Jim Doran EDTECH 505 Week 10 Assignment

Exercise Part 1

My project certainly falls on the side of evaluation. The basis for this statement lies in the fact that I will be doing a 100 percent sample of the available data. Measuring the success of troubleshooting training presents difficulties given the fact that such activities may take place in the wee hours of the morning without my personal oversight. As such, I will rely on management observations and the review of work order documentation.

Additionally, the findings of my evaluation will be very specific in nature. INPO (Institute of Nuclear Power Operators) has listed specific items that Millstone Power Station must correct in order eliminate our documented area of improvement. The training being evaluated has been specifically designed to address these issues. Thus, the data collection is not designed to determine the best method of accomplishing these changes, but instead, whether or not these changes have occurred. Behaviors and results are being targeted for evaluation and not methods.

Exercise Part 2

I will not be using sampling during my evaluation. Such is the nature of nuclear power that INPO will be examining 100 percent of our results. As such, my evaluation should mirror theirs both in population and depth of scrutiny. The ultimate goal of the evaluation is to ensure that we have raised our standard of troubleshooting such that INPO deems it effective and retracts their AFI. (Area For Improvement)

Also, my population will be, by its very nature, relatively small. Ideally, a nuclear power plant does not want its equipment failing. I will be examining a period of approximately six week between the completion of the training and the final evaluation report. This small period combined with the limited force me to examine each data point available in order to draw an accurate conclusion.

Review of A Practical Guide to Sampling

While the quasi-Weekly Reader format is a bit distracting, A Practical Guide to Sampling provides a great deal of pertinent information on sampling methods and populations as well as interpreting the results. Although the guide presents good tools, it's focused primarily on selecting representative sample populations within a large group. One of the things in the paper that truly surprised me was Microsoft Excel's ability to extract a sample, although I would prefer more control over the outcome than just the range and the number of samples. Selecting samples based on the output of a random number generator seems a bit vague, the digital equivalent of drawing numbers from a hat. Lastly, one of the things I will take from this paper is the next to last page of formulae. It's quite handy to have a single page reference guide when one is analyzing data.

Review of Sampling Workshop

The intent of the Sampling Workshop is apparent given its subtitle on the first page. This is a site devoted to research methods. Although it lacks the graphical elegance of the Practical Guide to Sampling, the information available is quite similar to the information in the practical guide. One helpful graphic representation included in the Sampling Workshop is the division of a population based on each type of sampling. For instance, the site's graphical representation of a proportionate sampling or stratified random sampling are easier to understand given the website's graphical representation of both the general population and the sample population for each method. Lastly, one of the nicest features of the website is the question and answer portion provided on many pages. Using this feature allows the student to answer various questions how they think best and then compare the answer to those provided by the site expert.