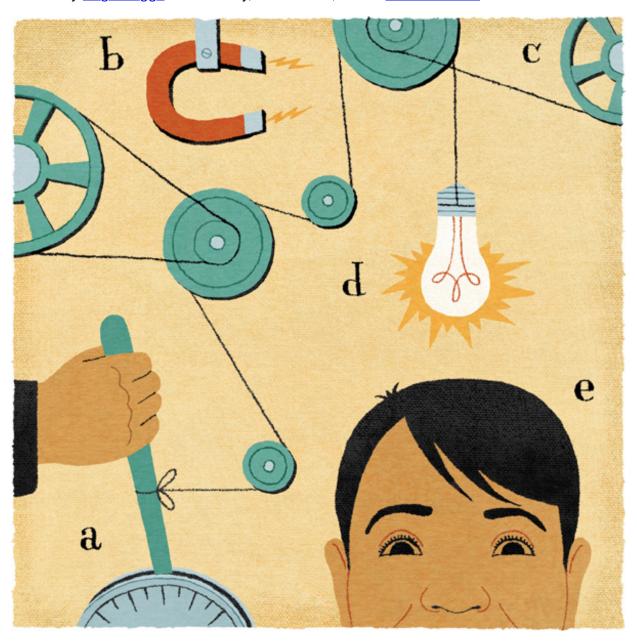
25 Things Skilled Learners Do Differently - InformED

25 Things Skilled Learners Do Differently

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magine for a moment that all human beings had the same IQ, but that some of us knew how to tap into it better than others. How would we approach education differently?

For starters, we wouldn't have to concern ourselves nearly as much with boosting students' academic confidence. If a student knows she has the same capacity to succeed as her fellow learners, then she'll be less likely to give up or drop out. In a similar vein, students would view test scores not as measures of self worth, but as evaluations of a chosen learning strategy. When Johnny sees that, despite his best efforts, he scored twenty points lower on the biology exam than Sally, he thinks, "I'm approaching this the wrong way" rather than, "She's smarter than me." And he then goes on to improve his memorization technique or ask more questions during the next unit.

The thing is, this "imagined" scenario isn't far from reality. Human intelligence isn't all that variable. For example, on the IQ scale, about 2 out of 3 scores fall between 85 and 115, and about 19 out of 20 scores fall between 70 and 130. Put another way, only 1 out of 20 scores differs from the average IQ (100) by more than 30 points.

What does vary–and widely, at that–are <u>learning strategies</u>. Many of us approach a concept with the same potential to learn it, but it only ends up sticking for some of us. Why is this?

Psychology offers several explanations. For instance, we know that the brain responds better to spaced practice than it does to cramming (at least in the long term), forced recall instead of review (quizzing yourself rather than re-reading material), and associative rather than isolated memorization (e.g. mneumonics).

We also know that people who think about their own learning, make a habit of asking questions, use what they've learned, teach what they've learned to others, and enjoy the learning process on an intrinsic level all become better learners.

The good news is, these are all strategies and habits that can be adopted through practice. Why some of us master them earlier than others is another topic, one that may have something to do with parenting, environment, and even genetics. But the point is, we're all capable. The smartest, most successful people in the world wouldn't be where they are today if they weren't skilled learners. So let's examine which strategies we should be perfecting and how they can serve us in the long run.

What Do Skilled Learners Do Differently?

1. Skilled learners think about their own learning.

Thinking about your own learning, or "<u>meta learning</u>," was originally described by Donald B. Maudsley (1979) as "the process by which learners become aware of and increasingly in control of habits of perception, inquiry, learning, and growth that they have internalized." A student who has a high level of meta learning awareness is able to assess the effectiveness of her learning approach and regulate it according to the demands of the learning task. On the flip side, a student who is low in meta learning awareness will not be able to reflect on her learning approach or the nature of the learning task set.

In consequence, she will be unable to adapt successfully when studying becomes more difficult and demanding.

2. Skilled learners ask more questions.

Researchers have found time and time again that students who ask more questions perform better academically. Daly et al. <u>found</u> "a significant and positive correlation between question-asking comfort and overall performance on cognitive tests," and Good <u>found</u> that low-achieving students ask fewer questions than high-achieving students in middle and secondary education settings.

"When students know how to ask their own questions, they take greater ownership of their learning, deepen comprehension, and make new connections and discoveries on their own," write Dan Rothstein and Luz Santana for the Harvard Education Letter. "However, this skill is rarely, if ever, deliberately taught to students from kindergarten through high school. Typically, questions are seen as the province of teachers, who spend years figuring out how to craft questions and fine-tune them to stimulate students' curiosity or engage them more effectively.

We have found that teaching students to ask their own questions can accomplish these same goals while teaching a critical lifelong skill."

3. Skilled learners are process-oriented.

In *The Practicing Mind*, Thomas M. Sterner emphasizes the importance of focusing on the process instead of the product: "Keep yourself process-oriented. Stay in the present. Make the process the goal and use the overall goal as a rudder to steer you efforts. Be deliberate, have an intention about what you want to accomplish, and be aware of that intention. Doing these things will eliminate the judgments and emotions that come from a product-oriented or results-oriented mind." Learners who find more joy in the process of working toward their goals will have an easier time achieving those goals.

4. Skilled learners can often find their own way, without guidance.

Note that this isn't the same as not asking questions; we've already determined that skilled learners ask more questions. What it means is that, when you run into a difficult concept or find yourself confused about an assignment, your natural instinct is to try to solve the problem yourself. Self-dependent learners become skilled learners, in part, because they familiarize themselves with the process of thinking critically and overcoming the fear of making mistakes.

They take creative license when they feel it's appropriate, decide what's important and what can be left out, and trust that they can identify the best plan of action themselves.

5. Skilled learners always keep the big picture in mind.

This one is pretty important, if only because it separates skilled learners from ineffective

learners quite frequently. The "big picture" can mean several things in terms of what you're learning: the wider context surrounding a historical event, the thematic aim of a passage of literature, the consequences of combining various chemicals in science lab. But it can also mean several things in terms of why and how you're learning: why this material is important to learn, what you can gain from it that may not be immediately obvious, whether or not your current approach is effective.

Being able to visualize how the details fit into the bigger picture, and how one picture relates to another, is an enormous learning advantage.

6. Skilled learners frequently try new things.

Trying new things keeps the brain sharp. But it also expands your ability to learn new things while rewarding you with a new skill or piece of knowledge. The variety of *ways* in which we learn is just as important as the learning itself. So go out and try a new dish, play a new game, change your exercise routine, memorize the Middle Eastern capitals, create and share a new recipe. The more different it is from what you're normally exposed to, the better. And though you may not realize it, the process will teach you as much as the product.

7. Skilled learners make mistakes work for them, not against them.

Some of us are better at learning from our mistakes than others. Denial certainly comes into play, as most of us don't like to admit we were wrong. Sometimes we're so wrapped up in correcting our mistakes that we forget to write a mental note, "Don't make that mistake again!" and find ourselves repeating it. Other times we don't realize what we've done wrong, such as on a difficult assignment or exam.

Skilled learners make a point of <u>viewing mistakes as opportunities</u>: they ask themselves, "What is my mistake and why did I make it?" and "What can I do to prevent this mistake in the future?" Try it for yourself. You'll notice the difference.

8. Skilled learners are interested in improving their memory.

Memory and learning are inextricably intertwined. You can't have one without the other. On a neurobiological level, they are nearly indistinguishable from each other—when does one end and the other begin? In daily life, learning depends heavily on memory. Have you really learned something if you can't remember it? Skilled learners either have strong memories already, or they're interested in improving. The good news is, there are countless exercises and puzzles you can do to casually improve your working memory capacity.

No joke, it's just as important a part of learning (and intelligence) as anything else, including environment, genetics, motivation, and talent.

9. Skilled learners keep learning.

A 2004 *Nature* article reported that people who learned how to juggle increased the amount of grey matter in their occipital lobes, the area of the brain associated with visual memory.

When these individuals stopped practising their new skill, this grey matter vanished. Similarly, if you're learning a new language, it is important to keep practising the language in order to maintain the gains you have achieved.

This "use-it-or-lose-it" phenomenon involves a brain process known as "pruning." Certain pathways in the brain are maintained, while other are eliminated. This speaks pretty loudly on the importance of retaining skill through practice. Even a short refresher now and then makes a difference. This is why lifelong learning is so crucial.

10. Skilled learners process the same concept in multiple ways.

According to Judy Willis, "The more regions of the brain that store data about a subject, the more interconnection there is. This redundancy means students will have more opportunities to pull up all of those related bits of data from their multiple storage areas in response to a single cue. This cross-referencing of data means we have learned, rather than just memorized." So read, watch videos, discuss topics with others—any variety of methods you can come up with—the more, the better!

11. Skilled learners teach others.

For thousands of years, people have known that the best way to understand a concept is to explain it to someone else. "While we teach, we learn," said the Roman philosopher Seneca. Modern researchers have found that students enlisted to tutor others work harder to understand the material, recall it more accurately and apply it more effectively. In a phenomenon that scientists have dubbed "the protege effect," student teachers score higher on tests than pupils who are learning only for their own sake.

But that's not all. "Above all, it's the emotions elicited by teaching that make it such a powerful vehicle for learning," says psychologist Annie Murphy Paul. "Student tutors feel chagrin when their virtual pupils fail; when the characters succeed, they feel what one expert calls by the Yiddish term *nachas*. Don't know that word? I had to learn it myself: 'Pride and satisfaction that is derived from someone else's accomplishment.'"

12. Skilled learners use previous learning to promote new learning.

When they learn something new, skilled learners connect it to what they already know. This helps solidify the new piece of information into their memory, and aids understanding. On the flip side, skilled learners are able to identify what they don't know about a subject in order to pursue that knowledge.

13. Skilled learners can turn knowledge into competence.

Even if we can recall it, knowledge doesn't do us much good lying stagnant in our brains. Skilled learners try to use what they've learned on a regular basis, whether in conversation, writing, physical practice, or product creation. They know how to use knowledge to their advantage, transforming concepts and facts into expressions of personal competence.

14. Skilled learners look up answers rather than struggle to remember.

One study found that the longer you spend trying to remember the answer, the more likely you will be to forget the answer again in the future. Why? Because these attempts to recall previously learned information actually results in learning the "error state" instead of the correct response. However, if you can recall the information without much trouble, it's a better way of preparing for a test than simply re-reading the course material.

15. Skilled learners are good observers.

Being a good observer doesn't just mean noticing the details; it means being able to distinguish between relevant and irrelevant details. Skilled learners can pick up on the things that are most useful to them and filter out the rest, whether they are reading a text or listening to a lecture.

16. Skilled learners use testing to boost their own learning.

Frequent testing <u>results in stronger academic performance</u>. In fact, numerous studies have shown that testing can be more effective than simply studying. In one study, for instance, students who studied and were then tested had better long-term recall of the materials, even on information that was not covered by the tests. Skilled learners quiz themselves on new *and* old material regularly in order to solidify it into their long term memory store.

Even if their instructors only administer a handful of exams per term, skilled learners are always in testing mode.

17. Skilled learners cultivate curiosity.

How do you <u>cultivate curiosity</u>, exactly? By asking questions, not taking things at face value, pursuing things you're genuinely interested in, and not assuming you know all the answers. Skilled learners do all these things, and it pays off.

18. Skilled learners work to understand.

If you're in the habit of thinking about your own learning, you will have likely experienced a moment when you knew you didn't fully understand a concept but moved forward anyway. Sometimes concepts like these become clear with a little more reading, but sometimes they don't. Skilled learners tackle the unknown with ferocity and don't rest until they've addressed their own confusion.

19. Skilled learners know how to live with uncertainty.

This might seem slightly contradictory to the last point at first, but it's not. Skilled learners realize the difference between questions with one right answer and questions with no right answer. Each type of question has its own value. F. Scott Fitzgerald once wrote, "The test of a first rate intelligence is the ability to hold two opposed ideas in the mind at the same time,

and still retain the ability to function."

20. Skilled learners make knowledge their own.

This is about making the new knowledge fit with what the learner already knows, not making it mean whatever the learner wants. Good learners change their knowledge structures in order to accommodate what they are learning. They use the new knowledge to tear down what's poorly constructed, to finish what's only partially built, and to create new additions.

In the process, they build a bigger and better knowledge structure. It's not enough to just take in new knowledge. It has to make sense, to connect in meaningful ways with what the learner already knows.

21. Skilled learners appreciate different perspectives.

It's difficult to be a skilled learner if you can't be open to views that are different from your own. Being open doesn't mean agreeing; it simply means being willing to learn for the sake of knowing more about the world you live in.

22. Skilled learners share what they've learned.

Whatever your chosen medium, if you make a habit of sharing what you've learned, you will get more out of the learning process. Sharing requires an awareness of an audience, maybe even a different perspective from yours, and therefore forces you to think about what you've learned in a way that is useful to others. In this way, sharing enriches your own learning experience.

23. Skilled learners can explain what they know in ways that make sense to others.

Again, skilled learners think about what they've learned in terms of how others might interpret it. It's also a good habit to try explaining what you've learned to others to test your own understanding of a concept.

24. Skilled learners have clear objectives.

We all enjoy flitting from topic to topic, indulging in whatever information strikes our fancy, and it's true that this can be a healthy and fulfilling way to learn. But skilled learners also have an agenda, and the goal of that agenda, more often than not, is mastery. Mastery of any subject requires dedication, patience, and clear objectives.

25. Skilled learners gather information from a variety of sources.

Where do you get your information from? If it all comes from one source, you may want to reconsider your strategy. Skilled learners make a conscious effort to consult a variety of sources. This helps ward off bias and builds a fuller perspective.



About <u>Saga Briggs</u>

Saga has taught and tutored writing at the elementary, secondary, and post-secondary levels. Her educational interests include psychology, creativity, and system reform. She earned a B.A. in Creative Writing from Oberlin College and lives in Portland, Oregon, USA.

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