
- % single-parent homes
- readiness on entry to school (% working on grade level)
- % non-native English speakers
- % special education
- % free/reduced lunch
- % gifted/advanced track
- mobility/turnover (annual rate)

• **Teacher quality**

- % w/degree in field
- % w/advanced degree
- % w/advanced certification (National Board for Professional Teaching Standards, others)
- turnover rate
- % of teachers leaving school within 5 years
- average years of experience
- absenteeism
- attitudes: sense of efficacy, enthusiasm
- technology literacy/comfort

PROCESSES

• **Safe/orderly climate**

- # of discipline incidents reported to principal's office
- # of incidents of violence, vandalism, cheating
- # of suspensions/expulsions
- # of cases in which drugs/weapons brought to school
- physical condition of school
- student/teacher/parent/community perceptions of safe school climate
- student/teacher/parent perception that rules are fair and consistently applied

• **Positive/learning focused climate**

- % of students/staff agreeing that:
 - the school is a supportive/caring place
 - the school is focused on learning
 - achievement is recognized/rewarded
 - they feel they belong
 - they are known and respected as individuals
 - everyone is encouraged to participate

• **Parent support and involvement**

- % attendance at conferences
- membership/participation in PTO
- volunteer hours
- % saying the school does a good job keeping them informed of school policies, their own child's progress
- % aware of/actively involved in student homework assignments at least weekly
- % aware of grade-level standards/expectations

• Curriculum

- clear goals (existence of written objectives for each subject area and grade, % of students aware/able to describe)
- continuity across grades
- integration across subjects
- extent textbook-driven
- teacher awareness/implementation of national subject matter standards
- perceived usefulness/relevance

• Instruction

(the following indicators could be reported by students or teachers or observed in a sample of classes)

- % of time reliance on textbook, worksheets
- % of time teacher talk vs. student participation
- % of time active/hands-on learning
- variety and appropriateness of pedagogical strategies
- opportunities for cooperative learning
- responsiveness to individual learning styles/needs
- integration of technology with core subjects (# of lessons/month)
- average hours of homework per student per week

• Assessment

- link to standards
- “authenticity” vs. reliance on defined response (multiple choice, fill in the blank)
- frequency of feedback to students
- opportunities for students to self-assess progress relative to clear standards
- use of multiple sources of evidence (tests, portfolios, projects, demonstrations, oral questioning)
- use of assessment data in instructional planning

• Access/equity

- to technology (student/computer ratio, average student minutes per week)
- to high-level material (% of students in high track, advanced classes, etc.)

• Professional Development

- \$/teacher/year
- % of budget
- hours/teacher/year
- perceived relevance to school-specific goals
- follow-through, application in classroom (# of times teachers report they applied new ideas from professional development to classroom)
- extent of mentoring for new teachers

- **Professional Culture**

- autonomy (% of teachers saying they are encouraged to use their professional judgment over what/how they teach)
- extent of teacher voice in schoolwide decision making
- innovation (% of teachers reporting they frequently experiment with new classroom strategies, % agreeing that good instructional ideas spread quickly in the school)
- collaboration (hours/month teachers report they work together on joint planning, curriculum development, etc., # of times weekly teachers report they discuss instructional issues with colleagues)
- opportunities for feedback (% of teachers saying they get regular and useful feedback on their classroom performance, # of opportunities per year to observe colleagues, be observed)
- responsiveness (% of teachers saying they/the school changes and adapts to meet students' needs)

- **Use of Time**

- instructional time on core subjects
- observed % student time on task in sample of classes
- # of interruptions of core instructional time reported by teachers in a sample week
- hours of teacher planning time (individual/joint) per week
- flexibility to accommodate varied instructional needs

- **Administration/leadership**

- % of teachers saying principal is effective instructional leader
- % of teachers saying good teaching is recognized and rewarded
- % of teachers saying they have access to up-to-date research on effective practice
- existence/scope of departmental or grade-level decision-making teams
- clarity of/consensus on school goals
- alignment of policies and resources with school goals
- extent to which decisions are data-driven

- **High Expectations**

- establishment (% of teachers who believe they can influence the achievement of students of all backgrounds)
- success in communicating (% of students who say teachers have high expectations of them)
- internalization by students (% of students who have high expectations of themselves)

- **Partnerships with community/business organizations**

- # volunteer hours
- \$/goods donated
- # of students directly affected (tutoring, mentoring, etc.)

GOALS/OUTCOMES

- **Attendance**
 - ADA
- **Completion vs. dropout rates**
- **Standardized test scores** (district, state, national, college entrance exams)
 - District
 - State
 - National/commercial
 - College entrance exams
- **Course grades**
 - #/% of students with one or more failing grades
 - #/% of students with A or B averages
- **Performance assessments of school-specific learning goals**
 - % of students meeting standards on school-developed task rubrics
 - portfolios
 - exhibitions
- **Student engagement**
 - % participation in extracurricular activities
 - homework completion rates
 - % actively participating in class discussions
- **Attitudes**
 - student satisfaction
 - student attitudes toward learning
 - parent satisfaction
 - community/employer perceptions
- **Preparation**
 - % retained in grade
 - readiness for next educational level (as rated by receiving institutions or % needing remediation at next level)
 - post-high school placement rates (college, military, work)
 - higher education degree completion (2 year/4 year)
 - % of graduates saying they were well prepared for work/higher education

APPENDIX B:

Types of Charts for Data Analysis and Presentation

Suppose you have the following data about performance on the 2000 state math achievement test for your 10th grade class of 22 students. The data you are examining include not only the students' test scores for that year, but their gender and their attendance rates, two factors that you hypothesized may be related to performance on this test:

Student ID	Gender	Math Achieve- ment	Attendance
1	M	60	85
2	M	92	100
3	F	73	90
4	M	95	99
5	F	50	82
6	F	88	95
7	F	78	99
8	M	65	90
9	F	69	93
10	M	79	92
11	M	98	99
12	F	61	97
13	F	81	95
14	F	90	90
15	M	88	93
16	M	78	93
17	F	42	80
18	F	90	95
19	M	75	96
20	F	95	99

Your first step will probably be to calculate the average score for the class, which is 78.1. This single number may be all you are required to report about math achievement for external accountability purposes. However, for your own internal improvement planning and to develop a richer and more meaningful accountability report as well, there are a number of other ways to look at these data. This appendix includes examples of 5 different types of charts that may be helpful to you in analyzing your data—helping you to see trends and relationships—and in presenting and communicating your findings to others.

CHART TYPE 1: HISTOGRAM

To get under the hood of a broad class or schoolwide average and see what is really going on, it is important to look at the distribution that average represents. Are most students clustered close to the average, or does the average represent the middle ground between a very high group of performers and a very low one? Although they could be masked by the same average scores, these two scenarios represent very different patterns of performance and imply different opportunities for action. Plotting a histogram or frequency distribution will give you a clear visual sense of how the scores are distributed, providing much more actionable information than a single average. The histogram below shows the distribution of 10th grade math achievement scores from the sample data above:

Distribution of 10th Grade Math Achievement Scores

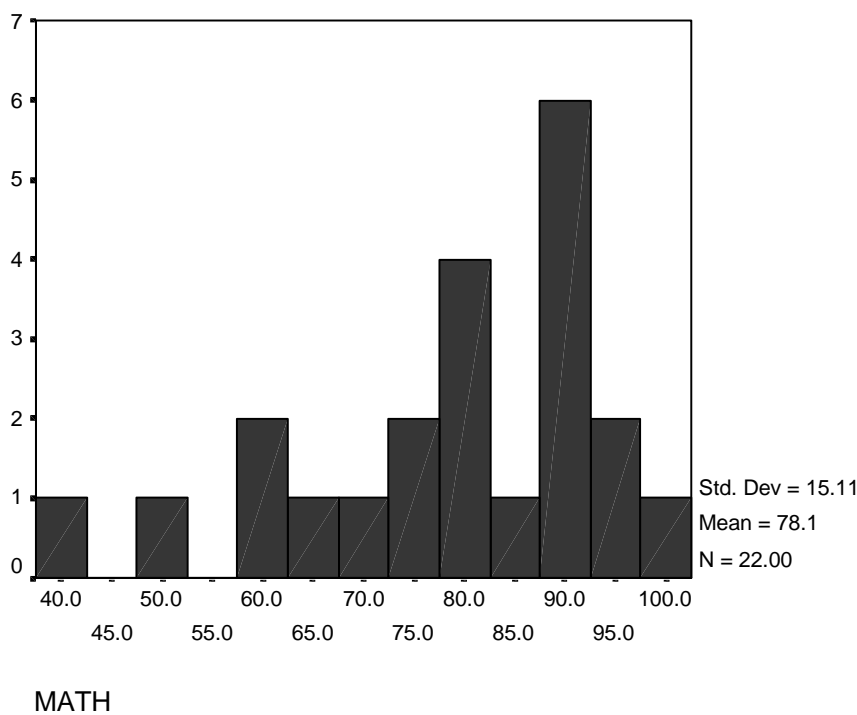


CHART TYPE 2: PIE CHART

Having examined the distribution of scores, you may now find it helpful to group students into performance levels you think are most relevant, for example those scoring below 60 or above 90. A pie chart is one of the simplest and easiest to understand ways to present such information. The pie chart below represents the same distribution of scores, this time grouped into performance levels

**Performance Levels on Math Achievement Test for 2000 10th Graders
(n=22)**

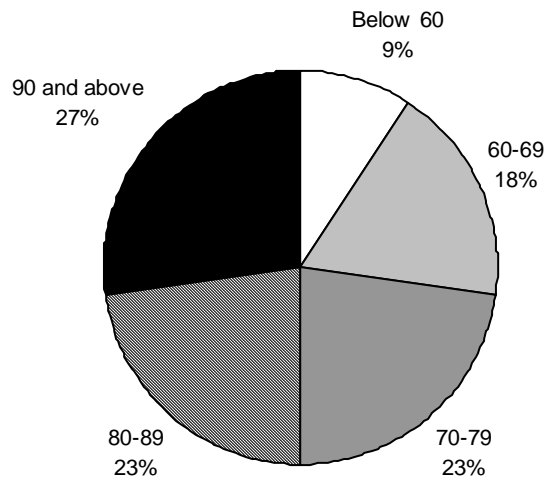
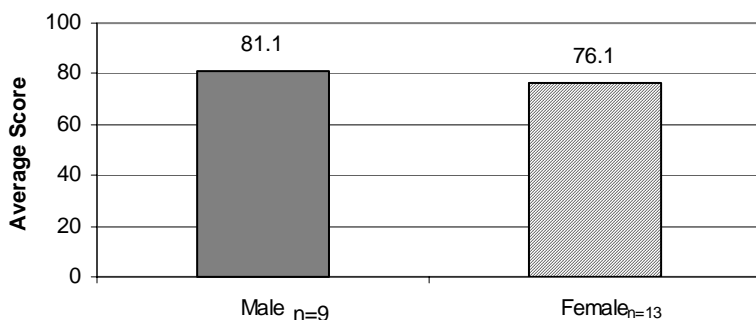


CHART TYPE 3: BAR CHART

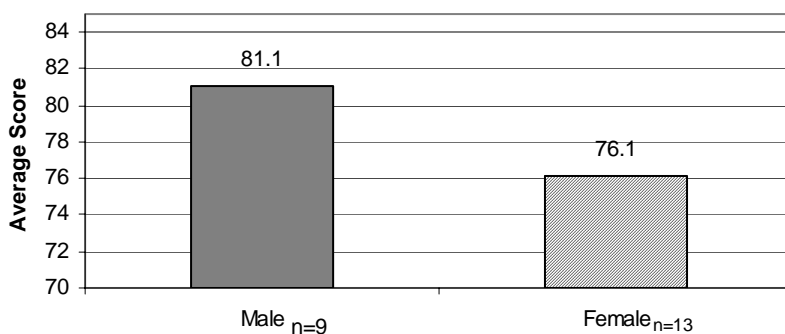
For a number of your indicators, it may be important for you to break down an average outcome to compare the results for different subgroups. In Step #5 (Setting Performance Benchmarks) you selected the subgroup comparisons that you considered most relevant for your indicators. A bar chart is a good way to display such comparisons because it gives you a quick visual sense of the magnitude of the difference in performance levels between groups. The bar chart below compares the average score for male and female 10th grade students on the math achievement test.

Average 10th Grade Performance by Gender on 2000 Math Achievement Test



Note that the scale on the chart represents the entire range of possible scores on the test, from 0 to 100, even though the two average scores being compared are only 5 points apart. If you are concerned about a difference between groups, you may be tempted to present a chart with a compressed scale, which would tend to emphasize the difference, for example:

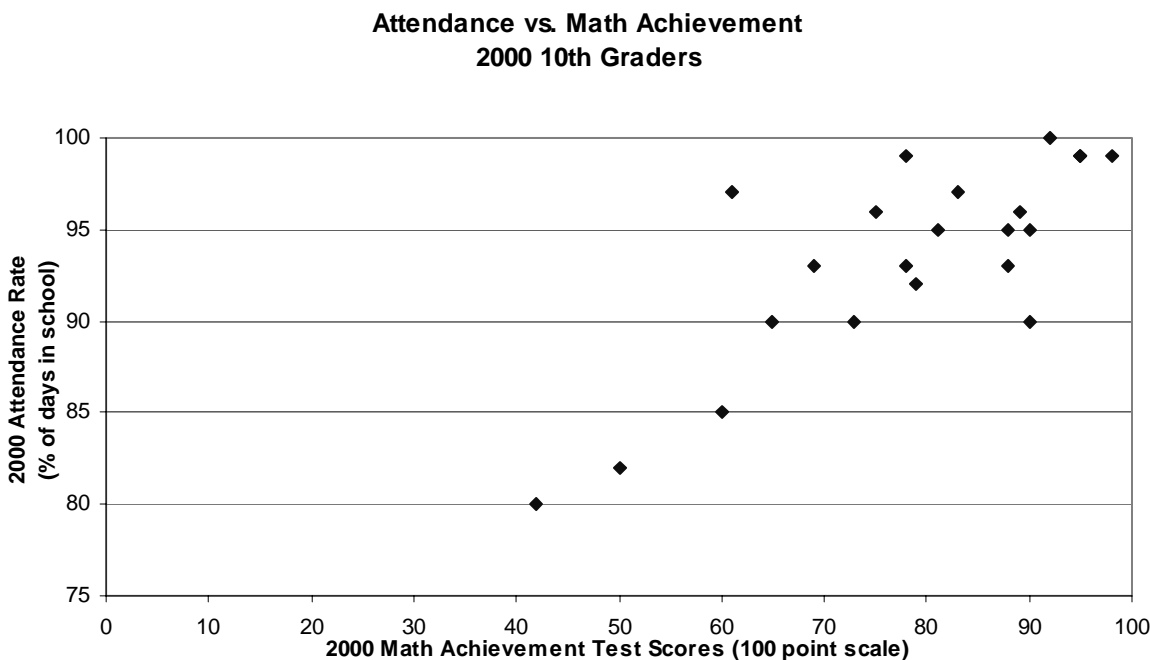
Average 10th Grade Performance by Gender on 2000 Math Achievement Test



The difference between the two groups appears much more dramatic when presented on this compressed scale, but the difference is misleading. In order to facilitate interpretation of the size of a difference, your chart should show the full range of possible performance. Charts that fail to put comparisons in the proper context are sometimes referred to as “USA Today charts” for the tendency of that newspaper to present graphs that overdramatize a minor and sometimes meaningless statistic.

CHART TYPE 4: SCATTERPLOT

A scatterplot (also known as an XY chart) is a valuable analytical tool for examining the relationship between two variables. In this example, we have data on each student's math achievement test score and attendance rate for the year. Plotting the two against each other can help us begin to see if the two factors are related:



A scatterplot plots the position of each individual data point along the two dimensions you are examining. In this case, it does appear that there is a fairly strong positive relationship between attendance and math achievement test scores, with students who have low attendance also generally having lower achievement. A positive relationship means that as one variable goes up or down, the other moves in the same direction. If two variables have a negative relationship, higher scores on one variable would have lower scores on the other.

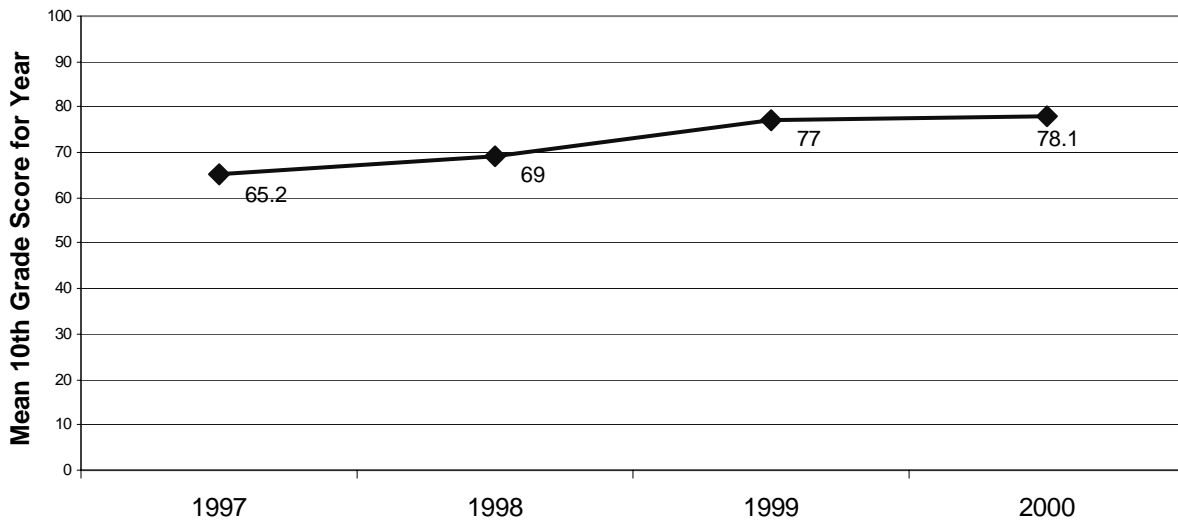
When examining scatterplots, it is always important to remember that a correlation between two variables does not necessarily imply causation. In other words, just because two variables appear to be related, one may not directly cause the other. Often there are other intervening variables that affect the relationship. In this example, the low attendance of some students may be caused by health or family problems and it may be those problems as much as attendance itself that are negatively affecting their performance. Although looking at this scatterplot would provide good evidence that working on attendance could help your school's math achievement, always consider the impact of unseen factors before jumping into action.

NOTE: Although it is almost always a good idea for the scale of the chart to reflect the full range of possible performance on a variable, compressed scales are sometimes used to make relationships easier to see. In this example, since all of the attendance rates are 80 or above we have used a compressed scale to spread out the data points and make the relationship easier to identify.

CHART TYPE 5: LINE CHART

Finally, for indicators on which you are fortunate enough to have trend data, a line chart is an ideal format for displaying performance over time. The sample below puts the 2000 average math achievement test score in context by showing the performance trend on this indicator for the last several years.

**Trend in 10th Grade Math Achievement
1997-2000**



RESOURCES*

- Annenberg Institute (2000) *Rethinking Accountability*.
<<http://www.annenberginstitute.org/accountability/framework>>
- Bernhardt, V. (1994) *The School Portfolio: A Comprehensive Framework for School Improvement*. Princeton Junction, NJ: Eye on Education.
- Education Week and A+ Communications (1999) *Reporting Results: What the Public Wants to Know*, <<http://www.edweek.org/sreports/qc99/opinion/aplus1>>
- Evaluation Center, Western Michigan University (1997) *The Alger Foundation Evaluation Manual*. Kalamazoo, MI.
- Fitzpatrick, K. (1997) *Indicators of School Quality (Vol 1: Schoolwide Indicators of Quality): A Research-based Self-Assessment Guide for Schools Committed to Continuous Improvement*. Schaumburg, IL: National Study of School Evaluation.
- Gardner, Laurie (1999) *One Hand Tied: Defining and Measuring Charter School Performance*, Charter Schools Development Center, Institute for Education Reform, California State University: Sacramento: CA.
- Herman, J. and Winters, L. (1992) *Tracking Your School's Success: A Guide to Sensible Evaluation*. Newbury Park, CA: Corwin Press.
- Leadership for Quality Education (Date?), *Illinois Charter Developer's Handbook: Getting off the Ground- Building Accountability into the Charter Proposal*
<http://www.lqe.org/Resource_Guide/go_account.htm>
- Leithwood, K. and Aitken, R. (1995) *Making Schools Smarter: A System for Monitoring School and District Progress*. Thousand Oaks, CA: Corwin Press.
- Levesque, K., Bradby, D., Rossi, K. and Teitlbaum, P. (1998) *At Your Fingertips: Using Everyday Data to Improve Schools*. Berkley, CA: MPR Associates.
- Ley, Joyce (1999) *Charter Starters Leadership Training Workbook 3: Assessment and Accountability*. Northwest Regional Education Laboratory.
- Manno, B. (1999) *Accountability: The Key to Charter Renewal- A Guide to Help Charter Schools Create their Accountability Plan*, Center for Education Reform.
<<http://www.edreform.com/pubs/accountabilityguide>>
- Mitchell, K. (1995) *Charting the Progress of New American Schools: Creating a School Reform Portfolio*. Santa Monica, CA: RAND Corporation.

* The resources listed in those section were used in the development of this manual and are suggested to school groups seeking further information on particular aspects of the accountability process.

Nathan, J. and Johnson, N. (2000) *What Should We Do? A Practical Guide to Assessment and Accountability in Schools*. Center for School Change, Hubert H. Humphrey Institute of Public Affairs, University of Minnesota: Minneapolis, MN.

National Center for Education Statistics (2000) *Monitoring School Quality: An Indicators Report*. Washington, DC.

National Center for Education Statistics (2000) *Building an Automated Student Record System*, Washington, DC.

Pioneer Institute Charter School Resource Center (1998?) *Charter School Accountability Action Guide*, <<http://www.pioneerinstitute.org/csrc/accountability/acctguide>>

Public Impact and the Annie E. Casey Foundation, (2000) *Holding Schools Accountable Toolkit*, <<http://www.publicimpact.com/hsat>>

Sanders, J., Horn, J., Thomas, R., Tuckett, D.M., and Yang, H. (1995) *A Model for School Evaluation*. Western Michigan University Evaluation Center: Center for Research on Educational Accountability and Teacher Evaluation.

Scottish Office Education Department (1992) *Qualitative Performance Indicators for School Effectiveness and School Improvement: The Scottish Experience*. Edinburgh, Scotland.

Shavelson, R. et al. (1987) *Indicator Systems for Monitoring Mathematics and Science Education*. Santa Monica, CA: RAND Corporation.

Tesh, A. (1991) *A Research-Based Attribute Structure for School Accountability*. Greensboro, NC: Center for Educational Research and Evaluation.

U.S. Charter Schools (1999?) *Authorizers Guide to Charter School Accountability*, <http://www.uscharterschools.org/gb/account_auth>