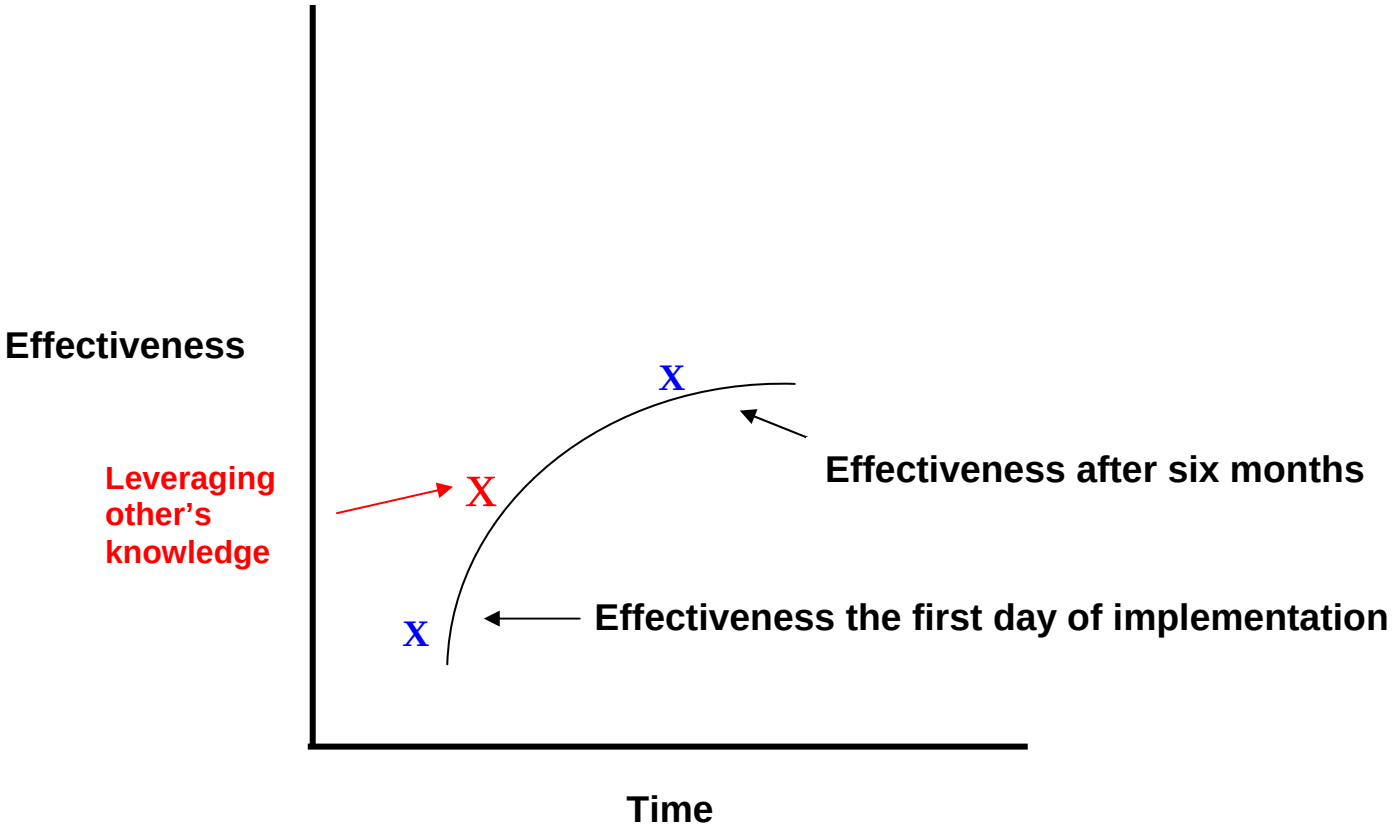
The Learning Curve



There is a well-known representation in manufacturing circles called the learning curve. It explains the relationship between time (X axis) and effectiveness (Y axis). As the learning curve depicts, a team just starting a new process performs at a fairly low level of effectiveness – often even less effective than they were with their old process. Over time the team begins to improve their effectiveness as they come to understand the new process and how to make it work more efficiently. The rate of improvement of a team implementing a new process is steep at first and then slows over time as the team gains experience.

Research in aircraft production, as early as the 1930's (Wright, 1936) and later during WWII (Asher, 1956) provided data about the direct impact of experience on productivity - the speed of production went up over time and the cost of production went down as a function of learning. Studies on individuals were also

made, demonstrating that individuals follow a similar learning curve in terms of effectiveness (Yelle 1979).

What knowledge transfer processes like Peer Assists are about is making it possible for a team to start higher on the learning curve. Colleagues offering their experience cannot take a team all the way up the learning curve, but they can help the team start higher on the curve - past the steepest climb.

If you can learn from others you can start ahead of the game!

Asher, H. 1956. Cost-Quantity Relationships in the Airframe Industry. Santa Monica, CA: Rand

Wright, T. P. 1936. Factors affecting the cost of airplanes. J. Aeronautical Sci. 3;122-8.

Yelle, L. E. (1979). The learning curve: historical review and comprehensive survey. Decision Sci. 10:302-28.