Training Effectiveness Predictors

Learner characteristics, training design, and work environment predict training effectiveness.

This document summarizes published evidence on training factors that have the strongest, most consistent relationship with learning and application of knowledge and skills in the workplace—a concept known as transfer of learning. For more information, see the Recommended Training Effectiveness Questions for Postcourse Evaluations User Guide. These predictors of training effectiveness align with several CDC Quality Training Standards.

Learner Characteristics

Motivation: The level of intensity and persistence the learner directs toward learning and the application of learning. Motivated learners are more likely to apply their knowledge and skills in the workplace.

Perceived Utility or Relevance of Training: Learners who see the training as useful and beneficial to their job are far more likely to apply their knowledge and skills in the workplace.

Training Design

Behavioral Modeling: Learners are more likely to apply their knowledge and skills in the workplace when the instructor clearly defines desired behaviors, demonstrates these behaviors, and gives learners opportunities to practice needed behaviors.

Error Management: Learners are better equipped to handle on-the-job challenges when instructors allow them to practice problem-solving that involves anticipating, experiencing, and managing issues in the workplace.

Realistic Practice or Realistic Training Environments: Learners are more likely to engage in active learning and transfer knowledge and skills to the workplace when instructors conduct training and practice in environments that resemble the workplace.

Work Environment

Supportive Environment: Peers and supervisors enhance transfer of learning by reinforcing and supporting learners' newly acquired skills. It is especially helpful when peers and supervisors work with learners to develop action-oriented goals for applying these skills.

Opportunity to Perform: Learners need resources and opportunities to apply their new skills and abilities in the workplace.

Relapse Prevention Strategy: Follow-up (such as job aids or reminders) increases the likelihood that learners will apply their new knowledge and skills in the workplace.

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These training effectiveness predictors align with several of CDC's Quality Training Standards:

Learner Characteristics

Needs Assessment (Quality Training Standard #1): A needs assessment can provide information about your learners' level of motivation. It can also provide information that helps make a course relevant and useful to the learners.

Learning Objectives (Quality Training Standard #2): Learning objectives help learners gauge if a training will be relevant and useful by letting them know what they will be able to accomplish by the end of the course.

Accurate and Relevant (Quality Training Standard #3): Making training content relevant for your learners improves their likelihood of applying what they learn in the workplace. In addition, if the training is designed to be relevant, the learner may be more likely to perceive it as useful and relevant.

Training Design

Accurate and Relevant (Quality Training Standard #3): Making content relevant involves using real-world examples, scenarios, or environments to reinforce learning.

Learner Engagement (Quality Training Standard #4) and Learner Assessment (Quality Training Standard #7): Learner engagement and learner assessment both address providing opportunities for learners to practice behaviors and receive feedback on their problem-solving skills.

Work Environment

Follow-Up Support (Quality Training Standard #8): Follow-up support for the learner involves providing resources, tools, and other support, such as opportunities to apply skills to reinforce content and learning when learners return to the work place.

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Visit www.cdc.gov/trainingstandards to learn more about the CDC Quality Training Standards.