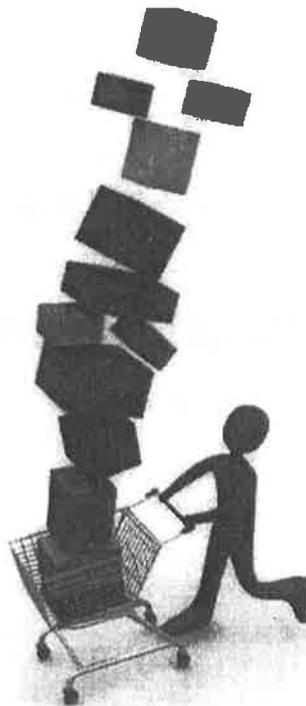


## **Tool Selection Basics**

First time users of PDSA may be unsure about when to use a particular QI tool when working with data. The following suggestions provide insight; they have been adapted from *The Six Sigma Way: Team Fieldbook*.<sup>16</sup> Consider them when choosing QI tools:

1. Have a clear objective when planning to use a tool. Avoid using a tool "just because." When pounding a nail, a hammer would be the tool of choice for most people rather than a screwdriver. Remember what you are trying to accomplish.
2. Consider your options. There are a variety of options and tools to choose from when collecting, analyzing, and displaying data. There are often several tools that will be compatible with your effort. Select the tool that seems to make the most sense.
3. Keep it simple by matching the detail and complexity of the tool with your situation. Use the basic tools described in this Guidebook most often.
4. Look for creative ways to analyze and display your data. It's okay to create your own variations as long as others understand them and your conclusions are sound.
5. If a tool is not working for you, stop using it. Every tool is a "trial." If it doesn't meet your need, try a different tool.
6. Remember GIGO: garbage in, garbage out! Work toward collecting meaningful or "good" data.

The next section provides assistance and additional information on the selection of tools.



### Tool Selector Chart

Consider whether you will be working mostly with ideas or numbers when deciding which tool to use for a particular task. The following chart offers tool suggestions for typical improvement situations. Many tools serve multiple purposes. Each tool is labeled with a "B" or "E" denoting its general suitability for beginning or experienced QI practitioners. The chart also identifies where in the PDSA cycle you would most likely use the tool and provides a Guidebook page number for an example, where available.

				TASK OR SITUATION							
				GENERATE/GROUP IDEAS	MAKE DECISIONS/ PRIORITIZE	CLARIFY/FOCUS	PLAN	COUNT	MEASURE	GATHER DATA/ DISPLAY RESULTS	
(B) = Beginning practitioners (E) = Experienced practitioners											
WORKING WITH IDEAS/CONCEPTS											
	PDSA Steps	User Experience	Page #								
Affinity	1,2,5,9	B		♦	♦	♦					♦
Brainstorming	1,2,3,4,5,9	B	133	♦		♦					
Fishbone/Cause & Effect	3	B	114	♦		♦					
Forcefield Analysis	1,3,4,5,8,9	B	139	♦	♦						
Gantt	5,6,8	B	81			♦	♦				♦
Logic Model	2,3,7	E	161			♦	♦				
Matrix	1,2,4,5,7,8	E			♦	♦					♦
Process Map	3	B	102	♦	♦	♦					
Story Board	9	B	41								♦
WORKING WITH NUMBERS											
	PDSA Steps	User Experience	Page #								
Check Sheet	1,3,4,6,7	B	145		♦			♦			♦
Control Chart	3,6,7	E			♦			♦	♦		♦
Histogram	1,3,7	E							♦		♦
Pareto	1,3,4,7	B	141		♦			♦			♦
Run Chart	1,3,7	B	106					♦	♦		♦
Scatter Diagram	1,3,4,7	E				♦		♦		♦	
Stratification	1,3,7	E				♦					♦

## **Final Thoughts on QI Tools**

In closing, the preceding pages briefly highlighted some basic QI tools and discussed in greater depth those especially useful for public health staff having limited QI experience. Tool selection basics were covered and a tool selector chart provided. If your health department is in the early stages of using PDSA, try and master the use of basic tools before expanding your repertoire. The tools listed in the tool selector chart and labeled "E" for experienced QI practitioners may be found in resources exceeding the scope covered here, such as "Tool Time: Choosing and Implementing QI Tools"<sup>2</sup> and the Public Health Memory Jogger II: A Pocket Guide of Tools for Continuous Improvement and Effective Planning.<sup>1</sup> The Public Health Foundation ([www.phf.org](http://www.phf.org)) is also an excellent source of information on QI tools and related resources for beginning and/or experienced QI practitioners.

