Incremental Learning Thinking

Idea In Short

Many leaders admire dramatic transformation and overlook the quieter route to mastery, which is a long run of small, well-chosen improvements. Incremental learning thinking holds that competence grows when people build on what they already know, work on one narrow weakness at a time, and check each step before moving to the next. Research on deliberate practice gave this idea its strongest evidence and also its sharpest critics. This article explains how step-by-step learning works, what the research does and does not show, how managers can structure it for teams, and when a gradual path stops being enough to meet the demands of a changing market.

A junior analyst wants to become a strong presenter. She could sign up for a weekend course and hope for transformation. Instead, she picks one narrow habit for a week, such as opening with the conclusion. The next week, she works on slide density. Then she focuses on pacing, then on handling questions. After six months, nobody can name the day she improved, yet everyone sees that she did.

What incremental learning is

Incremental learning treats skill as a structure that grows by addition. Each new piece rests on earlier ones, so order matters. A person who masters basic data cleaning can move to modeling, and a person who skips the first step struggles at the second.

The approach pairs naturally with deliberate practice, a concept associated with K. Anders Ericsson. A note on his framework cites Ericsson and Pool as saying that deliberate practice nearly always involves building or modifying previously acquired skills by focusing on particular aspects and working to improve them, and that this step-by-step improvement eventually leads to expert performance.1

The language here deserves attention. The unit of work is a particular aspect of a skill and

not the whole skill. Narrow targets make errors visible and allow quick correction.

The research behind it

Ericsson, Krampe, and Tesch-Römer published their influential paper on deliberate practice in 1993. The original work studied musicians. A later paper by Ericsson and Harwell points out that the 1993 paper defined deliberate practice as individualized solitary practice in classical instrumental music directed by a qualified teacher.2

That origin explains the features that matter for managers: a clear goal, expert guidance, and a focus on weaknesses. Casual repetition of tasks you already do well does not qualify.

Quality counts as much as quantity

A popular reading of the research says that ten thousand hours produce mastery. A business magazine account of Ericsson's response says that the original study of violinists at a Berlin academy showed ten thousand hours as the average practiced by age twenty, and that the crucial difference was whether the practice was deliberate.3

A research overview from a publisher of educational reference works reaches a similar point. It states that scientific research has shown that the quality of a person's practice plays as important a role in mastery as the quantity.4

For a manager, this means that adding training hours without redesigning the practice does little. The question to ask is what each hour targets and how quickly the person learns whether it worked.

Critics and a fuller picture

Not everyone accepts the strongest claims. A review from Purdue's skill learning lab asks whether the deliberate practice view is defensible, and it calls for a multifactorial perspective on expertise, in which practice works alongside talent, individual differences, and other factors.5

Both camps agree on a useful point. Practice matters a great deal, and the way people practice shapes results. They disagree about how much of the difference between people

practice explains.

Leaders can hold both ideas. Structured, step-by-step practice improves most people. It does not erase every difference, and it does not guarantee a place at the top of a field.

Designing a step

A good step has four features. It is narrow, so you know what you are trying to change. It sits a little beyond current ability, so it requires effort. It includes a clear measure, such as time, error count, or a rating from a coach. And it ends with feedback soon after the attempt.

Consider how a sales manager might design a step for discovery calls. The goal is to ask three open questions in the first five minutes. The measure is a count from a recorded call. The feedback comes from a peer who listens to the recording the same day.

Sequence the steps so that each one prepares the next. Early steps cover foundations, such as listening and structure. Later steps cover judgment, such as when to break the script.

Starting from what people already know

Incremental learning works best when each step connects to something familiar. A new concept lands more easily when the learner can attach it to an idea already in place, such as a known process, a past project, or a rule of thumb. Teachers and managers can help by opening each step with a short question about what the learner already knows.

This habit also exposes gaps early. If someone cannot explain the earlier step, the next one will fail, and it is cheaper to repair the base than to rebuild the structure later. Short diagnostic checks, such as a two-minute explanation or a small exercise, reveal where the chain is weak.

Over time, the learner develops a map of the skill. The map shows which steps are secure, which are shaky, and which come next, and it gives the learner a sense of control over the process.

Building rhythm in teams

Teams benefit from a shared cycle. Pick one skill per month, define the steps, practice in short sessions, and review at the end. Keep sessions brief and frequent, because small doses fit into busy weeks and keep memory fresh.

Make progress visible. A simple chart of the measure, shared in the team room, shows movement that people might otherwise miss. Visible progress also builds motivation, since people see that effort pays off.

Pair learners with coaches or peers who can spot errors. A fresh pair of eyes catches habits that the learner cannot see. Rotate the roles so that everyone both gives and receives feedback.

When small steps stall

Plateaus occur. Skill growth often slows after early gains, and people may think they have reached a limit. A plateau is a signal to change the practice, not to stop. Try a new target, a harder variation, or a different coach.

Local optimization is another risk. A team can polish a process until it is excellent, and still miss that the process no longer fits the market. Incremental learning improves a path. It does not question whether the path is right.

For that reason, pair step-by-step learning with periodic review of the larger direction. Ask whether the skills you are building match the problems you expect to face in two years.

A hypothetical example

Imagine a hypothetical customer support team that struggles with escalations. The team lead breaks the skill of de-escalation into five steps: greeting tone, restating the issue, offering one option, confirming the next step, and closing the call. Each week, agents practice one step on recorded calls and receive a short note from a peer.

After two months, escalation rates fall and agents report more confidence. Nobody attended a long workshop, and nobody can point to a single breakthrough. The example is invented, yet it shows how narrow targets, fast feedback, and steady rhythm can build a skill without drama.

Cautions

Do not assume that every skill suits small steps. Some tasks, such as redesigning a business model, require a conceptual shift that no sequence of tweaks will produce.

Avoid turning practice into measurement theater. If people feel watched and graded, they may hide weaknesses and practice only what they already do well. Keep the tone supportive, and treat errors as information.

Finally, keep claims modest. The research supports the value of structured practice, and it does not promise equal results for everyone. Track what happens in your setting, and adjust the steps as you learn. Share the results with colleagues, because other teams can reuse your sequence and save months of trial and error.

- 1Deliberate practice
- 2Deliberate practice and proposed limits on the effects of practice on the acquisition of expert performance
- 3How to use deliberate practice in business
- 4Practice (learning method)
- 5Is the deliberate practice view defensible?

Summary

Incremental learning thinking builds competence through a chain of small, targeted improvements that rest on earlier skills. The research on deliberate practice suggests that quality of practice matters as much as hours, and critics remind us that talent, opportunity, and context also count. Managers can help by breaking skills into steps, setting narrow goals, and giving fast feedback. Choose one skill your team needs, divide it into five practice steps, and schedule short sessions over the next six weeks. At the end of each week, record what improved, what did not, and what the next step should be, then adjust the plan.