Dynamic Learning Activity

Background

A dynamic learning activity (DLA) provides facilitators, observers, and participants with an opportunity to experience firsthand how knowledge, skills, work practices, and processes are applied while they perform realistic work activities in a simulated work environment. The activity is set up to be as realistic and authentic as possible, replicating actual physical, administrative, and cultural constraints. The DLA will often reveal organizational weaknesses, thereby offering an opportunity to improve relevant engineered, administrative, cultural, and oversight controls. Also, DLAs can be used to indoctrinate supplemental workers prior to outages or for just-in-time training before critical work activities.

A DLA has four parts, as follows.
1. Pre-activity preparation by facilitators (observers)
2. Pre-activity briefing with the participants
3. Activity
4. Post-activity review

The DLA is performed as if the participants were doing the activity in the plant or other relevant job site. They use the same tools and procedures and interact with others to complete the activity. In most cases, faults, defects, and errors are embedded in the scenario to challenge each participant's ability to perform the activity properly. Front-line workers who are passionate about human performance make the best DLA facilitators. They relate better to their peers and more effectively communicate the benefits of applying the expectations reinforced in the DLA.

The intent is to provide participants and observers with opportunities to self-evaluate their application of current knowledge, skills, work practices, and processes. Performance is not formally graded. However, it typically is assessed, and strengths and areas for improvement are discussed during a post-activity review. The emphasis is on critical self-evaluation in a nonthreatening environment. The learning comes from the interaction and collaboration during the activity and from the identification of strengths and areas to improve observed during the activity.

When to Use the Tool:
- on the first day of continuing training for line personnel
- at the conclusion of initial training on human performance tools
- when managers or supervisors exhibit a deficiency regarding
- human performance
- during pre-outage orientation for supplemental workers

Best Practice[1]

1) **Preparation** –Facilitator reviews:
   - expectations, precautions, and limitations
   - participants' roles, facilitator and observer roles
   - work activity scenario
   - faults embedded in the scenario
   - applicable work practice and human performance
   - expectations and standards
   - safety precautions
   - resources

2) **Pre-activity Briefing** –Facilitator and participants review:
   - purposes of a DLA
   - roles of facilitator during the scenario
   - reminder to perform activity as if in actual working
   - conditions

3) **Activity** –Participants perform:
   - work assignments
   - prejob briefings
   - assigned tasks
   - postjob reviews

4) **Post-activity Review** –Facilitator and participants review:
   - strengths
   - areas for improvement
   - follow-up actions and designated owners and due dates

At-Risk Practices:
- assigning a pass-fail grade to participants, which inhibits open communication during the post-activity review
- establishing unrealistic working conditions
- not being self-critical during the post-activity review
- facilitators or observers not being knowledgeable of expectations and standards
- having too many distracters in the scenario, such that the participant(s) cannot be successful
- coaching during the conduct of the activity
- providing feedback to participants before giving them an opportunity to self-correct during the activity
- limiting identification of areas for improvement to the participant; not including relevant organizational factors
- not asking participants what they did well before asking them what could be improved

[1] Exelon lesson plans for nuclear station personnel training programs on human performance served as the template for this tool.