

Building Success in a Team

R. Russell Rhinehart, 22 September 2017

Develop Your Potential Series in CONTROL magazine, Vol. 31, No. 1, January 2018, pp 47-48

We all want our group to be the best, but experience reveals some companies or academic programs are nearly dead, while others alive. What is the magic? Motivation and direction are two of the key ingredients.

Lessons from coaching a sports translates to teams of professionals, or the classroom. My Dad was a Junior High School P.E. teacher, and gave me two secrets when I started volunteering to teach youth gymnastics at the local YMCA (community center). First, be sure that each individual legitimately experiences a daily success, and takes pride in their personal achievement. When they leave, be sure they feel glad to have come. Then they'll come back. Second, provide a target they can achieve, the next personal challenge toward being awesome. Then they'll come back with enthusiasm. It made a good program; and I sought to do this when supervising engineers in industry, students in the classroom and research, and faculty and staff in the program. This seems to have worked as motivation. Of course, I have no control study for comparison.

In considering direction, it seems that there are a myriad of values that lead to success, and a duality for each value. For instance, a person could choose to demonstrate individual prowess to get promoted, or a person could choose to enable others to make the team successful. Which makes a best team? I think the answer is obvious. In athletics, a team full of outstanding Prima Donnas can get beaten by a team of inferior players that cooperate.

Also, consider these other relevant value dualities: One could choose to do it the smart way and tag onto others who do the work, or be the grunt and invest the effort to do the work. One could choose to do enough to pass, or to always do more work than needed to rise toward excellence. One could choose to defend your school legacy by undermining the rival, or defend your legacy by your performance. Choose to be safe in getting your work accepted by following traditions, or be innovative, which risks failure. Strive to not make a mistake, or strive to add value. I think that attitudes of cooperation and enabling others is what leads to organizational success, and that values that seek personal dominance or acclaim lead the community to mediocracy.

Individuals have their own vision, but this can be influenced by the environment. If everyone in the community is saying, "The smart way is to not make mistakes, because the leaders are always looking to use workers as scapegoats", then that behavior will be adopted by all in the community. By contrast, if all are saying, "Here, the employees really are valued members of the family, and we will grow from our mistakes.", then they will feel uninhibited, and be free to innovate.

Could this be modeled? I simulated 100 individuals, and randomly initialized their place on the value scale from -1 to +1. The perspective of each individual would tend to move them toward their own extreme, but this vision could be influenced by their closest buddies, by the average of all the individuals, and by a managerial influence. As time progresses, established individuals in the ensemble are randomly replaced with a person with a randomized perspective. What happens? When the perspective of individuals are substantially independent, or when only influenced by their besties, some tend to move toward +1 and others toward -1. In that case, the organization tends to stay with an average near zero. However, when the perspective of individuals can be more easily influenced by the average, the organization tends to

move toward, and remain, at either the +1 or -1 extreme depending on the vagaries of randomization. When the direction from the organization is a consistent +1 or -1 value, and employees are somewhat flexible, the organization moves in the desired direction. When employees are somewhat flexible, receiving 30% of direction from self, and the rest from friends and the norm, then if the management provides only 5% of the total influence, it is fully adequate to lead all of the individuals in the desired direction. However, if the direction of the organizational message is inconsistent, then the organization drifts. It all makes sense, but the model has not been validated by experts.

What can you do to set corporate direction? The simulation indicates: Management should hire employees that are strong, but moderately flexible. The organization will influence them. Be sure that the organization leadership message and example of behavior is consistent, and that it directs the community toward the right values. Leadership actions must be true to the values claimed. Let people know what the desired vision is, and also let them know that their role is to join the team. Get them to accept the vision and their personal role in making it happen.

Employees need to recognize that they also shape the organization, while it shapes them. Realize that the values and way of success that served you well as a student, are not necessarily the right way as a partner in the organization. Be flexible. Wear the team uniform, live the right values, and influence others toward team productivity.

In general, any experience translates and provides valuable insight. So now, do as much as you can, to learn as much about every aspect of life, and you'll benefit in the future. Study coaching. Know what builds a championship team. Study psychology of human systems. Know what influences people to be cooperative innovators. Whether the worker or the boss, help shape the environment for success.

Notable: The students in my program just won the AIChE National Team Chemical Plant Design contest. It was their 6th time taking top honor in the 23-year history of the contest. That is about 25% of the national championships. How can one program be so dominant? We have the same accredited curriculum as others, use the same textbooks as others, and have characteristic students and faculty. I think the answer is in the magic of inspiring people to invest the extra effort, an aspect that is accepted by faculty, staff, and students, who collectively propagate right values through the continual infusion of randomness.