The Skills Development Index™: What Type of Training Do You Need?
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Ryan Day, Global Knowledge Content Marketing Manager

Our data illustrates two conflicting trends: IT professionals are training more than ever, and skills gaps are more prevalent than they’ve ever been.

Which begs the question, is there a wrong way to train?

The Global Knowledge IT Skills and Salary Report is the largest annual survey of global IT professionals. This report, which has collected data from over 160,000 respondents since launching in 2008, provides a detailed examination of the most pressing topics in IT, including highest-paying jobs and certifications, top tech areas, job satisfaction, and preferred learning methods.

The 2019 report presents two all-time highs. First, 93% of all IT professionals took some form of training in the previous year. Secondly, 79% of IT decision-makers say their teams don’t have necessary skills.

A rise in training should result in a decline in skills gaps, right? Not the case. We believe there are two main reasons for this inverse correlation:

1. Technology evolution
2. Incorrect training

New products are being adopted faster than the consumption of training. So the problem may not be the training itself, but the lack of skills needed to keep pace with emerging tech.

In other cases, the type of training is the real problem—it doesn’t match the criticality of the skills need. In other words, professionals are taking the wrong kind of training. You can mow your lawn with a pair of scissors, but it’s not an efficient use of your time.

That’s where the Global Knowledge Skills Development Index™ comes in. This new tool answers the important question that all IT professionals face: What type of training do I need?
Before we dive into how the Skills Development Index works, let’s first explain why it’s needed.

Knowledge, ability and skills

When we talk about skills gaps, we’re referring to a shortage of knowledge or ability. While often used interchangeably, knowledge, ability and skills (KSAs) are different things.

**Knowledge** is a contextual awareness of a topic. You *understand* something well.

**Ability** is a trait needed to accomplish something. Some are innate; others are learned.

**Skills** are talents developed through training or experience. You *learned* something and can implement it as a result.

A cybersecurity professional, for example, must have **knowledge** of various social engineering threats, such as phishing (hacker attempts to gain sensitive information, typically via email) and baiting (hacker uses a false promise to get you to install a malware-infected device on your computer). That same cybersecurity professional should possess the **ability** to be highly organized, calm under pressure and attentive to detail. That cybersecurity professional must also exhibit the **skills** to identify real-time cyber threats and implement security measures to combat them.

Managers hire for knowledge and ability. They rely on training to build skills.
Risks of an untrained workforce

The relationship between training value and business value isn’t always obvious. Even the most ardent naysayers likely aren’t opposed to learning. Though, when a business case needs to be made to justify a training investment, it can be difficult to draw a direct line between training and organizational success. Thus, training is too often relegated as an amenity, not a necessity. IT professionals are expected to just “figure it out as they go.”

The fact is, thriving organizations have established a culture rooted in continuous improvement. According to a report on the most successful IT organizations, the International Data Corporation (IDC) found that training is a strategic enabler. To maximize technology investment, 98% of successful IT organizations incorporate IT employee training into strategic planning. Well-trained IT organizations also spend up to 20% less time “fixing” their IT environment and use that time to evolve and improve functionality.¹

The signs of an untrained workforce are everywhere

You must be proactive in filling your skills gaps if you recognize any of the following red flags:

- Project and deployment delays
- Peers or management expressing frustration about employee capabilities
- People being hired—typically at a premium price—with new skills because the talent isn’t in-house
- Organization is afraid to move away from legacy systems
- Unhappy, maybe even disgruntled, workforce
- Employees are asking a lot of “how to” job-related questions
- A noticeable amount of preventable employee errors
- High employee turnover
- Hearing horror stories from other organizations and realizing your organization has similar issues

There may be no greater advocate for training than IT professionals who have trained—mainly because they’ve experienced the payoff firsthand. Certified IT professionals are 1.7 times more likely to train than non-certified peers. Certified individuals are also 41% more likely to have took some form of

¹ IDC, Six Priorities and Behaviors of Successful IT Organizations, DOC #US42251116, Jan. 2017
training in the past two years.\(^2\)

Despite the obvious benefits, training support from leadership is far from consistent across the industry. More than 40% of IT organizations offer no formal training for their employees. For those that do, only 41% of IT decision-makers authorized training.

![58%](image1) ![41%](image2)

**Organizations who offer formal training for their employees**

**IT decision-makers who had formal training available, but didn’t authorize it**

But IT professionals are resilient—if they aren’t getting training support from leadership, they’ll seek it out themselves. In the past year, 85% of IT professionals took some form of training.

Obviously, there needs to be more backing from management. Though these numbers do illustrate the perseverance of IT professionals who will find ways to build skills even without manager approval. Just think what they could accomplish with a little help!

**How you train matters**

What is your training goal? This question should be answered before you begin weighing your options.

**Do you want to add knowledge or skills?**

If you want to build skills, you want to do something. A successful training course achieves just that—you’ll walk away with a “do” ability that will help you accomplish a task or perform an action.

After completing the Cisco training course ICND1 v3.0 – Interconnecting...
Cisco Networking Devices, Part 1, you’ll have the hands-on experience to configure a Cisco router and troubleshoot VLANs.

Just finished Architecting on AWS? You can now host a new web application on AWS and automate your infrastructure.

These are the type of “do” skills that you should expect as a result of effective training. The goal should be to gain skills that can immediately transfer to your job.

But not all training types match all skill needs. Training structure matters, mainly because each type can be vastly different. Self-study versus classroom. E-learning versus private group training. These learning methods differ greatly in terms of time, cost, flexibility and reliability.

The good news is you have many options. The bad news is ... you have many options! Ultimately, your training type should be dependent on the importance of your skills need.

So, IT professionals are training but skills gaps are widening. Why? Maybe the answer lies in the training formality.

Since 2016, skills gaps have risen by 150%. During that same timeframe, instructor-led course attendance has dropped 10% while self-paced and training subscriptions have remained steady. Skills gaps have risen while classroom numbers have dipped. An instructor-led environment is the best way to gain necessary skills because the skills will be contextualized and immediately applicable to the workplace. As more professionals lean on e-learning libraries, necessary skills are being bypassed due to a lack of expert access and interaction. E-learning and on-demand training also lacks structure, which isn’t ideal for students who lack a learning drive.

There’s a place for informal and on-demand training, but they shouldn’t form the totality of your learning. Each training formality serves a specific purpose—and each fulfills a particular skill requirement.

Let’s examine the five types of skills and six types of training that you have to choose from.

**Five skill types**

Based on priority, value and risk to the business, the Skills Development Index classifies skills in five categories: Interesting, Emerging, Core, Cohort and Project.

In essence, Interesting skills are least important to the enterprise, while Project skills are most important.

Before we dive into the five types, we must first acknowledge that professionals already possess a set of base skills that do not appear on the
Index. Base skills are typically acquired through higher education—they are the skills you were hired for. The following five skill categories are in addition to a professional’s set of base skills. (Note: Examples for each skill type provided by Global Knowledge instructor Daniel Cummins. The best solution for each training example will be provided later in the article.)

**Interesting**

These are the knowledge and skills adjacent to those required to perform your job role tasks. Interesting skills are something you care about, not necessarily your organization.

**Example 1:** You are troubleshooting a non-critical Ubuntu Linux server. While you are familiar with Linux, you are not the primary support for this particular server. One of your colleagues has written down instructions for which commands to use, but you want to be more familiar with the process.

**Emerging**

These are the knowledge and skills that may be required for your job role over the next 12 to 24 months. An interesting skill will “graduate” to an emerging skill if there is a direct impact or benefit to the business.

**Example 2:** You’ve had several discussions with your colleagues about the importance of cloud technology and you’ve been catching wind of the possibility that your organization may be migrating some of its infrastructure to Amazon Web Services.

**Core**

Core skills are required competence to perform your job role core tasks. Base skills are only relevant for so long. Due to changing technologies and digital transformation, something you learned only a few years ago may now be outdated.

**Example 3:** As an employee of the U.S. Department of Defense, you are required to maintain your Security+ certification in order to remain in your role as a network analyst, but your certification is about to expire.

**Example 4:** You’re a system administrator and have to step up to help when a
contractor fails to complete a firewall migration.

**Cohort**
These skills are required for a team to jointly accomplish projects that are high-priority, high-value or high-risk. Cohort skills affect the whole team or department—think more along the lines of upgrading platforms rather than simply switching servers.

**Example 5:** Your company is rolling out a new CRM platform, switching from an on-premises solution to a cloud-based platform. The company has chosen to implement this new platform following an agile development strategy.

**Example 6:** Your CTO has decided to upgrade several of the company’s firewalls to a new model of Palo Alto next generation firewalls. Your security infrastructure team needs training to configure and implement this new firewall.

**Project**
Project skills are required for an individual to accomplish projects that are high-priority, high-value or high-risk. Your company really cares about these skills.

**Example 7:** Your organization has made the decision to transition from IPv4 to IPv6. As the network administrator, you need to become intimately familiar with IPv6.

**Example 8:** Your organization has been using a proprietary application to maintain its asset management database. After a recent penetration test, a serious vulnerability has been discovered in the application, increasing the risk of an imminent database breach. You fail to locate the programmers who wrote the original application.

Your highest-priority skills are ones you can’t afford to get wrong. The impacts to the organization (and your job security) are too great—skills gaps in these areas can lead directly to:

- Increased stress on employees
- Delays in development and deployment of products
- Declining customer satisfaction
- Increased operating costs
- Loss of business to competitors
- Loss of revenue
Tips to prioritize your skill list
When determining skill importance, you’ll want to start by making a list of all known projects and identifying the skill needs for each. We acknowledge this isn’t a simple endeavor—it can and should be an extensive and meaningful investment.

Collaborate with a project manager to obtain a list of projects and rank them by importance—you’ll probably want to speak with stakeholders and do independent research to help inform your rankings. You may also want to reach out to training providers for advice. Some skill needs and their priority level won’t immediately be apparent. That’s OK—this list will change over time. You have to be adaptable. After you speak with managers, employees and others involved, you’ll have a better understanding of the value or risk of each project to the business and know where your strongest skill needs exist.

Six training types
Once you have determined the criticality of your skill need, then you can more strategically select how to learn. All of the following learning types have proven value, though it’s imperative you have proper expectations and know the limitations of each. From left to right, the following training types range from least to most formal. They also reflect the effort needed to add a particular skill.

Self-Study
Google, YouTube
Social Study
Ask a coworker, mentoring
e-Learning Library
Subscription-based, video classes / MOOC
Blended
Combination of instructor-led and on-demand
Instructor-Led
Live Classroom and Virtual courses
Private Group
On-site, instructor-led / Blended

Structure / Formality of Training

Self-study
We all dabble in self-study. Who hasn’t Googled a quick answer to a work question? It’s quick and easy, though there are risks. Self-study has no built-in structure, so it’s entirely up to the individual to determine what to study and how long to study. This can be trouble for those easily distracted.

Self-study may be instinctual, but learners must be conscious of the information’s source. There is a lot of outdated material on the internet, especially when it comes to technology. Google and YouTube will always provide an answer to your query; you want to make sure it’s the correct one. Blogs, white papers and videos serve as terrific learning resources—just make sure they’re up to date. Know the source before you run with the answer.

To ensure you’re maximizing your self-study time and know where to look for the best free resources, check out our 6 Tips for Informal Learning.
Social study
Have you ever asked a colleague for help? Social learning is something we all do and it can be quite effective. When you need to add a skill, ask yourself: Is there a co-worker who has this particular expertise? You’re likely surrounded by free (and intelligent) resources at work—so pick their brains! Schedule lunch-and-learns. Set up time for a training debrief immediately after a co-worker has completed a course. When it comes to training, pay it forward.

Social study can extend beyond the walls of your office. If you’re attending an industry trade show, track down and chat with subject matter experts. Or, if there’s a particular author who writes articles or study material you find useful, reach out to them via email or on social media. The larger your network of resources, the more knowledge you’ll have at your fingertips.

E-learning library
Paid online libraries are growing in popularity due to their flexibility. The demands of IT professionals are such that work and time constraints are limiting their ability to train during work hours. Decision-makers are shying away from approving classroom training courses because they require an employee to be out of the office. With on-demand e-learning, a professional can train when it best fits their schedule. Students can stop, start and pause training when work dictates. These libraries also require no travel, as all learning is done online.

The downside to e-learning is the lack of expert access. It isn’t the best fit for critical skill-building because training is done in isolation. Where does the student go when they have an immediate question? Think of e-learning libraries like “Paid YouTube.” Courses have valuable information, but essentially it’s an expert speaking at you with no opportunity to speak back. Its format is naturally more flexible than classroom training, but will the lack of expert interaction cost you time, or money, in the long run? E-learning may be cost effective, but it’s not sticky.

An e-learning library subscription is a perfect complement to instructor-led training. On-demand subscriptions also deliver a variety of courses, so you don’t need to select your training when you purchase. But a paid learning library should not be your only training investment for the year. Don’t assume it will cover all of your skills needs because the provider offers a large catalog. If you plan to rely solely on e-learning to fulfill your annual skills needs, ask yourself this question: Are you really OK with no instructor interaction for a full year?

Blended
Blended learning—or hybrid learning—is a combination of on-demand and instructor-led training. It’s the best of both worlds. Learners get the flexibility of on-demand and the expert access of a face-to-face classroom.
The unique advantage of blended learning is the problems it solves—the specific challenges facing modern business learners. As technology advances, the line between work and personal time has blurred. And with increased tech mobility, your work access isn’t confined to the office. This includes taking calls while driving, answering emails outside of work hours, responding to work requests while on vacation, or doing any or all of these while attending a trade show. The true benefit of blended learning is its ability to allow learners to train in an ultra-connected world.

The benefits of on-demand and self-paced training—reduced costs, less impact to working hours, access to a greater amount of content—has resulted in an increase in its popularity.

But recently, the shift to these products has stalled. The selling point of flexibility cannot make up for a lack of skill development. Companies have purchased these products for cost and work impact reasons but their employees aren’t gaining the skills their companies need. Universally, completion and utilization rates for self-paced classes are low. Students aren’t gaining skills the way they traditionally have in classroom settings. Which is why the instructor-led portion of blended learning is so key. With blended learning, on-demand content is reinforced by expert-led instruction. Students have access to an expert for questions, direction and mentoring.

**Instructor-led**

A traditional instructor-led classroom is one of the best ways to learn. It’s the most immersive training environment. Eliminate day-to-day distractions and interact directly with experts and your classmates, who may share similar work challenges with you. The engagement and collaboration in a live training course is unmatched. And for those seeking greater flexibility, virtual classroom options are available, eliminating the need to travel while maintaining the benefits of real-time instruction. When a skill must be learned, instructor-led training is superior. Formal training fulfills critical skills needs better than self-study and on-demand options. For larger tasks that have a team- or organization-wide impact, formal training provides more structure and access to an expert. It’s your better option.

**Private group**

Private group training provides an environment geared toward a team’s specific needs. Discussion and content can be adjusted on the fly to address customer-specific situations. It’s ideal for a group working on a project or campaign. It includes a customized curriculum where internal company information can be discussed openly. It’s also scalable for large or small groups. Global Knowledge instructor Samuel Brown says onsite training provides opportunities for colleagues to explore new ways of working together and develop a common language.

“*The obvious benefit of the onsite environment is the opportunity to group*
students based on similarity of project and give them the opportunity to discuss the content and application of it to their work within the small group without having to share the specifics in an open forum,” Brown said.

Private group training is flexible—students can often choose the location. All can attend in a classroom setting, or the instructor can be sent to you. Either way, students are benefiting from a more customized learning experience.

“If I’m teaching a public course, I have half a dozen or more people from different companies, different industries, meaning my teaching has to be rather neutral to accommodate so many different students,” said Global Knowledge instructor Daniel Cummins. “If I come to one company where all the students are with one employer, one industry, then I can tailor my teaching to meet their needs. They may even be able to request that we elaborate on certain topics outside of the course content due to a specific need at that company. We cannot do that in a public training situation.”

For those worried about budget, private group training tends to have better rates than public training courses, with a reduced cost per student and instructor travel included.

“The company can save money by having an instructor come teach a large group of employees all at once rather than sending employees individually to a training center,” Cummins said.

The Skills Development Index™ — How it Works
The Global Knowledge Skills Development Index answers the question: What type of training do I need?

Once you’ve defined the criticality of your skills need (y-axis), you can use the Index to determine the formality of training to pursue (x-axis). As you can see, the higher the skill risk, the more formal the training need.

The intent of the Skills Development Index is to help eliminate training uncertainty, both on the front end and back end. If you’re making a large time and money investment in a private group training, you want to make sure the skill needs are of the utmost priority.

Conversely, you don’t want an organization-dependent project hinging on a Google search. Skimping on essential training may save you money now, but you’ll pay for it later in the form of delays, errors and even lost revenue.

It is not the intent of the Skills Development Index to elevate one training type over another. We’re not saying blended is necessarily better than social learning. What we are saying is that both serve unique skill needs in different ways. Asking a manager or co-worker for help can be more beneficial than a training course in certain situations. Social is a huge part of learning. At the same time, self-study and social learning should always be used to complement more formal training options.

**Secondary training factors**

Ideally, skill needs would solely dictate training decisions. But in reality, budgets, workloads and time constraints get in the way. What the Skills Development Index aims to do is provide you with a preferred training scenario, independent of cost and time. Don’t limit yourself initially by budget—map out your ideal training based on skill need, then adjust due to constraints.

We’ve seen how skills gaps have impacted the industry. They’ve only worsened if high-value skills are left to informal resources. The best way to attack skills gaps is to have a training strategy. The Skills Development Index is a tool to help you be more tactical.

After you’ve trained, you don’t want to be left wondering, “Did I really learn it?” That sort of uncertainty leads to a further lack of skills. Don’t gamble with your training—especially when we’re talking about skills that are indispensable and necessary for business success. The Skills Development Index will help you take the guesswork out of training.

**What’s the best training solution?**

Now that you have an understanding of the different skill and training types, and how they relate using the Skills Development Index, let’s revisit our eight real-world IT examples from earlier and determine which training type is the
best answer for each.

**Example 1:** You are troubleshooting a non-critical Ubuntu Linux server. While you are familiar with Linux, you are not the primary support for this particular server. One of your colleagues has written down instructions for which commands to use, but you want to be more familiar with the process.

**Solution:** Visit the Ubuntu support website to review the manual on various Linux commands and read the recent posts in the community forum.

**Example 2:** You’ve had several discussions with your colleagues about the importance of cloud technology and you’ve been catching wind of the possibility that your organization may be migrating some of its infrastructure to Amazon Web Services.

**Solution:** Review Amazon’s white papers on the various products they offer and sign up for a free AWS account to try out those products.

**Example 3:** As an employee of the U.S. Department of Defense, you are required to maintain your Security+ certification in order to remain in your role as a network analyst, but your certification is about to expire.

**Solution:** Enroll in a Security+ exam prep course to acquire your continuing education units (CEUs) for renewal.

**Example 4:** You’re a system administrator and have to step up to help when a contractor fails to complete a firewall migration.

**Solution:** Sign up for instructor-led training. This is too big a task to complete on your own. This was actually a real dilemma for a real system administrator, Dane M. from California. After completing two Global Knowledge training courses, Dane was able to work through the initial migration. The new firewalls provided a faster and more reliable connection and resolved some “strange network behavior.” [View customer spotlight](#).

**Example 5:** Your company is rolling out a new CRM platform, switching from an on-premises solution to a cloud-based platform. The company has chosen to implement this new platform following an agile development strategy.

**Solution:** Your company arranges for your team to complete an agile training course.
Example 6: Your CTO has decided to upgrade several of the company’s firewalls to a new model of Palo Alto next generation firewalls. Your security infrastructure team needs training to configure and implement this new firewall.

Solution: You arrange for a Palo Alto expert instructor to come to your office and deliver a private group training on Palo Alto next generation firewalls.

Example 7: Your organization has made the decision to transition from IPv4 to IPv6. As the network administrator, you need to become intimately familiar with IPv6.

Solution: Enroll in a series of advanced IPv6 courses to boost your skills.

Example 8: Your organization has been using a proprietary application to maintain its asset management database. After a recent penetration test, a serious vulnerability has been discovered in the application, increasing the risk of an imminent database breach. You fail to locate the programmers who wrote the original application.

Solution: The programming language is unfamiliar to you so you enroll in several instructor-led courses to update your skills since you have to patch the vulnerability yourself.

Global Knowledge has all training needs covered

No matter your learning need—from formal to informal—Global Knowledge has you covered. We offer a wealth of instructor-led classroom and virtual classroom courses, providing access to the best technology and business experts in the industry. Take a tour of our Virtual Classroom Live environment.

Our private group training delivers consistent onsite learning for multiple employees. If you need all team members on the same page with the same skill sets, this is your best training option. The students will work together in an environment structured for team-building and growth.

At the same time, Global Knowledge’s informal learning resources are authored by the same instructors who teach our courses. Our articles, webinars, white papers and videos are terrific resources for self-study. And best of all, they’re free! View our entire resource library.

Global Knowledge also offers on-demand training and a blended delivery format, Blended Live. For on-demand, choose a single course or check out our subscriptions.
**Blended Live is our newest training type**, providing you the best of classroom and on-demand training. Get the instructor access you need and the flexibility to train whenever it fits your schedule.

Whether you need on-demand, instructor-led training, or a blend of each, we have you covered.

**Let skills be your driving force**

It’s our belief that strategic training is the only measure to reverse the skills gap trend. Training just to train isn’t cutting it. Don’t just check a box and think you’re covered from a skills perspective. How you train matters.

The Skills Development Index lays out your learning options. It also forces you to think about your skill needs—which is the significance and risk to you and your business? If you don’t fully grasp the necessity of a specific skill, you’re more likely to be misaligned when pursuing training.

We understand the impulse to have budget or flexibility drive training decisions—money can be tight and IT professionals are busier than ever. But if skills needs aren’t the driving force behind your training choices, you’re doing yourself a disservice. Training purchases driven by budgets and time constraints are why we’re in this skills gap mess. Skills should be your driving force. They should influence every learning decision you make.

With the Skills Development Index, you now know how you should be training. Successful skills development should be impossible to ignore. Ensure your success by developing a strategy based on the importance and risk of your skills needs.

**Learner’s Journey**

The Skills Development Index is just one tool along the path to skill-building. Learn more about the full learner’s journey in our e-book, *Mind the Gap: A Six Step Guide to Organizational Success*.

**About the Author**

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