# Human Performance Story Analysis & Intervention

# Situation and Desired Circumstance

A major university requires all professors to have an LMS component to their class; be it as the main medium via a fully online class, hybrid class or a means of communication and information dissemination for a predominantly face-to-face class.

One of the graduate schools established a Blackboard Assistant (BA) position to help instructors more effectively use Blackboard (BB) with their face-to-face and hybrid classes after noticing their instructors' comfort level with the LMS varied greatly. The position has been around for a few years and some standards have already been established. One crucial standard is completing a professor's request for no later than 48 hours after it was submitted.

# The Problem

The person who now holds the BA role—Rachel—is relinquishing it to take on other full-time responsibilities elsewhere in the university and she is tasked with training her replacement: Gina. Though Rachel is the trainer, she was thrusted into the BA role herself a few months ago without recent training on the LMS (she had extensive BB training many years before). Therefore, the ladies are learning some concepts together. These training sessions are not Rachel's sole focus. She has already taken on some of the functions of her new role and training Gina occurs in fits and starts. The training that was expected to take two weeks is now in its fourth week with very little progress. The BA functions most efficiently with double computer screens; yet, Gina was issued only a 13" laptop until her required devices arrive. To complete these tasks adequately, the BA must have access to several of the university's data management sites, but weeks into the training sessions Gina is still without access to some. At times, even when there are requests she can independently fulfill, she loses time on these tasks because of back and forth communication with professors who did not provide complete or accurate information in their initial request.

### How did you qualify that there is a real problem?

This current situation delays the time it takes to fulfil instructors' requests. During this training period, the turnaround time for assisting professors with their BB needs has ballooned. We know there is a (human performance) problem because Rachel was generally meeting deadline before having to train Gina. The training is taking place during one of the low request periods during the college's six-start cycle, yet the desired time frame for completing requests is not routinely met. Another indicator there is a real issue is that the training is not progressing as desired since Gina is much further behind than anticipated. In general, the training was expected to be a disruption to normal work flow, but the inadequate progress is poised to cause significant ripple effects.

#### Process

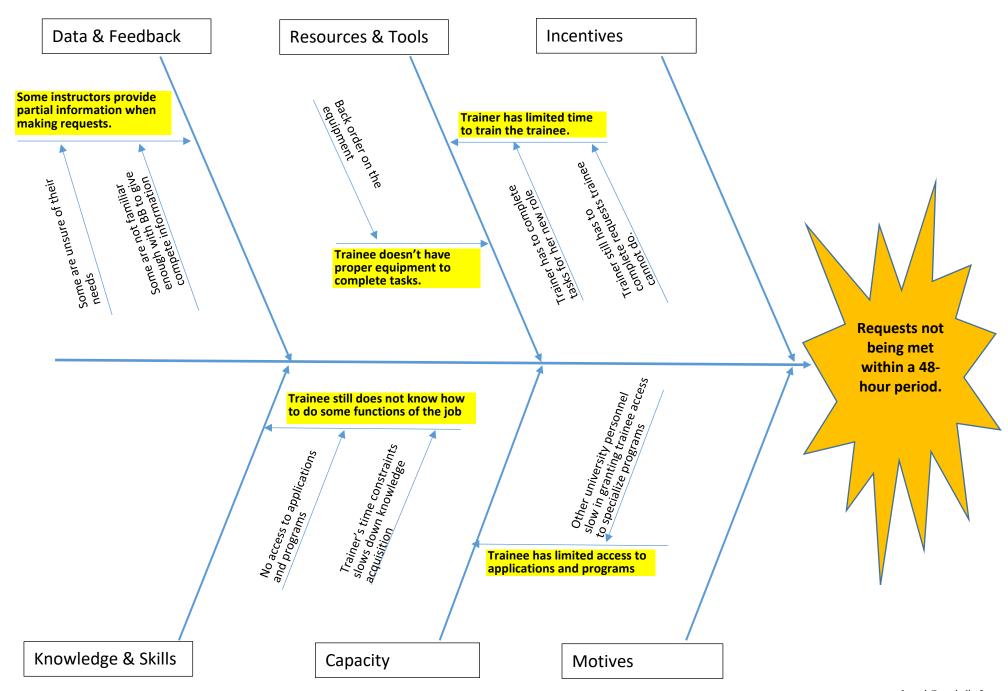
I used a combination of tools to complete a causal analysis: the updated BEM categories (Chevalier, 2003) on Ishikawa's Cause-Effect Diagram (Kelly, 2000) and 5-Whys questioning (ISM International, n.d.). Van Tiem, Moseley and Dessinger's (2012) questioning tool also proved invaluable in my aim to find root cause(s) of this slowed request process.

To explain, I use the BEM categories because they are comprehensive but by themselves would not produce enough information regarding the secondary issues that feed into the causes directly linked to the problem. I added the 5-whys strategy to each BEM cause, delving more deeply into the problem to address this. Ishikawa's Fishbone was an effective tool for putting it all together in a easy to understand mental model. Van Tiem et al's (2012) questioning tool afforded a variety of questions in each category; hence, it was easy to find at least one in each area that was relevant to the observed situation.

# Business Requirements

- 1. Minimize the lag between a request and when it is fulfilled in order to maintain the desired 48-hour period for assistance.
- 2. Increase the rate of speed at which the trainee is trained.
- 3. Increase the number of Blackboard requests the trainee is able to complete.

The college's Blackboard Assistant is not meeting the desired time for request turnaround and she is slowly progressing through the training. The aforementioned business requirements directly address these issues: (1) significantly reduce the lag between the time a request is submitted and when it is completed; (2) increase the trainee's productivity.



# Intervention Generation and Analysis

Joe Harless (1973) noted that a carefully analyzed problem will point in the direction of the solution. After the Fishbone made root causes apparent and business requirement easier to identify based on the desired outcome, I generated possible solutions based on their potential to adequately address the problems and business requirements

#### Solutions Brainstorm

- 1. Put the workflow of various processes in a flowchart that the trainee can follow. (JOB AIDS)
- 2. Put the trainer's other job on hold so she can more satisfactorily conduct the training. (TEMPORARY JOB RESTRUCTURING).
- 3. Have the trainee complete tasks using the trainer's credentials—under the trainer's watchful eye—until all of the trainee's access to key systems has been granted. The trainee will get needed practice. (ON THE JOB LEARNING)
- 4. Remind professors of required details when making requests. (DOCUMENTATION AND STANDARDS)
- 5. Special request to speed up the process that would grant the trainee access.

All of these solutions are possible, but some are more probable than others. Let's discuss the least probable, then finish with the most likely.

Having had experience working in a University, I know anything that involves speeding up interdepartmental processes—especially for something perceived as a temporary training—is a mammoth task. It's the same issue with Gina's equipment. While getting her the necessary equipment would go a long way in speeding up knowledge acquisition and make her more efficient on the requests she could complete, there is no changing the backorder status of the items. The TEMPORARY JOB RESTRUCTURING of putting Rachel's new job on hold would receive some pushback, particularly from those who would be temporarily taking over her duties. It can be argued, however, that once convinced this situation is only temporary and expedited [because Rachel's focus would be fully on training, the process would proceed more quickly] there should be less resistance.

Nonetheless, here are a few interventions certain to produce some positive return given the environmental constraints: solutions #1, #3 and #4. Rachel teaches Gina several processes, but none are in print. She talks her trainee through tasks as she does them, so if/when Gina forgets how to do something she has to refer to Rachel again. Putting processes and responsibilities in print, means this JOB AID gives Gina a reference for her tasks that is independent of the trainer. That selfreliance strengthens learning. Having Gina complete task under Rachel's credential also builds process memorization, which speeds up the training cycle. This also affords both women to be in the account at the same time. Rachel can complete larger requests while Gina addresses smaller ones (on her inefficient equipment) and the dual approach works to clear the inbox faster than they currently do. Another approach that could certainly address the lag in request completion is using a DOCUMENTATION AND STANDARDS intervention to remind professors of their responsibility in providing a certain level of detail needed to fulfil their tasks/requisitions in a reasonable time. It stands to reason that there are new instructors who are not aware of these standards and old faculty who have forgotten them since they were last disseminated. Therefore, updating and/or redistributing documented standards would go a long way in reducing the number of incomplete requests.

The two strategies that would have the greatest impact on Gina's ability to become more oriented and fully functional would be the most difficult to implement. Consequently, the interventionist am forced to work around them. Some would argue that it is only a training cycle and these issues will resolve themselves in time. True. But in that very long meantime, the damage of having a litany of courses whose LMS component is not ready by their start dates will have already been done.

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