

## RESEARCH-TO-PRACTICE WHITEPAPER #1

### ADAPTIVE TRANSFER

Dr. Reid A. Bates, Chief Research Officer

#### **Adaptive transfer is critical today**

Identifying effective training methods to foster learning transfer is a major concern of trainers and has been a focus of training research for many years. Because of the increasingly dynamic and complex nature of the jobs and roles that characterize modern organizations, flexibility and adaptability are far more important components of performance today than in the past. That is why we see a great deal of interest from practitioners and researchers in “adaptive performance” or an individual’s capacity to deal with changing work requirements in new or different situations. From a learning transfer perspective, adaptive performance parallels a concern for “adaptive transfer” and the challenges facing trainers concerned preparing learners with the capacity to apply the KSAs acquired in training to tasks that go beyond and are often substantially different from the tasks and applications covered during training.

Adaptive transfer (also called “far transfer”) contrasts with “near” or “analogical” transfer which involves transferring KSAs to

workplace tasks that are similar to those taught in training. This difference (transfer to similar tasks versus transfer to novel, different tasks) is important because a good deal of recent research suggests that preparing individuals for adaptive transfer requires special considerations in the design of training.

#### **Traditional training design is a limiting factor for adaptive transfer**

Our traditional approach to training has been to streamline training and to minimize errors or incorrect responses by using a “guided” approach to training design. Training is designed and delivered in ways that provide trainees with specific, often detailed instructions with trainers guiding trainees through the process of task completion. Traditional designs start with simple tasks, move to more complex tasks in a sequential manner, and provide opportunities for trainees to practice until they can do the tasks correctly on their own. In short, the emphasis is on teaching rules, principles, models, procedures and skills in a step-by-step manner and

supporting or coaching trainees to do things the “right way”. Behavior modeling training, in which trainees watch a model perform certain behaviors or tasks and then attempt to copy the model, is a common example of this approach to training design.

From a transfer perspective, the guided approach to training design has been shown to be effective when there was a high level of similarity between the tasks taught and practiced in training and the transfer tasks encountered in the workplace. It is a relatively efficient method for designing training and can, when delivered effectively, facilitate quick acquisition of the KSAs required for routine performance. But it has not proven to be very effective for adaptive transfer. A good deal of recent research indicates that active learning design elements are far better for fostering adaptive transfer than our traditional guided training approaches.

The value of active learning is something that trainers have been familiar with for years and is an important component in models such as Kolb’s experiential learning model and Revan’s action learning model that emphasize learning by doing. The difference is that active learning goes beyond simply learning by doing. It focuses on using specific training design elements to build the cognitive, motivational, and emotional processes that support adaptive transfer. In fact, recent research has convincingly demonstrated that active learning training design elements work:

they can enhance important training outcomes, particularly adaptive transfer.

### **Why is active learning more effective for adaptive transfer?**

Active learning design has two characteristics that distinguish it from traditional guided training design. First, active learning design tries to give trainees more control over the learning process. For example, active learning training design elements typically give trainees far less information or guidance in how to perform a specific task than in guided training. This limits control of the learning process on the part of the trainer and gives it to the trainees themselves, in contrast to guided learning design which limits trainee control of learning by having the instructor or learning system (e.g., computer) determine what materials or tasks are delivered and when. The transfer value of more learner control is that it helps trainees build the kinds of self-regulatory skills needed for adaptive transfer. Since active training does not provide much guidance or instruction on training tasks being learned, trainees must plan, monitor, evaluate, and revise task strategies themselves rather than rely on guidance from the instructor. So when active training participants return to work and are confronted with adaptive transfer tasks (those new or different from the ones practiced in training) they are prepared with the adaptive skills (planning, monitoring, evaluating, and adjusting) they need to solve new problems or to transfer skills to novel tasks. In guided training

designs, trainees don't need to engage in this level of mindful processing (also called metacognitive activity) so the skills needed to adapt learning to new situations aren't developed.

A second related characteristic of active learning design is that trainees are encouraged to explore task solutions and experiment with learning tasks on their own, to identify key issues and find their own solutions to problems or challenges. In other words, with reduced trainer guidance, trainees are encouraged to develop their own rules, principles, and strategies for effective performance. So rather than memorize a model of employee coaching provided by the instructor, active training design elements encourage trainees to construct their own knowledge or approach for coaching. For example, in some active learning strategies, such as discovery learning or error management training, trainees are provided relatively minimal guidance from the trainer and are instructed to experiment with problems or task-related challenges and to discover solutions on their own. The key difference in this approach, as opposed to that of traditional guided training, is that trainees are encouraged to construct their own knowledge or way to do something versus internalizing that which is provided by the trainer. Both of these factors, enabling trainees to practice and build the ability to plan, monitor, evaluate, and revise task strategies themselves and to construct their own rules, principles, and strategies for

effective performance, make active learning design elements more effective for enhancing adaptive transfer than traditional guided designs.

In the white papers that follow, we will explore several active learning design elements, look at how those design elements can be included in practical ways in training programs, and discuss how they work and why these design elements have the potential to increase adaptive transfer.