Training effectiveness: what you need to know

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Objectives

1. How effective is the training in helping learners gain relevant knowledge and skills?

2. Are the learners able to apply what they learned to improve their performance at work?

3. Is training effectiveness measurable? How can we do it?

4. When should measuring effectiveness start?

5. Can measuring effectiveness of training drive your organization goals and performance?

Background

- **Healthcare providers (HCPs) play essential roles in delivering healthcare.**

- **However, hundreds of studies have documented inadequate HCP performance in low/ middle-income countries.**

- **Estimates of the consequences of poor-quality care range between 4.9–and–8.4 million deaths annually.**

- **In the high-stakes world of healthcare—faced with challenges like the spread of infectious disease, how do training professionals prove that required skills and knowledge have transferred to the work setting and are being applied effectively?**

- **While every learning and development (L&D) function designs and delivers training with varying degrees of success, few provide concrete evidence that their training is working. Are you measuring?**

- **How do you prove to the organization that you have accomplished an essential training task to meet organizational goals?**
- **It is insufficient simply to communicate a change without taking the final step: measuring.**
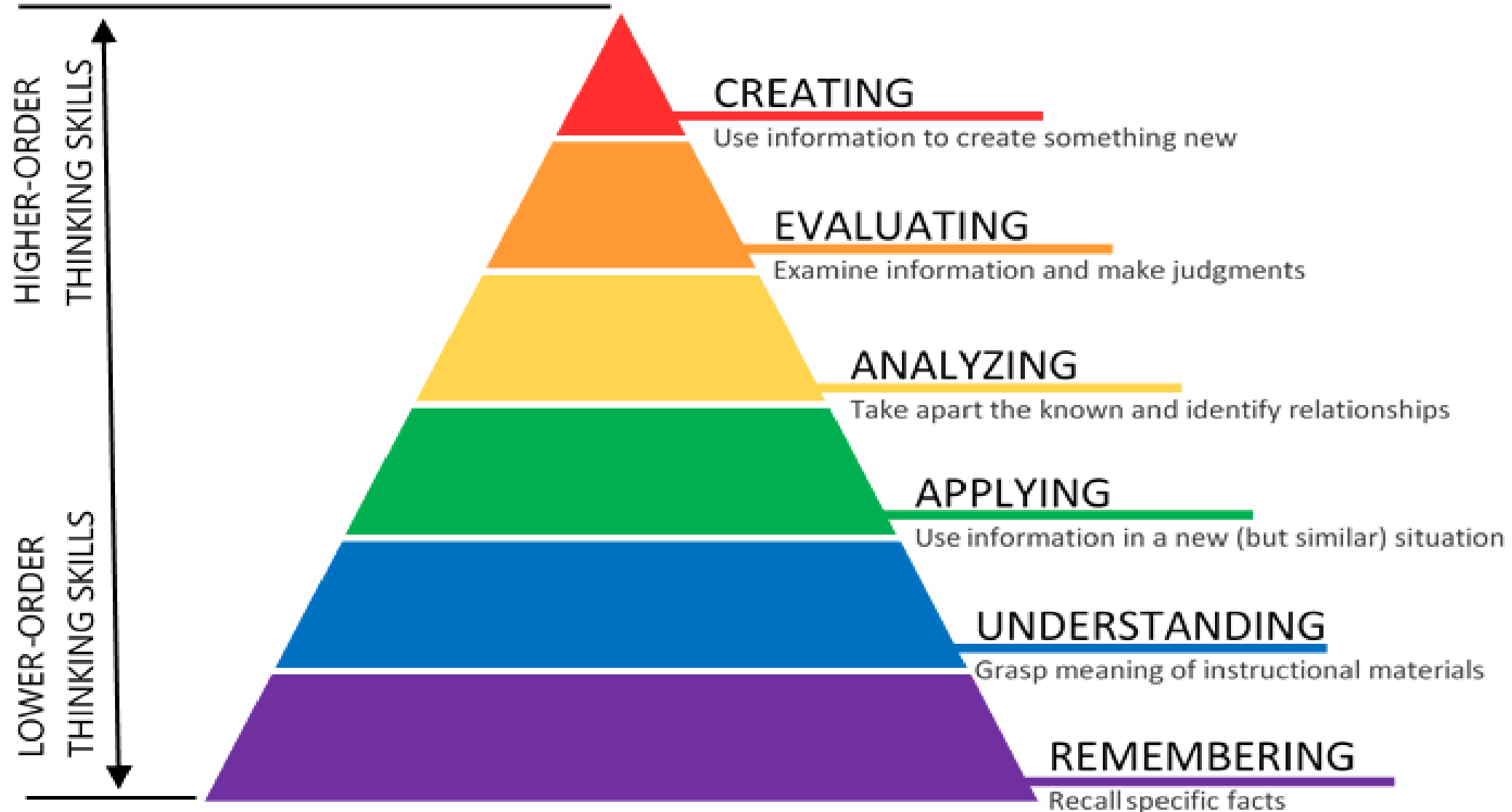
Engage Hands and Heads

and don't forget the

Engage Hands and Heads

- **When hands are done doing the work, the head takes over on a higher level to analyze data, evaluate outcomes, and create a viable solution.**

- **For instance, how are L&D functions making sure that they have provided the HCPs with the skill set to choose the right PPE in different situiations?**

- **The answer: L&D needs to train—and then measure the whole set of skills, from psychomotor to cognitive and even affective, to determine our success.**

BLOOM'S TAXONOMY – COGNITIVE DOMAIN (2001)

HIGHER-ORDER THINKING SKILLS

LOWER-ORDER THINKING SKILLS

CREATING
Use information to create something new

EVALUATING
Examine information and make judgments

ANALYZING
Take apart the known and identify relationships

APPLYING
Use information in a new (but similar) situation

UNDERSTANDING
Grasp meaning of instructional materials

REMEMBERING
Recall specific facts

Be Fair and Realistic

- What if you took your driving test before you took test drives? Likewise, what if HCPs are given aseptic technique tasks in the live environment before they've practiced clusters of related skills that comprise a realistic situation?

- Only after providing a safe environment for practice with feedback—where the HCPs will learn by trial and error—is it fair to measure performance.

THE BOTTOM LINE

- **Measuring on-the-job performance is the culmination.**
- **Let's prepare learners for fair and consistent conditions for measuring.**

Kirkpatrick's Four Levels
of Evaluation

Results
Measure the *resulting benefits* that the organization has experienced

4

Behavior
Measure the *behaviors* the participants *have applied in the real world*

3

Learning
Measure what the participants *learned*, in applicable skills and/or knowledge

2

Reaction
Measure how participants *reacted* to the training program. Did they find it valuable?

1

Extend Learning beyond the Formal Activity

- **Most L&D professionals are already familiar with the Kirkpatrick model of training evaluation, or measuring training results, at specific stages.**

- **It is probably safe to say that most organizations use Level 1 evaluations at the end of training in the form of a questionnaire, often referred to as a "smile sheet," which asks respondents how well they liked the training.**

- **At the end of the training event, they might even evaluate what HCP has learned with a skills-based test: this is Level 2.**

- What about venturing into the real work setting where the skills are to be applied in an environment with a myriad of challenges like emergent events, multi-tasking, interruptions, and pressure from patients and peers.
- How well is the HCP using these newly acquired skills now, transferring them from the controlled setting to the chaotic hospital floor? That is where L&D measures at Level 3.

- The pressurized environment—where the ideal practice meets the reality of the daily grind—is the testing ground for training.
- Can your training function prove that it prepared the HCP with not only the step-by-step procedure, but also that it extended that experience to the higher levels of learning?

Coach for Competence

- **The challenge is to stretch training beyond the controlled training activity and make sure the HCP is using the newly acquired skills on the job.**

- **This stage begins at Level 2 (when the skills test is administered at the end of the formal training event) by using this data for dual purposes—both as baseline data for measuring performance and as an indicator of which HCPs will need more help before they**

- **The training department, in collaboration with clinical stakeholders, is responsible for facilitating a standard that will determine quality patient care.**
- **What is acceptable performance that makes the HCP ready for work, what is below par that will require follow-up coaching?**

Proving that Training Matters

- **The stages of measurement from Level 1 to Level 3 are an important opportunity to impact the organization—from patient to HCP to organization—in a meaningful way.**

- **L&D can create a safe and respectful learning experience that continues well into application on the floor.**

- **More importantly, the data collected in a Level 3 evaluation is the baseline for the Level 4 evaluation of how well training met the targeted organizational goals.**

"**Measurement may seem like the end of the process but beginning with the end in mind is an approach that pays off".**
Measuring what your L&D function is doing now will pave the way for delivering effective and accountable training in the future.
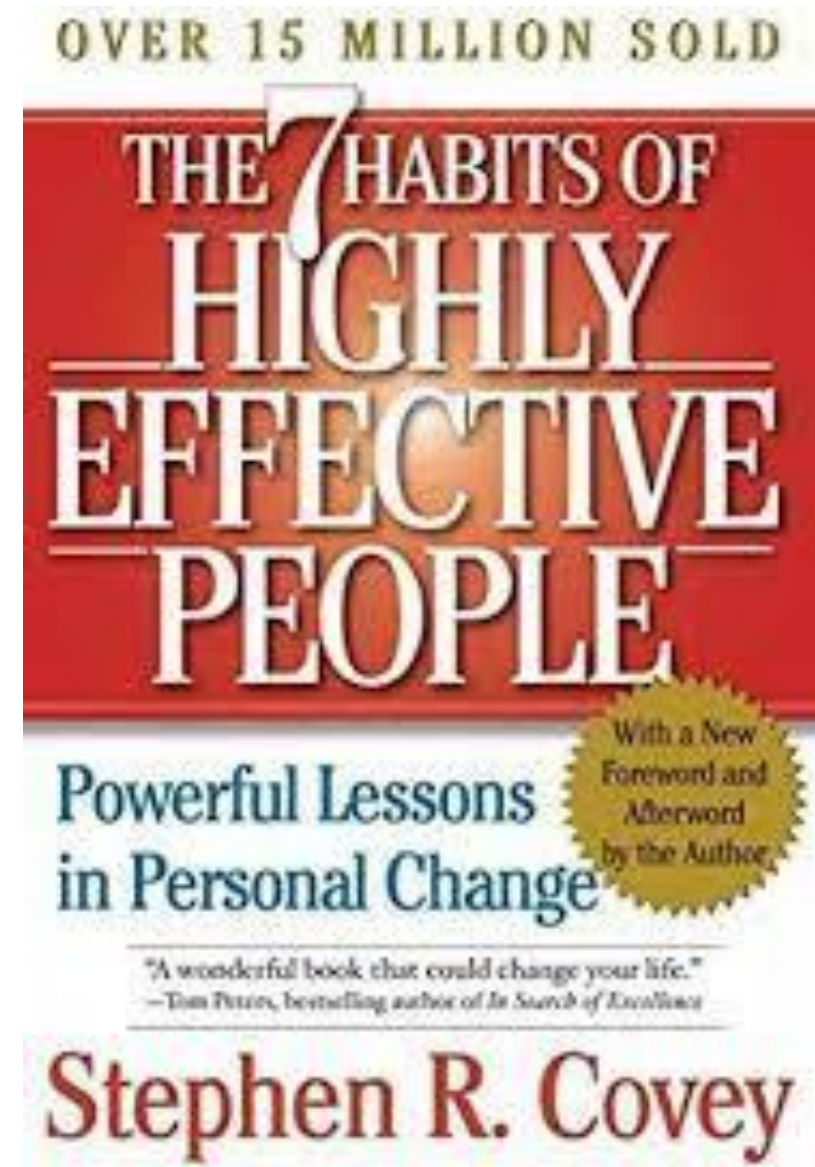
Measuring training effectiveness: "The Why"

- **The goal of training is to help a learner improve their competence, capacity, and performance.**

- **Training helps learners gain new knowledge and skill. The most effective training also helps learners apply this information to their workplace, a process known as "learning transfer".**

- **Training effectiveness refers to how well your training supports learning and learning transfer. There are many ways to evaluate training effectiveness.**

What to Evaluate "the what"

- You should assess both learning and learning transfer, whenever possible.

- Evaluate Learning

- Design your evaluation to assess how successfully the learner met the training's learning objectives.

- Look at the combined results for all learners to help you understand their learning and identify data trends that indicate challenging topics for your learners—which might show a need to improve course content or instruction.

Evaluate Learning Transfer
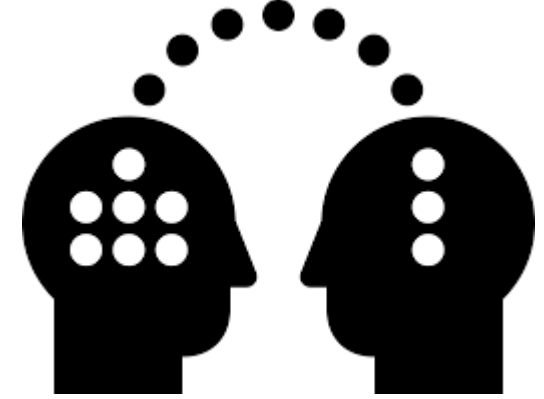
- **Design your evaluation to assess how successfully the learner can apply what they learned when they return to the workplace.**

- **Look at the combined results for all learners to help you understand if learning transfer is occurring and which topics are challenging for learners to apply—which might show a need for follow up support for the learners.**

When to Evaluate Training Effectiveness "the when"

- **Before and After Training**
- **Conduct a pretest before and a posttest and then compare the results.**
- **Using only a posttest, without a pretest, can provide an assessment of skill or knowledge proficiency, but you will not know if there was a change in learning. Learners might have already had the knowledge or skill at the start of the training.**
- **If you are unable to assess learning through a pretest and posttest, consider using a retrospective pre/post assessment.**

During Training

- Build knowledge or skill assessment into the training, like knowledge checks, quizzes or observations. This can provide evaluation data and reinforce learning at the same time.

- You might ask your learners questions to assess their comprehension or use an activity to gauge how they apply what they are learning. This provides real-time information for the instructor to reinforce content or adapt as needed.

Immediately After Training

- In many situations, you might only be able to gather information from your learners immediately after the training ends. You can design your post course evaluation to assess learning and predict learning transfer immediately after the course ends, while learners are available to respond.

- Post course evaluations traditionally focus on learner satisfaction, but the research shows learner satisfaction does not determine a training's effectiveness..

Delayed Evaluation or Follow-up

- Delayed evaluation (follow-up evaluation) is the best way to assess learning transfer. This helps training developers understand how much information learners retained, and if they have applied what they learned on the job.

- You can follow-up with learners to assess learning transfer after they have had time to go back to their workplace and apply what they have learned.

- It might also be helpful to follow-up with learners' supervisors.

- The timing of your delayed evaluation should be based on your program resources, the specific topic of the training, and learners' capacity to apply what they learned in the workplace.

Date: _____

Title and location of training: _____

Trainer: _____

Instructions: Please indicate your level of agreement with the statements listed below in #1-11.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The objectives of the training were clearly defined.	O	O	O	O	O
2. Participation and interaction were encouraged.	O	O	O	O	O
3. The topics covered were relevant to me.	O	O	O	O	O
4. The content was organized and easy to follow.	O	O	O	O	O
5. The materials distributed were helpful.	O	O	O	O	O
6. This training experience will be useful in my work.	O	O	O	O	O
7. The trainer was knowledgeable about the training topics.	O	O	O	O	O
8. The trainer was well prepared.	O	O	O	O	O
9. The training objectives were met.	O	O	O	O	O
10. The time allotted for the training was sufficient.	O	O	O	O	O
11. The meeting room and facilities were adequate and comfortable.	O	O	O	O	O

12. What did you like most about this training?

13. What aspects of the training could be improved?

14. How do you hope to change your practice as a result of this training?

15. What additional adult ESL trainings would you like to have in the future?

16. Please share other comments or expand on previous responses here:

Thank you for your feedback!

Take home message

You are evaluating the "learning" not the "learner"

- https://www.cdc.gov/training/development/pdfs/evaluate/effectiveness-questions-508.pdf#page=7
- https://www.cdc.gov/training/development/pdfs/evaluate/predictors-508.pdf

THANK YOU!