**INSIDE OUT PODCAST**

**NEW SERIES: THE SCIENCE BEHIND SUCCESS**

**EPISODE 2: THE LEARNING CURVE**

Welcome to episode 2 of my new series “the science behind success.” For this episode, I decided to dig into learning curves. How’s that for an unusual but hopefully interesting topic. I know that I’ve experienced all kinds of learning curves: going to college and moving away from home, going into the military and traveling to other countries, my first real job and my first job as a manager and my first job as an executive director – I had a learning curve in every one of these. At the time of each of these, I knew I was going through a learning curve, but I never really thought much about it. Plus, I never knew that there were things I could have done to make them easier. So today I’m going to talk about the science of learning curves.

Let’s begin with a clear definition of a learning curve. According to the Professional Leadership Institute, the learning curve is the visual representation of the relationship between an individual’s proficiency in a task and their experience performing the task. In other words, a learning curve is a graph of how proficiency increases with experience. Proficiency (measured on the vertical axis) usually increases with increased experience (the horizontal axis), that is to say, the more someone, groups, companies or industries perform a task, the better their performance at the task.

The theory behind the learning curve is that individuals require time to become proficient at something new. For a business, this means that investment needs to be made in order to obtain a certain output. Over time, an individual will learn and become more efficient at that task. This means that the individual’s productivity increases. At this point, the outputs should surpass the investments made by the business. Believe it or not, there are actually 4 types of learning curves:

1. **Diminishing returns learning curve** – this curve is typically used to illustrate tasks that are quick to learn and early to plateau. These tend to be manual tasks, like installing the components to a product.
2. **Increasing returns learning curve** – this curve typically signifies tasks that are difficult to learn at first but then the rate of returns become significant.
3. **S-curve** – the S curve is also sometimes known as the increasing – decreasing return curve. It represents a task that may be difficult for an individual to learn initially. Once the individual becomes proficient, they will begin to plateau.
4. **Complex learning curve** – it is believed that the complex learning curve is simply the learning curve observed over a longer period of time. In this curve, the individual may experience a temporary belief of mastery, only to uncover that they actually have even more to learn.

I never really knew that there are 4 types of learning curves, but now that I think I’ve experienced all 4. Doing a podcast as an example is probably a diminishing returns learning curve. I learned the basics of podcasting pretty quickly and most likely have been on a plateau, even though I know I could do a whole lot better at this. Becoming the executive director of a VR agency was either the S-curve or a complex learning curve, because just when I thought I had the job mastered, my apple cart would be turned upside down and I felt like I was back at square one.

Here’s one other concept about learning curves – have you ever heard someone say, “that’s a steep learning curve,” in fact, you may have said it. The expression "steep learning curve" is used with opposite meanings. Most sources, including the [*Oxford Dictionary of English*](https://en.wikipedia.org/wiki/Oxford_Dictionary_of_English), the [*American Heritage Dictionary of the English Language*](https://en.wikipedia.org/wiki/American_Heritage_Dictionary_of_the_English_Language), and [*Merriam-Webster's Collegiate Dictionary*](https://en.wikipedia.org/wiki/Merriam-Webster%27s_Collegiate_Dictionary), define a learning curve as the rate at which skill is acquired, so a steep increase would mean a quick increment of skill.  However, the term is often used with the meaning of a difficult initial learning process. Most of us picture the learning curve as a hill to climb. (A steeper hill is initially hard, while a gentle slope is less strainful, though sometimes rather tedious. Accordingly, the shape of the curve (hill) may not indicate the total amount of [work](https://en.wikipedia.org/wiki/Work_(physics)) required. Instead, it may be better understood as a matter of preference related to ambition, personality and learning style.

A German psychologist, [Hermann Ebbinghaus](https://en.wikipedia.org/wiki/Hermann_Ebbinghaus) first described the learning curve in 1885 in the field of the psychology of learning, although the name “learning curve” did not come into use until 1903, when Bryan and Harter did a study of the acquisition of the telegraphic language and found a learning curve which had a rapid rise at the beginning followed by a period of slower learning. Later, psychologist Arthur Bills gave a more detailed description of learning curves in 1934 and also discussed the properties of different types of learning curves, such as negative acceleration, positive acceleration, and plateaus.

Because learning curve theory has actually been studied quite a bit, there are all kinds of applications of learning curve theory in business. These include being able to predict the breakeven point. In other words, when a business is investing in starting a new product, when does the learning curve of that product reach its breakeven point – when does the return on the company’s investment in the new product exceed the cost of the investment. Predicting a breakeven point for a business is a pretty straightforward application of the learning curve, but what about the learning curve of people in an organization? Well, there are some pros and cons to learning curves that are worth considering.

**The Pros of the learning curve theory:**

Using a learning curve can actually help an organization to improve the performance and productivity of its workforce and reduce costs. When used to track or predict performance, it can provide psychological motivation and strategic planning:

* Performance improvement cannot happen on its own and is connected with learning. By incorporating a learning culture within the organization where employees are encouraged and supported to keep learning, performance levels can be expected to increase on the curve.
* The rate of learning is also considered to be consistent enough that trends can be established using the learning curve, enabling better forecasting and strategic decisions.

**The Cons of the learning curve theory**

As a con, a learning curve is very dependent on assumptions made about performance. As we all know, many variables can impact learning and future performance:

* Using a learning curve to predict overall performance of larger groups or processes means that many assumptions are made on variables like motivation, sociological factors, workplace dynamics, training resources, and previous knowledge or experience.
* A learning curve that may not show expected results would need further analysis to determine the underlying variables impacting its shape, as the curve does not tell the whole story.

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So, what about the leadership learning curve?

According to Khalid Turk, MBA, in The Leadership Learning Curve,

the Leadership Learning Curve is a concept that refers to the process of acquiring the skills, knowledge, and experience needed to become an effective leader. This process involves several stages, each with its own set of challenges and opportunities.

* **The first stage of the Leadership Learning Curve is** **self-awareness**. Effective leaders must have a deep understanding of their own strengths, weaknesses, and values. This requires a willingness to reflect on one's own experiences, seek out feedback from others, and be open to constructive criticism. Without self-awareness, leaders are unable to build trust with their teams and make informed decisions.
* **The second stage of the Leadership Learning Curve is** **building relationships**. Effective leaders must be able to build and maintain strong relationships with their teams, peers, and stakeholders. This requires strong communication skills, empathy, and the ability to connect with others on a personal level. Leaders who are effective at building relationships are able to inspire and motivate their teams and create a culture of collaboration and trust.
* **The third stage of the Leadership Learning Curve is** **developing a vision and strategy**. Effective leaders must be able to articulate a clear vision for their organization and develop a strategy to achieve that vision. This requires strategic thinking, creativity, and the ability to anticipate and respond to changes in the market and industry. Leaders who are effective at developing a vision and strategy are able to create a sense of purpose and direction for their teams and inspire them to achieve their goals.
* **The fourth stage of the Leadership Learning Curve is** **executing on the vision and strategy.** Effective leaders must be able to execute on their vision and strategy and deliver results. This requires strong project management skills, the ability to prioritize and delegate tasks, and the ability to navigate complex challenges and obstacles. Leaders who are effective at executing on their vision and strategy are able to build credibility and trust with their teams and stakeholders and achieve their goals.
* **The final stage of the Leadership Learning Curve is continuous improvement.** Effective leaders must be committed to continuous learning and growth. This requires a willingness to seek out new challenges and opportunities, embrace failure as a learning opportunity, and stay up-to-date with the latest trends and technologies. Leaders who are committed to continuous improvement are able to stay ahead of the curve and create a culture of learning and innovation.

Mr. Turk goes on to say that navigating the leadership learning curve is not easy, but it is essential for success as a leader. It requires a willingness to embrace the challenges and failures that come with the journey and to learn from them. Effective leaders are those who are able to adapt and grow over time, and who approach leadership as a lifelong learning process. By doing so, they are able to create a positive impact in their organizations.

Being in charge is a stressful job, as even the most experienced managers will tell you. When managers are new to their positions, their learning curve compounds that stress. An effective transition to their new role that includes training and mentoring can be crucial to the success of rookie managers. Without it, they can falter, bringing their teams down with them. Here’s some interesting data from a nationwide 2023 survey by Harris Research of 2,066 employees that examined the performance of first-time managers. The results found that an inexperienced and unprepared new manager can have real business and human costs. For workers who had a negative experience with a poor manager:

* 41 % said they were stressed or anxious about reporting to work.
* 34 % wanted to leave the organization.
* 31 % wanted to change managers by changing jobs or teams within their organization.
* 31 % lost confidence in their organization overall.

Let’s dive into this a little deeper. Research points to the following pitfalls of not allowing for an effective learning curve:

* **Learned Skill.** With little or no training in decision-making, running a meeting or knowing how to defuse conflicts, an untrained manager can harm even a well-oiled team.  Unprepared managers are unskilled at decision-making, cultivating good communications, coaching people to success and a range of other universal leadership skills. Effectively managing others is a learned skill that can take time.
* **Sink or Swim.** Strong individual contributors are often promoted to management roles with little or no leadership training, with a ‘sink or swim’ philosophy. Organizations that promote from within owe their new managers the training and support they require to succeed.
* **Coaching and Mentoring.** Simply having been around good managers doesn’t automatically instill the qualities needed to take over a team. Organizations should have a step-by-step process that helps [the new manager] practice and gain skill over time. It’s important for organizations to think about how people go from the change of leading themselves to leading others. Coaching is an opportunity to talk about new roles and be realistic about realigned responsibilities.
* **A Continual Journey.** Some organizations attempt to make up for the skills new managers lack by sending them to a brief, intensive management training. But trusting that a new manager will learn the large task of leadership in just a single seminar is unrealistic. There needs to be a social component where you interact with real humans to have discussions, ask questions or role-play. People are social animals, and peer coaching and mentoring can be useful approaches for learning leadership skills.
* **How to Combat the Leadership Learning Curve.** Successfully leading a team can be challenging. There’s a delicate balance between keeping employees engaged and balancing company expectations while meeting targets. Add remote or hybrid employees to the mix and suddenly managing a high-performing team can feel daunting. This is especially true for those new to leadership without years of knowledge and experience to fall back on.

2024 Workforce Trends report shows that around [**60% of managers feel overwhelmed at work**](https://5468055.fs1.hubspotusercontent-na1.net/hubfs/5468055/Lead%20Magnets/The%20People%20First%20Path%20to%20Business%20Success%20Report%20Leapsomes%202024%20Workforce%20Trends%20Report.pdf). This is partly because they often don’t have the tools and resources they need to grow into a successful leader. To get ahead of these challenges, organizations have begun prioritizing [**proper leadership training**](https://advancedtime.com/find-your-lead/), and those that do typically experience.

* Enhanced productivity
* Clearer communication among team members
* Improved employee retention
* Better decision making
* Increased customer satisfaction
* Enhanced company culture
* More consistent project execution
* Heightened confidence in both the team and leader
* Improved financial performance

I’m going to close today’s episode with comments from an article by Whitney Johnson entitled Manage Your Organization as a Portfolio of Learning Curves. She states that as people develop competence in a new domain of expertise, they move along an S Curve: Growth is slow and effortful at the outset or *launch point.*  It then progresses rapidly as people acquire new skills in a stretch known as the *sweet spot.*  At the peak is *mastery,* when work becomes easier but the curve flattens. Understanding where your employees are on this S Curve of Learning will help you coach them appropriately, craft thoughtful succession plans, and build a team with diverse but complementary strengths. The S Curve is a tool that smart managers use to launch conversations with their reports and create tailored development plans for them. It reveals when people are ready for bigger challenges—something that’s especially critical if they’re in mastery, which may mean they’re getting restless and need to jump to a new S Curve. Often the employees don’t even realize they’re ready to take the leap, but their managers push them anyway. When that happens, it’s key to surround an employee with the right supporting team. A good team will include members from all phases of the curve, who can contribute diverse perspectives and skills. She calls it the S Curve of Learning, and it might be time for VR agencies to consider it.

That’s it for episode 2. I hope you enjoyed it and hopefully learned something new. I appreciate you taking your time to listen and I’ll be back again next month with episode 3. Until then, stay well and be good.