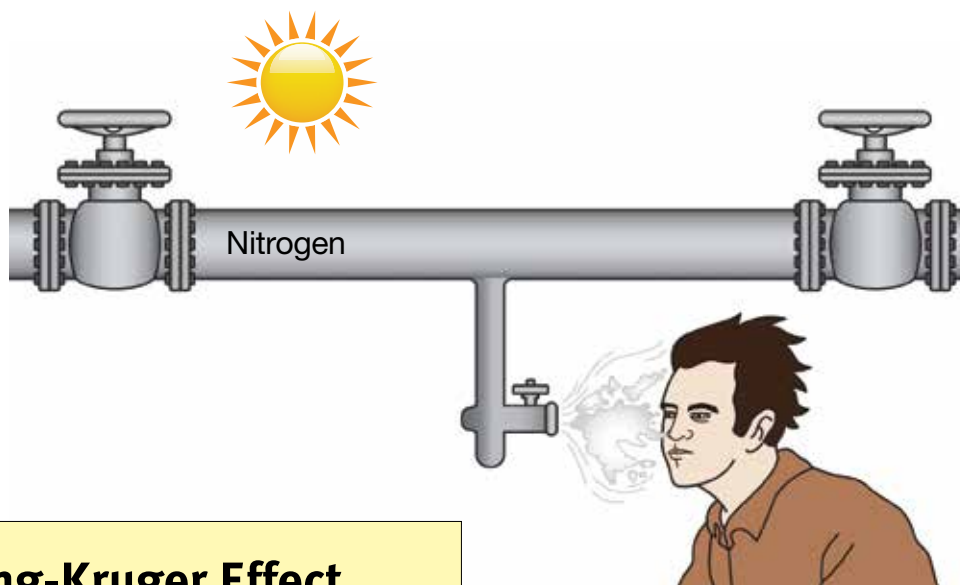


## The Competency Conundrum

Your most incompetent employees think they are above average.  
They don't know enough to know how incompetent they are.



### Dunning-Kruger Effect

More than 20 years of research into competence shows performers in the bottom 10% believe they are in the top 40%.

Research includes:

- doctors
- nurses
- engineers
- lab technicians
- psychologists
- computer programmers
- college students.

The least-competent workers lack the knowledge to accurately assess their incompetence.

This is called the Dunning-Kruger Effect.

In the U.S., around 10 people die every year from accidental nitrogen asphyxiation. Standing in front of venting nitrogen is not a good way to cool down on a hot day.

This worker's incompetence could lead to his death.

### Solution

We are too subtle when communicating with the least-competent workers.

They need to be directly confronted with objective data, such as test results and audits, that clearly demonstrate their incompetence.

This Safety Minute was prepared by Larkin Communication ([www.larkin.biz](http://www.larkin.biz)) in partnership with CEP.

# References: The Dunning-Kruger Effect

## Communicating with Poor Performers

Why don't poor performers see better performers doing a task and copy what they see? The poorest performers don't know enough to realize that the others are actually better — they simply think the others are different. The poor performers may even think their way is better (faster and easier).

The first step in communicating with poor performers is getting them to realize that they are poor performers. Subtlety does not work because they don't know enough to know they are poor performers.

The conversation needs to begin with objective measures — test results and/or audits — demonstrating their incompetence.

Until poor performers see that their behavior is not “different,” but is actually worse, no behavior change is likely.

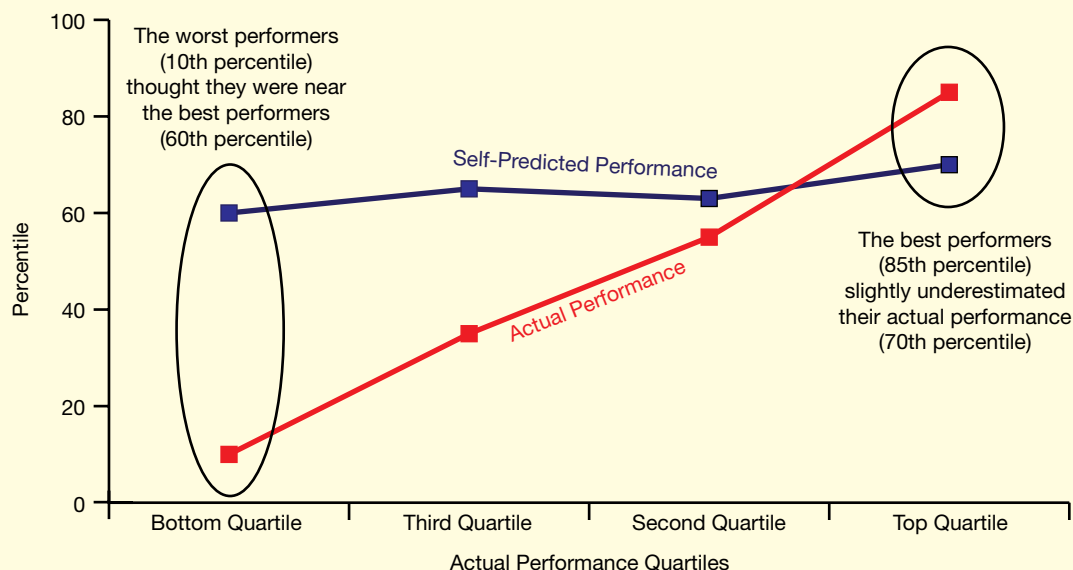
## Students Who Believe They Performed Better Actually Performed Worse

After taking an exam, 141 students were asked to rate how they thought they performed. The students were asked to estimate what percentage of students they thought performed better than them on the exam. Each student's self-predicted performance was compared to their actual exam performance. The results are shown on the graph below.

The worst-performing students on the exam (scoring on average in the 10th percentile) thought they scored well above average. Researchers concluded that the bottom performers don't know enough to realize how little they actually know.

The general pattern of this result, called the Dunning-Kruger Effect, has been duplicated many times since the original paper was published in 1999.

Source: Dunning, D., “The Dunning-Kruger Effect: On Being Ignorant of One's Own Ignorance,” *Advances in Experimental Psychology*, 44, pp. 247–296, <https://doi.org/10.1016/B978-0-12-385522-0.00005-6> (2011).



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