SMART Tools

Group Process Tools		
SMART Tool	**What It Is**	**Use It When**
Dialogue p. 87	A true conversation in which talking and listening by all parties creates a flow of meaning among, between, and through a group. Out of dialogue emerges a new and shared understanding. Dialogue is a tool for collective exploration of meaning---not a search for the right, wrong, or best solutions.	You think adding structure to a team's discussion will lead to a deeper and broader understanding of an issue.
Brainstorming p. 89	--A group activity to stimulate creativity and bring out diverse perspectives in a short period of time. --An excellent way to equalize participation and build collective motivation.	--Having a large quantity of diverse ideas will add value to a team's work --People need to think out of the box
Affinity Diagram p. 90	A tool for organizing brainstormed lists into like categories or things that have an affinity for each other.	You want to involve an entire group in organizing and consolidating many ideas.
Mulitvoting p. 92	A method for narrowing down and prioritizing lists of ideas.	There are too many ideas to decide which ones to focus on .
Decision Matrix p. 93	A table in which alternative decision options are scored against criteria.	--You want to move from a list of options to a final decision. --You need to simultaneously assess multiple options against multiple criteria. --You want to compare options in a relatively objective and unemotional way.
Consensus Decision Making p. 94	Consensus exists when everyone on the team feels that she or he can support the decision, even if it is not their preferred option. It is not a majority vote.	It is important that everyone in a group supports a decision both publicly and privately.
Process Mapping Tools		
SMART Tool	**What It Is**	**Use It When**
Basic Flowchart p. 97	A visual high-level picture of how work or activities generally flow in a sequence in a process or system	You want a "high-altitude" picture of a system or process---one without a lot of detail
Top-Down Flowchart p. 98	A diagram that depicts the major flow (steps) of a process along the top, with detail added vertically below each major step.	--You want to quickly see the major steps of a process along with some detail --You want to organize works around major parts of a process

Deployment Flowchart p. 100	A flowchart that depicts which individuals or groups play a role in each step of the process	You want to visually show which aspects of the work are the responsibility of which individuals or groups.
Detailed Flowchart p. 102	A flowchart that shows all the steps in the process and identifies where the key decisions are made	You need to depict all the steps in a process in more detail than is shown in other types of flowcharts
Tree Diagram p. 105	A chart used to identify essential components of something (e.g., the targets for goals, the steps in a plan)	You want to align efforts toward a specific goal
Responsibility Matrix p. 109	A matrix showing which individuals or groups have what type of responsibility related to core processes in your school	--You want to clarify roles and responsibilities for carrying out tasks and functions in a department, division, work unit, or other type of organizational unit
Gantt Chart p. 110	A scheduling tool for action planning that depicts relative timing of process steps.	You need to be able to judge the timing of action steps.
Activity Network Diagram p. 112	A diagram depicting the flow of work, incorporating dependencies between tasks	You want to organize actions into the most efficient path and identify the most realistic schedule for the completion of a project
Understanding Perceptions and Opinions		
SMART Tool	**What It Is**	**Use It When**
In-Depth Interviews p. 125	One-on-one conversations, either by phone or in person, using open-and/or closed-ended questions	--You need to identify and learn about underlying issues and concerns in depth --A better understanding of the full range of perceptions will clarify questions or needs
Focus Group p. 127	A facilitated conversation with a small group of selected individuals, focuses on one specific issue or topic and uses structured, open-ended questions	--Issues and concerns among stakeholder groups are not immediately apparent to your team --You need to understand the full range of perceptions of an issue --You want to compare perceptions between different groups --You feel that having interviewees together in the same room at the same time will spark greater insights and creativity

Surveys p. 129	A set of questions that ask people about their perceptions or opinions. Usually surveys are written questionnaires, but they can also be conducted by phone.	--You need to quantify perceptions/concerns identified through interviews and /or focus groups. --You want to understand the perceptions of large numbers of people
Cause Analysis Tools		
SMART Tool	**What It Is**	**Use It When**
5 Why's Analysis p. 135	A method for uncovering the real reasons underlying a problem—for getting to the root causes	--You have tried solutions that have failed --You are stuck in a complex problem or issue
Cause-and-Effect Diagram p.136	A structured tool for conducting 5 Why's thinking	--You have isolated a problem that has no obvious cause --You want to expand your thinking before focusing solutions on a particular cause --There is more than one problem or gap being addressed --A problem has many branches to its complexity
Relations Diagram p. 138	A systems thinking tool that helps identify the most important causes of a problem	--A problem is part of a larger system or set of processes that can't be easily analyzed using sequential thinking tools (such as the cause-and-effect diagrams)
Numerical Data Tools—Snapshot Tools		
SMART Tool	**What It Is**	**Use It When**
Histogram p. 142	--A snapshot chart that shows how often different values of a given measure occurred during the data collection period --An illustration of the full set of continuous data across an entire spectrum or continuum --A snapshot of items that are related to one another—they are usually part of one complete set --An illustration of the range of variation in the data set	--You need to see how a large set of snapshot data is distributed --You have collected 18 or more data points over time, plotted it on a Run Chart, and you want to see the shape in the variation
Distribution Chart p. 144	A chart that shows each data value as a dot (or other symbol) along an axis	--You want a simple descriptive tool that creates a picture of what is --You want to see how data values are distributed throughout the range of observed values

Pareto Diagram p. 148	--A bar-type that shows the frequency or impact of different problems or causes in order from the highest to lowest values. A line shows the cumulative impact of subsequent problems as you move from left to right across the chart --Shows the relative importance of all the activities, problems, issues, and areas of concern --Some people find it helpful to think of a Pareto diagram as a hybrid of a bar chart and a histogram: It is a bar chart because you are comparing separate, discrete categories of information. It is like a histogram because the categories represent the sum total of the data being analyzed.	--You need to focus your actions on high leverage points—the areas that are most likely to yield the greatest results --You want to choose a place to begin problem solving
Scatterplot p. 150	A graph that shows the strength of the relationship between two variables	--You want to investigate the relationship between two variables --You have paired data that might have a cause-and-effect relationship --You have continuous interval (numerical) data for two different variables, both measured on each item/person
Disaggregation p. 152	The process of separating and then analyzing results achieved by different groups	--Identifying differences across subgroups of students in terms of their performance --identifying which subgroups, if any, are responding to certain instructional methods differently than others
Moving Picture Tools		
SMART Tool	**What It Is**	**Use It When**
Run Chart p. 156	A chart of data where points are plotted in time order, and tests are performed to determine whether the variation is due to special or common causes	--You want to monitor performance over time --You want to understand the pattern of variation over time
Control Chart p. 159	A run chart that also indicates the range of variation built into the system (indicated by control limits added to the chart)	--You want to find out whether a particular data point is truly outside the normal range for variation for the system --You want to demonstrate that the action you took resulted in not only improved performance, but less variability around performance (more students doing better).

* Copied from The Handbook for SMART School Teams