

Myth	Key Ideas	Additional Reading
Research does not support the use of positive reinforcement	<p>As a teaching approach <u>positive feedback</u> as a reinforcer has a strong effect size (second only to formative assessment)</p> <p>Not all reinforcement is equal. The type of reinforcement and the context in which it was delivered should be considered when looking at contradictory findings.</p> <p>Bottom Line: Despite some contradictory findings research consistently shows the positive educational effects of feedback</p>	Hattie, 2009
Reinforcement inhibits intrinsic motivation	<p>Acknowledging student success provides feedback that allows students to formulate their own beliefs about success.</p> <p>Effective instruction and contingent positive feedback is important to set students up to have confidence and high self-esteem.</p> <p>Bottom Line: Providing students with positive feedback about their successes encourages further success in practice and self-esteem.</p>	Kirschner et al., 2006
Reinforcement is bribery	<p>While some reinforcement is tangible, the majority of positive instructional feedback is in the form of verbal acknowledgement.</p> <p>Positive feedback is focused on promoting success, so longer-term success is the actual reinforcer that maintains the desired behavior.</p> <p>Bottom Line: Most interactions in life depend on some form of contingency. Just because effective reinforcement is contingent on certain behaviors, it does not make it “bribery” any more than vending machines bribe people to insert money by providing a snack in return.</p>	
Reinforcement is counterproductive	Those doing the most poorly and at greatest risk tend to receive the least positive feedback, while	Scott et al., 2019 Sitcher et al., 2009

<p>and inhibits positive behavior</p>	<p>students with the best outcomes receive the most positive feedback.</p> <p>Positive verbal feedback is generally more appropriate than tangible reinforcement when students already have an interest or history of success.</p> <p>Some pause in success post-reinforcement is normal, especially when using a fixed-interval schedule. General trends still show upward momentum when using reinforcement.</p> <p>Bottom line: Using reinforcement does not mean that only positive behavior will always immediately follow reinforcement, but there is no evidence that positive reinforcement is counterproductive or inhibits positive behavior.</p>	<p>Yoshikawa et al., 2012</p>
<p>Reinforcement inhibits creativity</p>	<p>Creativity can be taught and encouraged via instruction and reinforcement.</p> <p>Positive feedback is useful during instruction to develop students' skills that are foundational for creative behavior.</p> <p>Bottom line: Positive feedback is essential to shaping student's critical thinking and creativity.</p>	<p>Hattie, 2009 Higgins et al., 2005</p>
<p>Focus on specific and measurable behavior ignores more important constructs</p>	<p>While it is vital to focus on outcomes, that doesn't mean internal motivations and processes need to be ignored.</p> <p>Break complex skills into teachable moments so students can have success in both understanding and outcomes which can be reinforced.</p> <p>Teacher's encouragement of critical thinking during lessons address internal factors and has positive effects on problem-solving abilities.</p> <p>Bottom line: It is possible to balance the focus between internal processes and outcomes. Still, all important</p>	<p>Hattie, 2009 Rosehshine & Meister, 1994</p>

	constructs need to be measurable in order to know their importance.	
In the “real world” nobody is going to give you anything for doing what is expected	<p>This is contradictory to fact, as all working adults receive payment as reinforcement.</p> <p>Verbal acknowledgement can serve to guide students to tell the difference between success and failure, as well as generate confidence that supports continued learning and success.</p> <p>In academic learning tasks, unlike many “real world tasks”, there are no natural contingencies competing against success except for fear of failure.</p> <p>Bottom line: Even if this were true, it does not outweigh the benefits that reinforcement can provide students in achieving academic success.</p>	

Adapted from:
 Scott, T. M., & Landrum, T. J. (2020). An Evidence-Based Logic for the Use of Positive Reinforcement: Responses to Typical Criticisms. *Beyond Behavior*, 29(2), 69–77.