



Peer Reviewed

Marc Siegall is a professor in the Department of Management, College of Business, California State University, Chico. He can be reached at msiegall@csuchico.edu

Abstract

Goal setting is one of the most researched and useful approaches to helping managers guide others' behavior at work, and is highlighted in practically every introductory text on management and organizational behavior. In this paper, I present an easy, short, yet powerful exercise for introducing the goal setting concept to a class. The exercise itself takes about three minutes, but overall can take ten to forty (or more) minutes, depending on how one chooses to handle the debriefing.

Goal setting, according to the title of the oft-cited piece by Latham and Locke (1979), is "a motivational technique that works." It is one of the most

researched (e.g., Locke & Latham, 1990, 2002) and useful (e.g., Latham, 2003) approaches to helping managers guide others' behavior at work, and is still stimulating investigation (e.g., Bandura & Locke, 2003).

In this paper, I present an easy, short, yet powerful exercise for introducing the goal setting concept to a class. I most often use this exercise in an introductory management or organizational behavior course, consisting of approximately 45 juniors, but I have found that it works well with younger and even graduate students. The biggest restriction is class size. For reasons that will become clear, the exercise might not be as effective with classes of fewer than 24 students.

The exercise itself takes about three minutes, but overall can take ten to forty (or more) minutes, depending on how you choose to handle the debriefing. The amount of class time varies by the amount of material you want to introduce and how much student discussion you wish to include.

The Exercise

Preparation of the exercise is simple. Prepare slips of paper, stapled closed so that the instructions on the slips cannot be read until the slips are opened. On each slip is one of the following instructions.

- A. In the next minute, write down as many uses for a paperclip as you can.**
- B. In the next minute, write down four (4) uses for a paperclip.**
- C. In the next minute, write down seven (7) uses for a paperclip.**

As might be obvious, one-third of the class gets each of the instructions. I have one sheet of paper that has all three instructions on it, duplicate that paper the appropriate number of times, and then cut and staple.

Distribute the slips to the class – there's no need to worry about who gets which instruction – while telling them not to open their slips until instructed. Tell them to have ready something to write with, and that they can write on the back of the slip if they want to. Once everyone has a slip, instruct them to open it and do what is requested. Start timing one minute.

During the minute that the students are working on their tasks, prepare a grid – on a whiteboard, chalkboard, overhead transparency, etc. – with rows marked “A” “B” and “C” and columns marked “0” “1” through “8+”

At the end of the minute, tell them to stop. Ask, “Who had an instruction that started with ‘A?’” Pick someone to read aloud the instruction. Next to the “A” on your grid, write “do your best.” Ask for a showing of hands from only those students with the “A” instruction for those who came up with zero uses for a paperclip, one, two, on so on. Place tick marks on your grid to record the scores.

Next, ask for someone to read the “B” instruction. Write “easy” next to the “B” on your grid. Again, get a tally from the “B” instruction students. Finally, have someone read the “C” instruction. Write “hard” next to the “C” on your grid, and proceed with the tally.

The “Ideal” Outcome

When you are done recording the scores, an ideal set of results might look like this:

	0	1	2	3	4	5	6	7	8+
A Do your best		///	///	//	/	/			
B Easy				///	////////				
C Hard						//	//	////////	

What Can We Learn?

Using the set of tick marks to illustrate your points, the basic requirements for effective goal setting are easily demonstrated.

Specific: Overall, the specific goal conditions (B and C) outperformed the no-goal “do your best” instruction (A). A “do your best” goal is as good as no goal at all.

Difficult, but achievable: Students with the hard goal (C) outperformed those with the easy goal (B). If you ask your students “Why?” they will tell you that people are trained to stop when hitting a goal. Ask some of the “B” students if they finished before the minute was up and/or if they could have come up with more

uses for a paperclip. Some will say yes. You can make the point that with easy goals, the “manager” misses out on performance capability. You might find that on the other end, those with the easy goal were not very motivated by it because it did not provide much of a challenge (intrinsic motivation, need for achievement, etc.). Ask the B and C students what would have happened if the instruction had been to come up with 43 uses. The point here is that goals must be seen as achievable, in order for them to be accepted, which leads to...

Acceptance (a.k.a., Commitment): Ask all of your students why they wrote any uses for a paperclip in the first place. Note that it had nothing to do with extrinsic rewards. The situation/context can be enough to gain acceptance. This one point alone is useful for distinguishing goal setting from the other motivational techniques usually taught within the same unit of the course. I point out to them that we accept that the boss gets to ask us to get certain things done. “What if I stopped you downtown and asked you to write...?” That usually gets a laugh, and further drives home the point. I also point out that different circumstances might require that rewards be included in order to gain acceptance, or that even if no rewards are needed at first, they might be needed over time to maintain acceptance. This moment could provide an opportunity to tie goal setting in with equity considerations (and, later, reinforcement or organizational behavior modification).

Feedback: “How did you know how you were doing, whether you were reaching your goal?” This usually proves to be a surprisingly difficult question. It takes a few tries before someone notes that they can see it for themselves by looking at the list they are writing. Building feedback into the job becomes an additional learning point. Note for them that there was no need to wait for the instructor to put the tick marks on the board, just as it is best not to have to wait for a weekly computer report or a quarterly discussion with management to find out how one is doing at work. A good story about the power of a little self-feedback is the Emery Air Freight example (Hamner & Hamner, 1976), even if it usually is used to illustrate organizational behavior modification.

The Even More Useful “Non-Ideal” Outcome

More likely, you will get a set of results that look something like this:

	0	1	2	3	4	5	6	7	8+
A Do your best		///	///	//			/	//	/
B Easy			/	////	////////				
C Hard	//	//				////	//	//	

I have found that no matter what the results, a little digging into the causes will help reveal interesting and well established principles of goal setting. Talk with the students whose performances are represented by specific cells. For example:

A6, A7 and A8: “Did you see the instruction and think ‘This might be fun’ or ‘an interesting challenge’? Here, the power of intrinsic motivation or self-set goals can be discussed (e.g., Moussa, 2000). I’ve even had students exceed the hard goal because they see themselves as “overachievers” (the students’ word) or because they were not happy with the quality of some of their ideas, so they wrote more in order to make up for it – basically adding a self-set “quality” goal to the assigned performance goal.

B3, C5 and C6: “Why didn’t you meet the goal?” The role of skill/ability and resources (time) can be brought in (e.g., Tubbs, 1994).

C0 and C1: “Did you see the instruction and think ‘too hard; no way?’” These cells illustrate the importance of finding the proper goal level and its impact on acceptance. It also allows you to add but achievable to difficult without having to ask about a goal of 43 uses.

Your results will vary, and I have always found that that is part of the fun. Debriefing this simple exercise can keep you on your toes. I also have found that it might take a few tries to determine what constitutes “easy” and “hard” goals for this task with different populations of students. You may want to adjust the instructions to match the paperclip use creativity of your students.

Additional Issues

After covering the four “required” points for effective goal setting, I also discuss the role of participation in goal setting, or self-set versus assigned goals (e.g., Donovan & Radosevich, 1998; Hinsz, 1995; Latham & Yukl, 1975; Ludwig & Geller, 1997; Moussa, 2000; Wofford, Goodwin & Premack, 1992). I include this point because students usually are very big on the idea of everybody getting together to decide what to do, and often have a naïve psychologist’s perspective of participation always leading to better results. I quickly review how participation might lead to higher goals than the “manager” might set on his/her own, but that it also could lead to lower goals, and then what do you do? Participation might be useful for gaining acceptance in some circumstances or increasing satisfaction, but overall is not necessary for goal setting to work.

Depending on the course and the amount of detail you wish to include about goals, other interesting points include:

- The simple but powerful early research with loggers, where specific goals and self-recorded tally sheets led to remarkable results (e.g., Latham & Baldes, 1975; Latham & Locke, 1975; Latham & Yukl, 1975).
- Details on the role of goal commitment (e.g., Donovan & Radosevich, 1998 [the level of goal commitment may not be as important as we generally believe, based on a meta-analysis]; Klein, Wesson, Hollenbeck, Wright & DeShon, 2001 [on the measurement of commitment]; Tubbs, 1994 [on the debate over measurement and the role of ability]; Wofford, Goodwin & Premack, 1992 [goal commitment really is important, based on a meta-analysis]).
- Types of goals
 - Quality of output versus quantity of output (e.g., Audia, Kristof-Brown, Brown & Locke, 1996).
 - Mastery/learning (improving one’s competence) versus performance/outcome (proving oneself against others, e.g., Barron & Harackiewicz, 2001; Harackiewicz, Barron, Carter, Lehto & Elliot, 1997 [both types have beneficial roles]; Kristof-Brown & Stevens, 2001 [differential effects of both types in a team setting]; VandeWalle, Brown, Cron & Slocum, 1999 [goals that focus on learning are superior to goals that focus on performance, in some situations]; Winters & Latham, 1996 [the

superiority of learning goals over performance goals with new, complex tasks]).

- Influence of extrinsic rewards, such as pay (e.g., Lee, Locke & Phan, 1997 [the interaction of goal difficulty with type of pay system]; Moussa, 2000 [the interaction of self-set versus assigned goal with type of pay system]).
- Broad applicability (e.g., Ludwig & Geller, 1997 [using goal setting to reduce traffic accident rates among pizza delivery drivers; also deals with self-set versus assigned goals]).
- Underlying mechanisms (e.g., Bandura & Locke, 2003 [self-efficacy]; DeShon & Alexander, 1996 [goal setting with complex tasks improves performance through the development of better task strategies]; Latham & Locke, 1991 [self-regulation]; Lee, Locke & Phan, 1997 [the role of self-efficacy]; Wofford, Goodwin & Premack, 1992 [the roles of efficacy, expectancy, and task difficulty]).
- Goal setting in a group context (e.g., Hinsz, 1995 [an example from the laboratory; also deals with assigned versus self-set goals]; Kristof-Brown & Stevens, 2001 [the importance of congruence between personal and group goals]; O'Leary-Kelly, Martocchio & Frink, 1994 [a meta-analysis and qualitative review of the use of goal setting in groups]).

Concluding Comment

In over 16 years of using this exercise, I have never found it to fail. No matter what the results, it has provided an immediate, personal, and memorable introduction to the principles of a very well accepted means for motivating others in the world of work.

References

Audia, G., Kristof-Brown, A., Brown, K. G., & Locke, E. A. (1996). Relationship of goals and microlevel work processes to performance on a multipath manual task. *Journal of Applied Psychology, 81*, 483-497.

Bandura, A., & Locke, E. A. (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology, 88*, 87-99.

- Barron, K. E., & Harackiewicz, J. M. (2001). Achievement goals and optimal motivation: Testing multiple goal models. *Journal of Personality and Social Psychology, 80*, 706-722.
- DeShon, R. P., & Alexander, R. A. (1996). Goal setting effects on implicit and explicit learning of complex tasks. *Organizational Behavior and Human Decision Processes, 65*, 18-36.
- Donovan, J. J., & Radosevich, D. J. (1998). The moderating role of goal commitment on the goal difficulty-performance relationship: A meta-analytic review and critical reanalysis. *Journal of Applied Psychology, 83*, 308-315.
- Hamner, W. C., & Hamner, E. P. (1976). Behavior modification on the bottom line. *Organizational Dynamics, 4*, 8-21.
- Harackiewicz, J. M., Barron, K. E., Carter, S. M., Lehto, A. T., & Elliot, A. J. (1997). Predictors and consequences of achievement goals in the college classroom: Maintaining interest and making the grade. *Journal of Personality and Social Psychology, 73*, 1284-1295.
- Hinsz, V. B. (1995). Goal setting by groups performing an additive task: A comparison with individual goal setting. *Journal of Applied Social Psychology, 25*, 965-990.
- Klein, H.J., Wesson M. J., Hollenbeck, J. R., Wright, P.M., & DeShon, R. P. (2001). The assessment of goal commitment: A measurement model meta-analysis. *Organizational Behavior and Human Decision Processes, 85*, 32-55.
- Kristof-Brown, A. L., & Stevens, C. K. (2001). Goal congruence in project teams: Does the fit between members' personal mastery and performance goals matter? *Journal of Applied Psychology, 86*, 1083-1095.
- Latham, G. P. (2003). Goal setting: A five-step approach to behavior change. *Organizational Dynamics, 32*(3), 309-318.
- Latham, G. P., & Baldes, J. J. (1975). The "practical significance" of Locke's theory of goal setting. *Journal of Applied Psychology, 60*, 122-124.
- Latham, G. P., & Locke, E. A. (1975). Increasing productivity and decreasing time limits: A field replication of Parkinson's law. *Journal of Applied Psychology, 60*, 524-526.
- Latham, G. P., & Locke, E. A. (1979). Goal setting – A motivational technique that works. *Organizational Dynamics, 8*(2), 68-80.
- Latham, G. P., & Locke, E. A. (1991). Self-regulation through goal setting. *Organizational Behavior and Human Decision Processes, 50*, 212-247.

Latham, G. P., & Yukl, G. A. (1975). Assigned versus participative goal setting with educated and uneducated woods workers. *Journal of Applied Psychology, 60*, 299-302.

Lee, T. W., Locke, E. A., & Phan, S. H. (1997). Explaining the assigned goal-incentive interaction: The role of self-efficacy and personal goals. *Journal of Management, 23*, 541-559.

Locke, E. A. & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs: Prentice Hall.

Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist, 57*, 705-717.

Ludwig, T. D., & Geller, E. S. (1997). Assigned versus participative goal setting and response generalization: Managing injury control among professional pizza deliverers. *Journal of Applied Psychology, 82*, 253-261.

Moussa, F. M. (2000). Determinants, process, and consequences of personal goals and performance. *Journal of Management, 26*, 1259-1285.

O'Leary-Kelly, A. M., Martocchio, J. J., & Frink, D. D. (1994). A review of the influence of group goals on group performance. *Academy of Management Journal, 37*, 1285-1301.

Tubbs, M. (1994). Commitment and the role of ability in motivation: Comment on Wright, O'Leary-Kelly, Cortina, Klein, and Hollenbeck (1994). *Journal of Applied Psychology, 79*, 804-811.

VandeWalle, D., Brown, S. P., Cron, W. L., & Slocum, J. W., Jr. (1999). The influence of goal orientation and self-regulation tactics on sales performance: A longitudinal field test. *Journal of Applied Psychology, 84*, 249-259.

Winters, D., & Latham, G. P. (1996). The effect of learning versus outcome goals on a simple versus complex task. *Group & Organization Management, 21*, 236-250.

Wofford, J. C., Goodwin, V. L., & Premack, S. (1992). Meta-analysis of the antecedents of personal goal level and of the antecedents and consequences of goal commitment. *Journal of Management, 18*, 595-615.

