“INSPIRING INNOVATIVE SOLUTIONS IN HUMAN SERVICES”

TRANSFER OF LEARNING GUIDE

Anita Harbert, PhD
Executive Director—Academy for Professional Excellence
Professor Emeritus—SDSU School of Social Work

Jennifer Tucker-Tatlow, MSW
Director, Academy for Professional Excellence

Prepared by:
James Coloma, MSW

Consultants:
Cindy Parry, PhD
Jane Berdie, MSW

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PURPOSE OF THIS DOCUMENT
The Academy for Professional Excellence has a deep commitment to quality training. As such, we evaluate each and every training. The evaluation of training that we provide using a multi-level evaluation methodology including: Tracking, Formative, Satisfaction/Opinion, Knowledge, Behavior, and Outcomes. In keeping with our commitment to quality training, it is a goal of the Academy for Professional Excellence that each training we provide includes strategies to increase Transfer of Learning, in other words, the ability of trainees to apply what they’ve learned on the job or their Transfer of Learning.

This guide will provide you with an overview of what TOL is, why TOL activities are important, strategies to increase TOL, and examples of TOL activities. Some of the examples within this guide are complex and require the coordination between the trainer and multiple Academy staff. If you would like to utilize any of the examples within this guide, please meet with your Academy contact.

WHAT IS TOL?
Transfer of learning is the degree to which trainees apply the knowledge, skills, and attitudes learned in training when they return to the job, and the degree to which the new learning is maintained over time (Baldwin and Ford, 1988).

THE “TRANSFER PROBLEM”
According to Curry and Caplan (1996) “Research suggests that there is a typical transfer skill dollar loss ranging from 28 to 90 cents on every training dollar spent.” In addition, Burke (1997) found that “immediately following training, trainees are able to recall and use approximately 40% of the training material. However, this learning and training transfer diminishes to 25% at six months and 15% at one year.”

This transfer problem could translate into increased staff turnover, problems for the agency in meeting federal, state and local requirements, and, possibly, increased risk of harm to populations served by our trainees. Beyond dollars and cents, increasing transfer of learning is important to ensure the application of best practices.
WHAT DOES RESEARCH TELL US ABOUT FACTORS THAT PROMOTE TRANSFER?

Considerable research has been done on the factors that promote or inhibit transfer of learning.¹ Current theorists take an ecological approach that considers influences that go beyond what happens in the training room. These factors may be related to the participant, the training design and delivery, or the environment the trainee returns to, and may operate before, during and/or after training. The factors that research has found to relate to transfer of learning include: participant factors, training design and delivery factors, work environment/climate factors.

PARTICIPANT FACTORS:

- Motivation to learn and to apply what has been learned
- Self-efficacy (participants’ beliefs that they can learn and apply the learning successfully)
- Personality dimensions such as conscientiousness/goal orientation
- Expectations that training will be valuable
- Control over attending or not attending training
- Ability, including prior knowledge/skill level/strategies.
- Learning the acquisition of knowledge and skill being taught

TRAINING DESIGN AND DELIVERY FACTORS:

- Quality of the training
  - Clear learning objectives
  - Content and methods that support desired levels of learning
  - Opportunities for practice and feedback
  - Repetition of key ideas
- Trainer skills
- Fidelity true to training design
- Relevance of training content to the job
- Alignment of training to trainee’s organizational mission and values
- Follow-up (coaching, mentoring, feedback, peer networks, booster sessions)
- New ideas presented by training

¹ e.g. Antle, Barbee, Sullivan, & Christensen, 2009; Arthur, Bennett, Stanush, and McNelly 1998; Broad & Newstrom, 1992; Baker and Mayer, 1999; Burke & Hutchins, 2007; Curry & Caplan, 1996; Curry, Caplan, & Knuppel, 1991; Curry, Caplan, & Knuppel, 1994; Ford, 2009; Holton, 1996; Noe & Schmitt, 1986; Rouiller & Goldstein, 1993; Yarnell & Mclean, 2001
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WORK ENVIRONMENT/TRANSFER CLIMATE FACTORS:
- Management, supervisor, and peer support
- Opportunity to use what has been learned
- Time and resources to implement new practices
- Incentives
- Organizational openness to change

WHAT CAN BE DONE TO PROMOTE TRANSFER?²
The following table provides a list of strategies that a training organization can use to promote transfer and when these strategies should be done in association with the training.

Examples for each of the strategies are provided throughout the table. Some of these examples may be specific to a particular trainee group and are included since they can be modified to fit another trainee group.

Some of the examples within this guide are complex and require the coordination between the trainer and multiple staff of the training organization. If you would like to utilize any of the examples within this guide, please meet with your Academy contact.

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<th>WHEN TO USE DURING TRAINING</th>
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<tr>
<td><strong>SET CLEAR COURSE GOALS AND OBJECTIVES.</strong></td>
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<td>• Brown (2005) found that goal-setting helps individuals regulate their behavior by directing attention and action, mobilizing energy expenditure or effort, prolonging effort over time, and motivating the individual to develop relevant strategies for goal attainment; all necessary behaviors for transfer.</td>
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<td>• Kontoghiorghes (2001) found that the development of learning goals and objectives was significantly correlated with transfer, indicating that participants are likely to transfer when they have a clear understanding of what knowledge and behaviors are required after training.</td>
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<td><strong>Example(s):</strong></td>
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<tr>
<td>• Make sure objectives are behavioral or SMART (specific, measurable, attainable, realistic, and time sensitive).</td>
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<td>• Provide a course description including goals, objectives, content highlights, and expectations for performance on the job as a result of training.</td>
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<td><strong>ORIENT SUPERVISORS TO THE COURSE.</strong></td>
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<td>• Baumgartel, Reynolds, &amp; Pathan (1984) showed that employees whose managers believe in the utility of training or value the outcomes training will provide are more likely to apply skills learned in training.</td>
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<td>• Antle, Barbee, &amp; van Zyl (2008) found that the individual variable of learning readiness and the organizational variable of supervisor support of training predict training transfer.</td>
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<td><strong>Example(s):</strong></td>
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# Transfer of Learning Guide

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### Orient Trainees to the Course.

- Chiaburu & Marinova (2005) found that pre-training motivation has been shown to influence actual transfer outcomes.
- Motivation to transfer is the trainee’s intended efforts to utilize skills and knowledge learned in the training setting to a real world situation.

**Example(s):**

- Provide a course description including goals, objectives, content, expectations for applicability, and any assignments/pre-work.

### Invite Input.

- Brinkerhoff & Montesino (1995) suggest including stakeholders in the design of training.
- Gaudine & Saks (2004) suggests the use of a needs analysis approach that specifically identifies obstacles to positive transfer.

**Example(s):**

- Provide an opportunity for stakeholders/trainees to state their expectations and desired outcomes.

### Help Create Preliminary Action Plans.

- Kontogiorghes (2001) found that the development of learning goals and objectives was significantly correlated with transfer, indicating that participants are likely to transfer when they have a clear understanding of what knowledge and behaviors
are required after training.

- Brown (2005) found that participants who set short-term goals plus long-term outcome goals reported increased transfer over those who set only long-term outcome goals.

Example(s):
- Encourage trainees to develop a preliminary Action Plan (preferably with their supervisor) that describes how they will apply their new knowledge and skills after training.

**Connect New Knowledge and Skills to Future Use.**

- Brown (2005) found that participants who set short-term goals plus long-term outcome goals reported increased transfer over those who set only long-term outcome goals.

- Axtell, Maitlis, & Yearta (1997) found that the content validity of the training information was highly correlated to transfer after and at the one month mark after training.

Example(s):
- Directly alert trainees to occasions where they can apply what they are learning.

- Ask students to predict possible on the job applications for learning.

- Challenge students to come up with a convincing reason why a particular skill is useful now; might still be useful a year from now; and five years from now. Thus, participants are encouraged to take 'the long view' and consider how certain skills and concepts that they are discussing now might be necessary in the future.
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## Strategies

- Help trainees develop realistic action plans that describe how they will apply their new knowledge and skills immediately after the training and six-months after the training.

## Use Authentic Learning Tasks That Are Similar to Job Requirements and Have Sufficient Complexity to Encourage Deeper Thinking and Longer Term Retention.

- Burke, Sarpy, Smith-Crowe, Chan-Serafin, Salvador, & Islam (2006) found that including active training methods (such as behavioral modeling, feedback, and dialogue) increased learning and decreased negative outcomes.

- Salas, Rozell, Mullen, & Driskell (1999) suggest that learning interventions be designed to provide adequate practice and feedback to enhance long-term maintenance and application of skills.

- Holladay & Quinones (2003) found that cognitive or mental rehearsal and behavioral practice strategies during training are positively correlated with transfer.

## Example(s):

- Make the learning task mimic the ultimate applications (e.g. using an actual form to record case data in an exercise).

- Use simulations or role-playing to approximate the situation in which the knowledge or skill will be used and help students practice new roles in diverse situations.

- Have students learn content through solving problems similar to those on the job.
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<td><strong>Use activities and questions that tap into the trainees’ existing knowledge and skill and engage them as participants.</strong></td>
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<td>McKeachie, Pintrich, Lin, &amp; Smith (1987) found that discussion-based techniques were superior to lecture only.</td>
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<tr>
<td>Example(s):</td>
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<tr>
<td>Consider brainstorming with the participants early in the course to identify work related issues and then use those issues as the basis for activities throughout the course (e.g. use real case descriptions to apply concepts and provide practice scenarios).</td>
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<td>Use realistic exercises/scenarios that address the challenges being faced by the trainees at their work sites.</td>
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<td>Consider exercises involving problem solving or troubleshooting a typical/actual problem faced by one of the trainees.</td>
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<td>Use analogies and parallel processing. For example, help reinforce learning by finding and discussing parallels between training concepts and trainees’ home or work lives.</td>
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<tr>
<td><strong>Provide enough repetition, practice and feedback to prepare people to use a new behavior on the job.</strong></td>
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<tr>
<td>Repetition and over learning (practicing a new skill beyond mastery to automaticity) are the single most important predictors of retention of information.</td>
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<tr>
<td>Fisk &amp; Hodge (1992) found that over learning can improve transfer especially for skills that may go unused for long intervals.</td>
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<td>Fisk, Lee, &amp; Rogers (1991) demonstrated that</td>
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<tr>
<td>Transfer of automatized task components is successful if the component is applied in a similarly fashion across tasks.</td>
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**Example(s):**
- Use a variety of examples to illustrate key points.
- Provide opportunities for trainees to support each other by giving each other feedback and discussing how they will use their new knowledge and skills.
- Give immediate, individualized, constructive and clear feedback as part of skills practice, presentations, or other classroom activities or informally at breaks or after class.
- Use multiple activities that reinforce the same skill set.

**PROVIDE OPPORTUNITIES FOR REFLECTION AND SELF-MONITORING.**
- Self-monitoring strategies work to equip trainees with necessary skills to help them transfer successfully back to the workplace.
- Gist, Bavetta, & Stevens (1990) found that having trainees engage in self-regulatory/monitoring behaviors have a direct and indirect effect on trainee transfer.

**Example(s):**
- Provide frequent opportunities for trainees to reflect on what they are learning and plan how they will use their new knowledge and skills on the job.
- Give them a notebook to use as a learning journal. Periodically ask specific questions for trainees to answer in their journals about:
  - how they will apply their new knowledge/skills,
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<tr>
<td>o what problems they will need to resolve and how they will overcome them, and</td>
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<tr>
<td>o what resources and support they will need and how they can obtain them.</td>
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<tr>
<td>• Encourage them to use their notebook as a reference on the job and to note any issues or questions they have as they try new ideas or strategies.</td>
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<td>• Encourage “high road” transfer, or deliberate and mindful transfer of concepts or skills learned in one context to new and different situation. Ask questions to cue trainees to use learning from an earlier time to solve a current problem such as:</td>
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<td>o What does this remind you of?</td>
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<td>o Have you done anything similar before?</td>
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<tr>
<td>o What strategies could you try that have been successful before?</td>
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<tr>
<td>o Do you think they will work here?</td>
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<tr>
<td>o How could I handle what was hard better next time, what skills/strategies have I learned that I might be able to use again?</td>
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<tr>
<td>o What situations might these skills be useful for?</td>
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<tr>
<td>o What do I still need to learn?</td>
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<tr>
<td><strong>Help Trainees Develop Job AIDS (e.g. Checklists, Posters, Index Cards, or Other Job Aids They Can Use to Recall Information, Procedures, etc.)</strong></td>
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<tr>
<td>• Clarke (2002) found that a limited opportunity to peform skills on the job was the highest impediment to successful training transfer.</td>
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<tr>
<td>• Bates (2003) found that training goals and materials should be content valid or closely relevant to the</td>
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<td>transfer task.</td>
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**Example(s):**
- Developing a personalized job aid provides an opportunity for further repetition and practice of key points and encourages connections to future applications.
- Have trainees practice using their job aids in situations similar to those on the job.

**Provide tools to help supervisors coach, evaluate, and support transfer.**
- Richman-Hirsch (2001) found trainees who perceived a supportive transfer climate were more likely to use training goals to support transfer of skills than those that perceived an unsupportive transfer climate.
- Foxon (1997) found that trainees’ perception of managerial support for using skills on the job correlates with increased report of transfer.
- Smith-Jentsch, Salas, & Brannick (2001) have identified manager supportive behaviors such as providing encouragement and coaching to trainees about use of new knowledge and skills on the job as salient contributors to positive transfer.

**Example(s):**
- Provide checklists for supervisors to use to evaluate trainee performance.
- Provide job aids for supervisors that give them:
  - information about key concepts, procedures, or skills that trainees were taught,
  - guidance for how to support these skills, and
  - how to contact the training academy with
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<td>PROVIDE FEEDBACK TO AND SOLICIT FEEDBACK FROM SUPERVISORS.</td>
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<tr>
<td>• Lim &amp; Johnson (2002) identified that discussion with supervisors on using new learning, supervisor’s involvement in training, and positive feedback from supervisors were forms of support most recognized by trainees as positively influencing their transfer of learning.</td>
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<tr>
<td>Example(s):</td>
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<tr>
<td>• Provide supervisors with research-based steps for helping trainee transfer learning to the job.</td>
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<tr>
<td>• Solicit input from trainees supervisors on how the training has improved performance and suggestions on what can be done to improve the training based on the performance outcomes that the supervisors are observing.</td>
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<td>• Provide a tool that assesses a trainee’s learning from both the trainee and the supervisor.</td>
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<td>PROVIDE “BOOSTER SHOT” TRAININGS EITHER IN PERSON OR BY WEBINAR.</td>
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<tr>
<td>• Rossett &amp; Marino (2005) detail various successes and uses of e-coaching.</td>
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<tr>
<td>• Provide “booster shot” trainings either in person or by webinar.</td>
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REFERENCES


Rossett, A., & Marino, G. (2005). If coaching is good, then e-coaching is... *T & D, 59*, 46-49.


