Clovis Unified School District
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Leadership Academy

What is a PDSA Cycle?

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A Plan-Do-Study-Act or PDSA cycle is a four-step model for improvement, which can be used to provide a framework for quality improvement changes.

PDSAs are based on scientific methods and provide a rapid way to test out small changes, then build on them. PDSAs give stakeholders the opportunity to see if proposed changes will succeed. It's a powerful tool for learning from ideas and establishing what does and what doesn't work.

The history of PDSA cycles
You may well be familiar with the 'Plan-Do-Study-Act' or PDSA cycle from your improvement work. It is a four-step model for improvement which is often used to provide a framework for quality improvement changes.

Developed and introduced by the improvement hero Walter A. Shewhart, the model started out originally as the 'Plan-Do-Check-Act' (or PDCA) cycle. Later W. Edwards Deming developed it into the PDSA that we know today.

While you might be more familiar with the PDSA cycle, both PDSA and PDCA methodologies are still widely used today in order to create quality process improvements.

Both PDSA and PDCA methodologies use cyclical processes to measure and repeat, while supporting an organization-wide approach to improvement. The key difference between the two processes is in one stage – the 'Check' (PDCA) or 'Study' (PDSA) stage. Read in more detail about the difference between PDCA and PCSA cycles and how they can be useful for problem-solving.

Based on scientific method, PDSA cycles were designed to effectuate positive change and provide a rapid way for teams to test out small changes and build on them. They also give stakeholders the opportunity to establish whether proposed changes will succeed. A powerful tool, the PDSA helps teams learn from ideas and establish what works and what doesn't.

Who uses PDSAs?
'Ideas tested through PDSA cycles are always small and take a bottom-up approach; very often they are mere tweaks to the everyday routines and processes.' The aim of the process is to repeat until you implement a successful, sustainable improvement. The sheer simplicity of the process makes them a popular choice for organizations.

Widely promoted and recommended by organizations such as the Institute for Healthcare Improvement (IHI), who use them within their Model for Improvement, PDSAs are used by a

wide range of organizations for quality improvement, as they are a quick way of allowing your team to test out small changes.

PDSAs are also a key process within the Kaizen method - the basis of Lean methodology and a systematic approach for continuous improvement invented by Masaaki Imai.

Should I use a PDSA cycle in my organization?
PDSAs can really help to build an organization-wide approach to improvement. So, if you want to make quality changes within your organization, you should consider using PDSAs to support this change! The step-by-step approach and cyclical process by which you measure and repeat, means PDSAs are ideal for many improvement projects. They also enable you to demonstrate that by making small changes, you can make big improvements.

How do you start preparing for a PDSA cycle?
The PDSA is a real 'trial-and-learning' method. It uses quality tools to identify problems, review causes and create solutions with the aim of continuous improvement. The aim of the process is to repeat until you implement a successful, sustainable improvement.

The first thing you need to do, however, is to identify what you want to achieve.

Let's take a look at the four steps of the PDSA cycle in more detail:

Plan – This is the stage when you agree on the change that will be tested and plan your actions for the cycle. You would also agree on and form a team that will be managing the process and who will be responsible for the PDSA cycle. At this stage, you need to identify exactly what your objectives are and what you want to achieve. It's also a good idea to work out what measurements you will use to measure your changes.

Do – This stage is when you will carry out the change or test. It may be a very small test and you may have several tests going on at the same time. But this is when the action takes place. This is also the stage when you will be observing where any problems lie and start collecting data for analysis. In Life QI you can easily record all stages and collect data that you will review within the 'Study' phase.

Study – You will now need to study the data you have collected. It needs to happen based on the outcomes that you agreed on during the Plan phase. Once you have collected the data, you can review, discuss and reflect with your team about the impact of the change and the test and about what you have learned. Now is the time to agree what you need to tweak or whether you should abandon the test. Or indeed whether the results mean a positive outcome can be followed through going forward.

Act – At this stage, you will be acting on the data that you have collected. This may help you to plan the next change cycle based on the reflection in the Study phase. You may also be planning

full implementation based on your results. You can use the results of one cycle to inform an enhanced idea to be tested in a new cycle.

Then – it's back to the planning stage again to repeat the process