Eleven Common-Sense Learning Principles

By David C. Forman

Lessons from experience, sages, and each other.

s learning becomes increasingly central to our work and lives, an array of templates, methods, blends, objects, and knowledge repositories have been created to facilitate wider distribution of information. That's useful and inevitable, but is that all learning should be? Remember when learning was enjoyable as well as relevant? Current training seems to have moved away from essential, tried-and-true, practical principles of learning that have endured for centuries. These principles are derived from our own learning experiences as children and adults, as well as from clinical research and learning theory. They're from memorable times when the message took and learning was exciting and meaningful. We remember the elements to this day. The common-sense lessons are part of life's wisdom and shouldn't be lost.

Training has industrialized learning, with an emphasis on courses and knowledge chunks that can be distributed through classroom and electronic delivery. Templates, standards, and content repositories enable mass dissemination efficiently. This type of engineered learning can be antiseptic, almost alien, from what we do, who we are, and what we know works.

Common sense is a powerful force. It provides a

Early in my life, my mentor explained to me the three paths that lead to the creation of knowledge: The analytical path, where philosophers reflect, meditate, and make sense of objects and events; the empirical path, where scientists manipulate variables and conduct controlled experiments to validate reliable principles; and the pragmatic path, where practitioners struggle with real-world challenges and come up with strategies for effective and efficient performance.

Training games guru Sivasailam"Thiagi" Thiagarajan

framework for the way things ought to be. It's practical wisdom. In educational measurement terms, it is face validity. It's certainly true that one person's common sense might not be another's, but there's a shared collective wisdom or common sense that most people would recognize as valid. An emphasis on common sense doesn't detract from research or more structured forms of inquiry. That would be wrong and ignore the great contributions of researchers, scientists, and educators. It's also wrong and too easy to dismiss commonsense learning principles simply because they're not footnoted or the subject of formal study.

Here are 11 commonsense learning principles that

are often overlooked in many programs these days. They can be kept in the forefront of what we do as mentors, learners, teachers, parents, caregivers, and neighbors in everyday life as well as educational settings. They can be applied in formal learning and in the informal learning events that happen anywhere, anytime.

Principle 1: Tell stories

Long before schools were established, information was conveyed in conversations around the hearth, out in the field, or in the shop. These conversations passed along the skills, traditions, and understanding needed to be successful in the next task, job, or challenge. These conversations were of-

ten in the form of stories.

Storytelling is the original form of teaching. Stories can have drama, tension, memorable characters, and events in a real-life or fictional context. Stories have a beginning, middle, and end; they bring to life lessons and information that would otherwise be mundane and ordinary. We remember good stories, and the lessons endure.

In much classroom and self-paced training, there's little room for stories. The em-

phasis is on funneling as much information as possible, not on making the most important elements come to life and be remembered. It can be harder to tell stories now because we don't practice and appreciate that skill. It's much easier to just convey information.

as the wisest man in the world? Because he knew more stories than anyone else. Scratch the surface in a typical boardroom and we're all just cave people with briefcases, hungry for a wise person to tell us stories. Tools for Thought contributor Alan Kay

Why was Solomon recognized

Training Tip: The use of stories to foster discussion and interaction is especially productive in the beginning of a session, when it's important to establish common ground. Higher participation leads to greater commitment and less isolation, which increases retention.

Anyone who makes a distinction between games and education clearly does not know the first thing about either one.

Media critic

Marshall McLuhan

Current research in the areas of stress, anxiety, creativity, self-efficacy, and neuroscience shows that more play will improve our learning and performance. While "more work and less play" has been touted for a long time as the way to improve human performance, there is much evidence that such thinking is wrong.

Games expert

Marc Prensky

Principle 2: Play games

There's no reason games can't be an integral part of training. Games involve the learner and many senses, foster high-level thinking, reinforce the value of goals and rules, and show outcomes. Games, like stories, have a meaningful context and wholeness. They can be ideal teaching vehicles as people reflect on what they did in the game and why 🧌 "How to Speak Game" (Trends, June T+D).

Training Tip: It's not easy to create engaging, meaningful games either for classrooms or stand-alone training products. But there are excellent games and resources such as Marc Prensky, Thiagi, and Roger Schank. Still, it's important to develop or customize games for your audience's needs and learning requirements.

what we learn. Sometimes that approach is necessary and appropriate (it's best not to practice brain surgery on a living brain), but often a content-centered approach isn't necessary or appropriate. Further, it can cause the perception that training is little more than "chalk and talk" or "spray and pray."

Flip the traditional approach and begin with a problem, an issue, or an experiment. Immediately engaging learners motivates them to discover what they need to know more about. A problem-centered approach can be initiated by games, other activities, or a simple question. "Explore and experiment" has been recommended for decades, but actual application remains limited.

Training Tip: A problem-centered approach is particularly useful for building interactivity, motivation, and interestimportant but often missing elements in training. Because it's a less directive approach, it

From the very beginning of his education, the child should experience the joy of discovery. **English mathematician** and philosopher Alfred North Whitehead

> The art of teaching is the art of assisting discovery. Poet Mark Van Doren

You can talk and talk and talk, and the kids don't learn. It's that "wow" experience when you go out and do. America's 2002 All-Star Teacher Team member Fraser Randolph

People remember 10 percent of what they read, 30 percent of what they see, and 50 percent of what they hear and see.

Training Tenet

Principle 3: Explore and experiment

Do you remember times when you were exploring something new? It could've been hiking new ground, trying to fix your car, or baking bread for the first time. It was exhilarating, exhausting, challenging, frustrating, and maybe even scary. It defined what you needed to know so you could do it better next time.

These days, a prevailing way we learn is through instructional models that present the content before actually doing something. The structure of content and instructional design process frequently defines

can take more time and require different types of feedback and guidance. The problems presented should be challenging but not so sophisticated or difficult that learners become lost and confused.

Principle 4: Use pictures

A picture is worth 1000 words and probably a lot more. But often visuals are an afterthought in textheavy learning materials used to convey the core message. Visuals are usually an adornment. Centuries ago, pictures were the primary means for conveying information.

We know learning is enhanced when the message is presented through words and visuals with each channel reinforcing the other. We know there are visual

We do what our mentors teach us to do. Writer M.F.K. Fisher

learners who prefer to have information conveyed graphically. Common sense tells us that visuals can add meaning, a framework, and relevance to material. Flip the tradi-

tional instructional model and start with the visual, not the text. Try to represent each major concept or objective with a key visual, then develop the surrounding text. Show a visual outcome first, then teach backwards. Lead with strength.

Training Tip: It's important to recognize various types of visuals: fact, concept, process, procedure, relationship, visual outcome, topic organizer, and thematic. A visual must have meaning and purpose. A straight text presentation can be ineffective, but learning can also be impeded by irrelevant or competing visuals. Learners can become confused unless the visuals have a role, work together, and add value.

Principle 5: Have a coach

I've learned several practical lessons over the years, and few occurred in formal educational settings. Among these lessons are to look for unique value propositions in products and companies, try to distill a presentation into three to five salient points easy to remember, begin a course development project by creating a job aid, and always catch a ball with two hands. I was taught those lessons by coaches and mentors, I've found them valuable, and I've never forgotten them. They weren't learned in a class or course; they were passed along by people with experience, wisdom, and dedication. The lessons were made personal, relevant, and part of an ongoing dialogue related to personal development and apprenticeship in professional tasks.

Many current training systems seem to have forgotten the long-standing, almost revered role mentors have had in learning. When we don't seek mentors, we miss tremendous learning opportunities. One of the fastest growing areas in leadership development is the role of an executive coach, so there is a return in some disciplines and companies to the practical common-sense understanding that mentors matter, are enriching, and add value.

Training Tip: It's important for learners to recognize the value coaches provide through different stages, projects, and occupations. We can design systems and courses that include provisions for personal dialogue and discussions with experts and mentors over a continuing time period. Technology can be used to help facilitate mentoring. Seek a coach and be one yourself. Learning is incomplete without one.

Principle 6: Learn with others

Many studies show that people learn most about how to do their jobs in informal learning situations. That says learning is a social activity. It implies learning devoid of personal contact is limiting and that self-paced training can breed a lonely long-distance learner unless such systems add people back into the equation. It says learners learn most from each other.

No one is suggesting formal courses be eliminated. The implication is that the informal, hu-

man context around formal training is a rich learning

experience. The interaction among peers is where

Don Norman of the **Nielsen Norman Group and** Northwestern University

I think peer interaction

Having students work in

is where you learn.

groups is essential.

The course is not just

the material that we

present to them.

None of us is as smart as all of us.

Baseball Hall of Famer Satchel Paige

ideas are discussed, reality is checked, and lessons are applied and adapted.

Training Tip: Classrooms and campuses are conducive

to human interaction and informal learning opportunities; that's a primary reason for their enduring success. Effective and creative uses of technology can also bring a spirit of community to distance learners. At the Watercooler of Learning author David Grebow advises:

"We need to use technology to facilitate the informal as well formal transfer of knowledge by including expert locators, email connections with instructors, real-time Internet meeting places, virtual learning support groups, instant messaging, expert networks, personal e-learning portals, moderated chats, and more. We need to create the 100 percent learning solution, in which the proscribed formal learning events and the serendipitous learning moments are given equal value."

Principle 7: Focus on what

Many training courses opt for complete coverage instead of making the tough decision on what's really important to know. It's easy to develop programs that try to teach everything; it's hard to make choices and prioritize to focus only on what's important, relevant, and meaningful. Courses are often an inch deep and a mile long, presenting more information than can be comprehended.

Humans' short-term memory is much like a computer's RAM: It can process only so much information at any one time. Generally, short-term memory can process about seven ideas (plus or minus one) ef-

At harvest time, separate the wheat from the chaff.

Anonymous

fectively. More information tends to lead to overload and confusion. That personal bandwidth limitation is why it's necessary to not teach everything. Select a limited

number of the most important concepts, and teach those in depth and effectively.

Training Tip: The 80/20 rule proposes that 80 percent of what you do in a software application, for example, is accomplished with only 20 percent of its features. The essence of the 80/20 rule is that you can do a lot with a little. Performance is determined largely by a relatively few activities, lessons, or skills. The art of the 80/20 rule is in identifying the core 20 percent that drives the 80 percent.

Principle 8: Take recess

Learning takes time. The movement from "data to information to knowledge to wisdom" (as proposed by Davis) requires time to think, question, percolate, apply, and test. Because training has focused on fact acquisition, there's an emphasis on faster delivery of more

and more facts. Consequently, a relentless barrage of facts and figures has been conveyed in our courses, with little assimilation or retention. When people aren't in formal classes is when they're probably learning the most. That time not on task is when knowledge settles and understanding starts to emerge. Using other parts of our minds and bodies, as we do in recess, often unlocks the brain to let in learning. How many times have insights come

Real learning is the state of being able to adopt and adapt what you know and can do under a varying set of informal circumstances.

At the Watercooler of Learning author David Grebow

while taking a run or trodding the treadmill?

Understanding can't be rushed, crammed, delivered immediately, or accessed by a clicker. Aha! moments aren't manufactured or created on demand; they evolve and emerge within the interaction of information, ideas, time, and the situation.

Training Tip: Structure key learning activities over time. Let learners have days or weeks to adopt and adapt what they've learned. Let them test it against different contexts, people, and events. Enable them to refine and shape their ideas over time and with more experience.

Principle 9: Have lunch

Recess is good, lunch is better. Lunch can involve all of the senses and be a time when friends get together and share conversation and laughter. It's a time to nourish the body, refresh the mind, connect with others, and learn.

For 18th- and 19th-century farming families, the main meal was lunch although it was called dinner. It signaled a break from the fields and provided an opportunity to refuel for the afternoon's work. Those gatherings provided more than just nourishment; they helped convey information, expecta-

tions, traditions, and values.

Dining is and always was a great artistic opportunity. **Architect Frank Lloyd Wright**

Learning thrives when nurtured and encouraged; it can whither without attention, sustenance, and support. It doesn't occur in a

vacuum or an antiseptic, controlled environment. It often occurs outside of classrooms in real-life settings with an ever-changing mix of people, ideas, debate, challenges, senses, and support—like sharing a meal with friends or family.

Training Tip: Be interested in fostering learning in casual and informal settings. That doesn't mean monopolize dinner or social conversations with homework reports. It's best to talk about ideas and ask questions, not discuss school schedules or training activities. Good questions are often more valuable than good answers in these types of conversations.

Principle 10: Be passionate

Have you ever listened to someone who was so involved and invested in delivering his or her message that the speaker was animated, the voice rose, the intense vision permeated the room, and she or he was visibly exhausted when finished? Politicians and actors do that routinely, but it's rare to see such passion in learning. When it happens, it can be magical.

Learning is heightened by the senses and emotions. Many training programs try to isolate knowledge and discard affective and psychomotor factors, but life doesn't work that way. All of those domains work together. The higher the emotional component and passion are, the greater the retention of knowledge and skills. Perhaps a key reason for low learning retention is because knowledge does becomes isolat-

ed from affective and psychomotor elements, devoid of context and adrift, and therefore difficult to remember.

Education is not the filling of the pail, but the lighting of a fire.

Poet William Butler Yeats

All learning can't be wildly exciting. It's hard to be passionate

about sentence construction, geometric principles, and the like. But passion can be directed at why those foundations are important to know and how they can be used to solve problems or improve performance. Passion can have a direct bearing on a person's motivation to learn. When people are motivated to learn, they not only learn the material, they retain it better.

Training Tip: WIIFM (what's in it for me?) is important. Training programs are often created with little understanding of how they will benefit the learners, or the benefits aren't well communicated. It's hard to be passionate about something that doesn't seem connected to what you do, who you are, or what you want to become. If the WIIFM is clear and conveyed with passion and meaning, it's easier to devote oneself to learning.

This is the most important lesson. Learning is more important than ever. Knowledge is being created and made obsolete faster. There's a great deal to learn and unlearn to stay informed. Continuing to learn is a state of mind and a skill fueled by a belief that there's more to know and fanned by a passion for ideas, improvement, growth, and personal and professional development. A key metric is time to competency. Given the compressed shelf-life of products, markets, and knowledge, the ability to become knowledgeable and skilled quickly in changing conditions is a major comIn a time of drastic change, it is the learners who inherit the future. The learned usually find themselves equipped to live in a world that no longer exists.

American social philosopher **Eric Hoffer**

Anyone who stops learning is old, whether at 20 or 80. **Automaker Henry Ford**

petitive advantage. The quicker you can learn about a new product, procedure, process, or initiative, the more valuable you are to the enterprise.

Training Tip: A necessary skill for continuous learning is the ability to digest and synthesize a large amount of information into meaningful lessons. Without that skill, we're overcome by the flood of information. The Web is a perfect example of the power and preponderance of information. Activities can expose learners to

the vast resources of the Web but should also guide them to analyze, synthesize, and make choices from that rich repository. That's a life skill that fosters continuous learning for personal and professional improvement.

Those common-sense learning principles aren't new; they exist in our consciousness and have played an important role in our lives for many years. We know they work. But they're often absent when the emphasis is on expediency, delivery platforms, and granular learning objects. It's easy to overlook familiar and common-sense learning principles when they don't neatly fit the present learning mold. But it is possible to develop enjoyable and challenging learning solutions that involve participants, mentors, and the best ideas tested over time and that use our full mental, physical, and emotional resources, recognize the value of informal as well as formal learning, and lead to continuous learning. TD

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