In her book Mindset (2006), Carol Dweck contrasts a growth-oriented mindset with a fixed-oriented mindset and suggests that a growth mindset can be learned with time and practice. Doyle and Zakrajsek (2013) describe characteristics of the two mindsets when dealing with challenges, criticism and several other dimensions that can impact student behaviors. Our primary question for this presentation is how well do activities and strategies that encourage a growth mindset toward learning mathematics actually impact student learning. In this presentation I will briefly outline Dweck’s mindset framework and consider ways to develop, encourage and support a growth mindset in our mathematics students’ approach to learning. In this preliminary report of an ongoing investigation, I will briefly discuss assessments of the effectiveness of targeting strategies for a growth mindset using student work, participation and feedback as the primary evidence.