Knowledge Worker

The Performance Path

(February 2020)

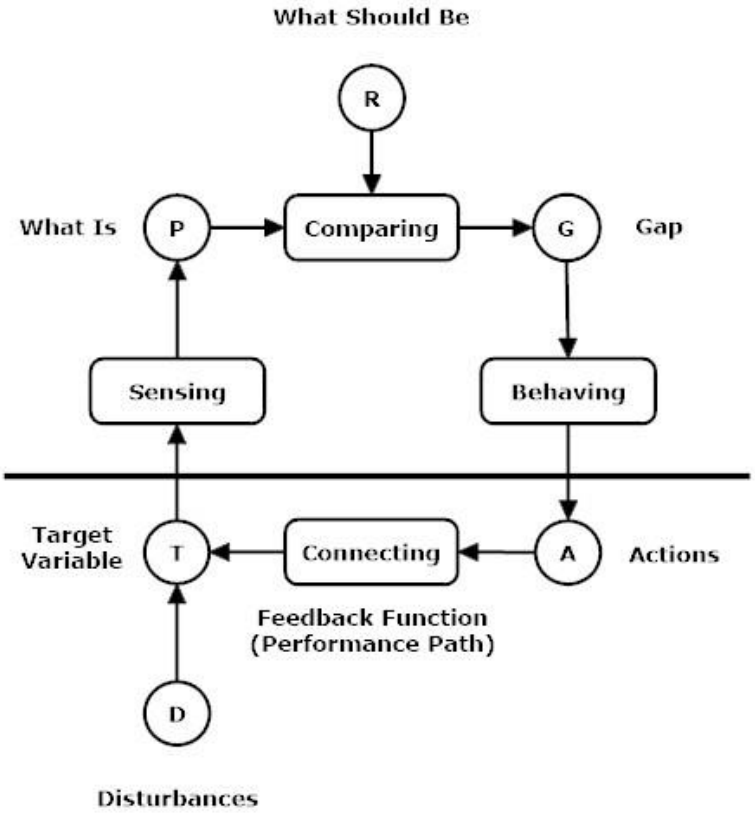
The Performance Path: A Neglected Area of Human Performance Technology

My aim in this month's column is to draw attention to what I see as a neglected, if not overlooked, area of Human Performance Technology (HPT). I am referring to what I call the "Performance Path" – the path that connects the effects of our actions to the results we seek. I have been exploring this path for several years and have in earlier columns referred to it as the "Solution Path" and the "Achievement Path." All three terms refer to the same thing – the linkages that connect the effects of our actions to the results we seek.

The Performance Path and Perceptual Control Theory (PCT)

My interest in the Performance Path began with my exposure to Perceptual Control Theory (PCT) back in 1975. Essentially, PCT holds that we compare our perception of *what is* with our reference for *what should be* and, if there is a gap, we act to close it. We act to control our perception of the match between *what is* and *what should be*. In this scheme of things, "*what should be"* refers to a desired value for some variable of interest. To close any gap, our actions must affect the value of that variable.

According to PCT, the effects of our actions make their way to and affect the value of the Target variable by way of what is called the "Feedback Function" and what I currently call the "Performance Path." The diagram below is a simplified version of one that is well-known in PCT circles. A brief description of its basic elements follows.



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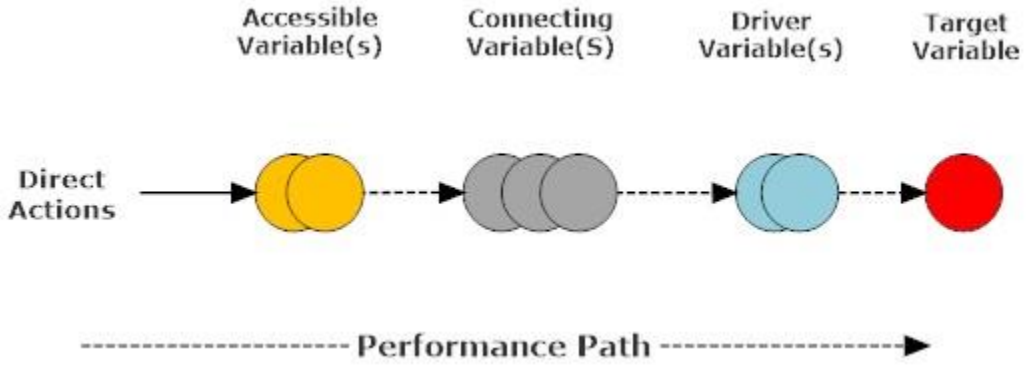
Control and the Role of the Performance Path
The performer is the controlling system and is above the solid line. The environment, the world "out there" so to speak, is below the solid line.

There are other actors and factors that can independently affect the value of the Target Variable and when they do, they are known as "Disturbances" (D). On occasion, they are an important consideration but there is no need to discuss them in this month's column.

If (P) the performer's perception (*What Is*) of the Target Variable does not match (R) the reference value (*What Should Be*) for the Target Variable, there is an error or gap and the performer will take action to close it. To do that, the effects of the performer's actions must make their way to the Target Variable and alter its value.

If the Target Variable is close at hand and can be affected through direct, immediate action, little difficulty exists. However, in workplace settings involving complex performance, the Target Variable is often far removed in space and time and cannot be affected through direct, immediate action. You must change something "over here" to realize a result "over there." Enter here the Feedback Function as it is called in PCT and the Performance Path as I call it in relation to human performance.

The Composition of the Performance Path
In PCT, the Feedback Function is the means by which the effects of the control system's actions affect the Target Variable. They do this by making their way through the larger network of variables in which the Target Variable is embedded. In complex situations, this can involve the four different kinds of variables shown in the diagram below.



1. *Target Variable*. Its intended value is the goal, the end result to be achieved.
2. *Driver Variables*. These are variables that directly affect the Target Variable.
3. *Connecting Variables*. These connect Driver Variables to Accessible Variables.
4. *Accessible Variables*. These are variables the performer can affect through direct, immediate action.

To illustrate, consider the following example.

A Performance Path Example

I am sitting in my living room. Suddenly, I'm aware that I am feeling very thirsty. I get up, go into the kitchen, open a cabinet, take out a glass, close the cabinet, move to the sink, hold the glass under the faucet, grasp the faucet handle, raise it, run water into the glass and when it is as full as I would like, I push the faucet handle down, shutting off the water, then raise the glass to my lips and take a long drink of cold water and set the glass down on the counter. My thirst is quenched.

In that homely example can be found a Performance Path and all four kinds of variables. The Target Variable was my sense of thirst. I did not want to feel thirsty and so there was a gap I had to close. The Driver Variable was a drink of cold water that would quench my sense of thirst. The Accessible Variables included my location in relation to the kitchen, the cabinet, and the sink; the position of the glass in relation to the faucet and to my lips; and the position of the faucet handle. Connecting Variables include the pressure of the water system and the amount of water in the glass. A more detailed analysis would probably reveal more, but we needn't go there.

Did I have to think about all that and identify a Performance Path that would lead to me getting a drink of water? Certainly not. But, in the workplace, results are far more challenging than getting a drink of water and we do indeed have to give thought to identifying the Performance Path that will lead from our actions to the results we seek.

Think About It

Think about it. Do you think the concept of Performance Path is relevant? Can you think of situations in which desired results were not achieved because of a lack of clarity about the Performance Path? Can you think of situations in which desired results were in fact achieved and the performer was clear about the Performance Path? Does the concept of Performance Path fit with your practice of Human Performance Technology?

In closing, consider this: If I am correct, and the Performance Path is indeed a neglected or overlooked aspect of human performance and Human Performance Technology, then there is fertile ground to be explored. Exploring that newly discovered ground will benefit us all – performers, employers, human performance professionals and academics.

About the Author

Fred Nickols is a toolmaker, a knowledge worker, a solution engineer, a writer, a consultant, and a former executive who spent 20 years in the U.S. Navy, retiring as a decorated Chief Petty Officer. In the private sector, he worked as a consultant and then held executive positions with two former clients. Currently, Fred is *Chief Toolmaker* and *Lead Solution Engineer* at Distance Consulting LLC. His web site is home to the award-winning Knowledge Workers' Tool Room and more than 200 free

articles, book chapters and papers. Fred writes this column on a monthly basis. All previous Knowledge Worker columns are accessible by clicking here.