Putting real skills to work

General Assembly's learning philosophy

GENERAL ASSEMBLY

Dear reader,

The world is moving the fastest it ever has. And skills are somehow evolving even faster.

At General Assembly, we know how difficult it is for individuals and businesses alike to keep up with emerging technologies and the constant evolution of roles, plus the skills and tools needed to succeed in those roles. It can feel incredibly overwhelming for everyone—especially for those early in their careers, contemplating new careers, or advancing their careers in nontraditional ways— along with businesses in the tech space and beyond. Many college grads, seasoned professionals, and employers across industries also feel unsure of— and unprepared for—the ever-evolving modern workforce.

The truth is, today's workforce—regardless of industry—is increasingly fueled by tech skills that are becoming even more valuable as the digitally charged future of work, plus all things AI, continue to become more commonplace.

That's where we come in. We've spent the last 13 years working hand-in-hand with employers, tech experts, and industry insiders to build a learning ecosystem that can help everyone thrive in a digital-first world. An ecosystem that empowers a more efficient transformation of talent, skills, and processes. And one that breaks down the barriers to entry for underrepresented and historically marginalized groups—especially in the tech world.

Over 100,000 students have come through our doors (both physically and virtually) and have gained the skills and confidence needed to fuel their careers for years to come. We're proud of our legacy and remain committed to the belief that anyone can learn technical and workplace skills with the right learning experience, support, and community—and that everyone should have the opportunity to improve their lives through learning.

All the best,

Jeffrey Bergin

Jeffrey Bergin
Vice President, Impact & Experience, General Assembly

Our learning philosophy at a glance

Great learning experiences don't just happen—they require planning and take advantage of research on what activities and strategies will have the greatest impact. At General Assembly, we believe in evidence-based design. At the highest level, our research-based learning philosophy and guiding principles behind our curriculum development and learning design approach all come together to create experiences that:

Engage

Captivate and encourage

Learning happens best when it's focused on the most important things to know, draws personally relevant connections to real life, and motivates you to keep going.

Be flexible

Learning should be flexible enough to fit into your life, no matter where you live or whether you're a full-time student, working full or part time, a parent or caregiver, or a mix of multiple learner profiles.

Prepare

Focus on real-world application

Learning should be focused on how it'll actually be used and applied in the real world, with emphasis on practice, learning by doing, and real-world performance.

Build independence

Learning should prepare you to confidently perform on your own, make your own choices, monitor your progress, and reflect on how to improve.

Support

Emphasize feedback

Specific, individualized, and actionable feedback is one of the most powerful contributors to learning.

Be social

Collaborating with others enhances learning, provides additional feedback and support, and also mirrors how the real professional world works.

A deeper dive into the details—and the research that guides our program design decisions

Engage

Learning experiences should engage learners by capturing their attention, encouraging them to keep going, and being flexible enough to fit into their lives.

Captivate and encourage

At General Assembly, we believe **learning happens best when it's focused on the most important things to know, draws personally relevant connections to real life, and motivates you to keep going**.

Focus on the objectives

Let's face it—learning isn't always easy—especially with so many distractions competing for our attention. And how demotivating is it to see that a reading or assignment you're about to start is so intimidatingly long? That's why **learning should be explicitly focused on the essential content, activities, and assessments enabling you to achieve its objectives,**[1] **and should minimize extraneous content.**[2] This helps make learning experiences concise and efficient and reduces distraction.

Give learning content the spotlight

While focused, **learning content should also be presented in ways that make it easy for your brain to process.**[2] How often have you found a webpage or app so difficult to use that it takes away from the experience—that you have to work extra-hard just to understand it or finish what you're trying to do? With that in mind, interactions with platforms and content should be intuitive, distraction-free, and enable easier understanding—not hinder it.[3] Buttons, headings, navigation, and visuals should be purposeful, well-placed, and let the learning content itself have the spotlight.

Learning should be thoughtfully designed to motivate the learner to keep going.

ENGAGE

Keep learners going

Ever take a course or read a book that feels like it makes no effort to actually stay interesting? We have, too, and it's awful. To avoid this, **learning should be thoughtfully designed to motivate the learner to keep going.**[3] One of the best ways to do this is by encouraging personal relevance—drawing connections to things in your own life, showing why what you're learning matters.[4,5] Case in point—learning can point out that the steps in a process you're learning are the very same you'll use on the job as a working professional. It can also provide real-world examples of a concept you see in your everyday life, or share relatable stories and case studies to strengthen not only your understanding but also your motivation to learn knowledge and skills that matter to you as an individual.

Promote a growth mindset

Additionally, **learning should promote a growth mindset.**[6] Some believe they can never improve in a given area—that they have a "fixed" amount of skills and aren't ever able to get any better at math, playing an instrument, or progressing in a sport. However, the truth is that our brains are flexible and can always experience "growth" if we allow it and work at it. You may have heard of this referred to as "fixed" and "growth" mindsets, but what many don't realize is that our mindsets often vary depending on the topic or skill. For instance, research has demonstrated that someone can believe there is no way they'll ever be a good singer ("fixed" mindset) while also believing that although they've only played a few games of chess, they can keep getting better with practice ("growth" mindset).[7] This is why it's important for learning to continually reinforce that practice and learning from mistakes can help anyone improve at anything if they seek help when they need it and keep at it.

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📌 Be flexible

We have busy lives just like anyone else, so we know just how important it is to acknowledge the reality that it can be difficult to learn with so many competing priorities and commitments. This is why **learning should be flexible enough to fit into your life, no matter where you live or whether you're a full-time student, working full or part time, a parent/caregiver, or a mix of multiple learner profiles**. Not only do we strive to keep learning short and focused (see above)—we also design our learning using proven remote/blended learning principles, emphasizing learning that can adapt to your schedule.

Activate remote learning

While remote learning boomed during the COVID-19 pandemic, there's actually a solid amount of evidence going much further back demonstrating that **remote/blended learning yields greater learning outcomes and more positive learner attitudes than traditional face-to-face models**. This has been found across all subject areas and disciplines, with both child and adult learners, and in both school and professional learning settings.[8,9,10]

Some of the many reasons for this include:

• Learners spend more time practicing and "doing."

• There are more opportunities for personalization and individualized feedback/support.

• Learners have more control and choice "over time, place, path, and/or pace" and the ability to self-manage.[11]

• Connecting multiple interaction types (live instruction/discussion, individual practice, remote small-group collaboration) "provides an integrated learning experience."[11]

Prepare

Learning should prepare learners for independent, real-world application of the knowledge and skills they've gained.

📌 Focus on real-world application

There's a vast difference between knowing information about something and actually being able to do it in real life. General Assembly empowers learners from all walks of life with the real skills to be able to perform on the job immediately because **learning should be focused on how it'll actually be used and applied in the real world—with emphasis on practice, learning by doing, and real-world performance**.

Incorporate realistic practice

There's a reason "learning by doing" has become such a common phrase—it really does work. The more practice you've had at something before having to do it when your job depends on it, the better you'll perform and the more confident you'll be. That's why we design our products based on research emphasizing that **learning should be based explicitly on practicing tasks learners will perform on the job**.[12] However, one crucial element of that practice is that the closer it is to how you'll do it in the real world, the more it'll benefit you. For instance, someone in the final stages of training to be a pilot will likely benefit more from extra practice in a flight simulator than from reading books about how to fly a plane. Similarly, if you're learning to code, you're better off being given a realistic scenario similar to a request you'd have as a junior engineer, including requirements in the form of a ticket giving you clear instructions on what success will look like in the context of an application as opposed to being given a coding practice task with no context or bigger picture frame of reference.

Model and explain a variety of scenarios

You don't become an expert at something immediately. It takes time and experience—particularly solving a wide range of problems and edge cases and knowing what to do if you see a similar problem in the future. All too often, learning experiences will only show "happy" or "textbook" examples of how to do a task—versions of a problem that are straightforward with simple solutions—but not what to do when real-world complexity is added. While the "simple" approach is well-suited for beginners, it

often doesn't enable learners to translate their skills to the workplace very easily. They'll flounder when there isn't a straightforward solution like the examples they're accustomed to. That's why in order to prepare learners for real-world performance, **learning should model a variety of scenarios, philosophical approaches, and levels of expertise with rationales for processes and underlying decisions**.[12,13] Examples of this nature should enable learners to observe as experts not only work through problems but also explain the reasoning behind what they're doing in each step. It's also helpful for experts to describe common variations of the given problem as they work, with instruction on ways to respond to each variation. Additionally, because there's often more than one way to solve a problem, it's beneficial for learners to hear about different philosophical approaches or schools of thought as experts model problem-solving. This arms learners with skills, tools, and strategies enabling problem-solving from multiple perspectives and approaches.[12]

Make routine tasks second nature and support complex problem-solving

Some tasks in life are super predictable and done the same way every time. We typically don't need to actively think about walking, drinking water, or clapping our hands—we just do them automatically, often while also thinking about something else. Similarly, a pilot has practiced enough to not need to think about how to lower a plane's landing gear. An office worker types without having to actively think about which individual keys to press. A UX designer doesn't need to think about how to draw a rectangle with their design software. In the 4C/ID instructional design model[14] (which we apply during GA's curriculum development), these are referred to as "routine tasks," which are taught by providing learners with steps in a procedure and having the learner repeat it until memorized. If learners need assistance, they can refer back to the procedural steps they were taught, but the ultimate goal is to internalize the process until it can be performed second nature.

But not all tasks are this straightforward. There are also "non-routine" tasks,[14] which are less predictable than routine tasks and require problem-solving, reasoning, and/or decision-making. Similar to the "variety of scenarios" approach described above, non-routine task instruction involves providing a wide range of scenarios of varying difficulty with explanations on how to approach each. The goal is to expose learners to a variety of tasks, to understand the causes of issues or pitfalls, and effectively be able to address them. Because non-routine tasks often involve actions responding to a specific scenario rather than being the same every time, memorization of processes isn't crucial. As learners work through non-routine tasks, they're aided with supportive information on how to perform non-routine tasks—sometimes called "the theory" behind the action.

Based on all this, **learning should include practice aimed at making routine tasks automatic/second nature and supporting procedural decision making for non-routine tasks**.[14] In particular, practice should support critical thinking with the ability to identify and solve problems for which there's no routine solution.[15]

Build independence

It's one thing to perform a task as part of an assignment with support from an instructor, but another to do the task completely on your own in a professional setting. That's why **learning should prepare you to confidently perform on your own, make your own choices, monitor your progress, and reflect on how to improve**. Research demonstrates that self-regulated learning, learner choice and control, and independent practice can drive strong, self-reliant performance.

Encourage self-regulated learning

Self-regulated learning is the process of managing your own learning and adapting your behavior and strategies to achieve your goals. It typically involves planning and goal-setting, monitoring your progress toward your goal, and reflecting on how to act next based on that progress.[16] Enabling learners to self-regulate not only helps them become confident and independent but also helps them excel.[3] In fact, self-regulation is one of the strongest predictors of high achievement and performance,[17,18,19] which makes logical sense because the more you understand your own needs and challenges and are able to actively and consistently respond to them, the better your ability to persist through difficulty. For these reasons, **learning experiences should support goal-setting and planning, provide opportunities to monitor progress, and offer prompts and cues to encourage self-reflection**.

Allow choice and control over the learning process

As you self-monitor, it can be additionally empowering and motivating to be able to make your own choices and decisions about your learning, which in turn increases independent thinking.[20,21] **Allowing choice over pacing, order, and the topics you individually need to focus on the most (based on self-monitoring and reflection) helps you pursue your goals in ways that work best for you, and often reduces the need for assistance from others**. Your instructor isn't a mind-reader, and neither is your manager, so whether you're learning in a course or on the job, the more you can make choices that will keep you moving forward, the better off you'll be.

Promote independent practice

Building on that, in the real world, you aren't always able to immediately ask for help when you're stuck on a problem, so the more practice you get at working through roadblocks and setbacks independently, the quicker you'll be able to perform professionally. Research supports this, as it's demonstrated that **practicing first on your own and requesting help only when stuck helps you become more independent, self-reflective, and job-ready**—whether you're learning in-person or remotely.[22,23]

With all of this in mind, the ability to monitor your own learning and make choices in response can enable you to learn just about anything.

Support

Learning should provide feedback on how to improve, build community, and support collaboration.

Emphasize feedback

Everyone makes mistakes—especially when they're first learning something. One of the best ways to improve is to be able to recognize what mistakes were made, why they weren't effective, and how to do better in the future. This is why **specific, individualized, and actionable feedback is one of the most powerful contributors to learning**.

Provide feedback specific to the individual learner's performance

Have you ever received a grade for an assignment or exam with absolutely no explanation of where you went wrong or could have done better? Incredibly frustrating, right? We naturally want to learn from our mistakes, and not including feedback on how to improve is a missed opportunity. There are other times when we're working independently and know we're struggling at a task, but just can't figure out where we're going wrong. For these reasons, **learning experiences should include specific, actionable, individualized, and timely feedback, which helps learners improve performance and self-monitoring**.[24,25] This is ideally more than just showing which questions you've answered incorrectly or how many points were subtracted. The feedback we actually learn from is a specific response to what we've done, explaining why we've fallen short or made mistakes, and what to do to avoid them in the future. Additionally, the practice of receiving and learning from feedback is a critical skill in the workplace.[26] In order to collaborate successfully with others and continue to grow through performance reviews, we need to be able to learn from each other and avoid taking criticism personally.

The frequent, individualized feedback that comes from coaching can be a critical contributor to someone's learning and skill development

Provide scaffolding through coaching

Coaching is when an experienced, knowledgeable person helps another achieve a goal. Research demonstrates that coaching has a significant positive effect on skills, performance, well-being, coping, work attitudes, and self-regulation, whether it's done in person or virtually.[27,28] The frequent, individualized feedback that comes from coaching can be a critical contributor to someone's learning and skill development—particularly in moving someone from needing continual support to working completely independently.

One research-proven method for this is through scaffolding. Named after the temporary supports used for constructing a building, the idea behind scaffolding is starting with lots of support but gradually removing that support until ultimately the learner is working completely on their own. Scaffolding can help:

- Simplify tasks so they're easier to practice.
- Manage processes to support practice in real-world contexts.
- Minimize frustration and risk and maintain interest.
- Focus attention on things that may be taken for granted.
- Prompt explanations and reflections.[29]

Learning should provide scaffolding through coaching. Not only does it enhance learning—it also fosters independent, confident workers who can think critically and not require lengthy training.[22,27,28]

Be social

Collaborating with others enhances learning, provides additional feedback and support, and is also how the real professional world works.

Enable collaborative learning

Rarely in the real world do we work completely alone, so when learning new knowledge and skills, it's vital to also learn how to use them in a collaborative setting—which just so happens to also enhance learning. Research demonstrates that outcomes and learner performance in collaborative learning settings are superior to cooperative, competitive, and individualistic learning.[30,31] One reason for this is because the brain is wired to be social and feel part of a community, and collaborative learning appeals to the brain's default setting, taking advantage of our natural desire to connect with others.[32] Social learning through conversation, peer learning, and producing work with a real audience in mind can powerfully impact learning, compared to a focus on non-personal facts and individual thought.[32] Online learning typically involves mostly individual/isolated instruction, but at General Assembly, we believe **learning should include collaboration and peer review, as well as promote a strong sense of community**.

Use collaborative learning strategically

While collaborative learning provides powerful benefits, **not all learning should be social all the time**. Successful social learning often needs preparation, and it's often best to start with learning foundational skills individually so learners have the basic knowledge enabling them to work effectively together. For example, it would make logical sense to make sure learners all understand key terms and concepts before attempting a productive, collaborative conversation. Additionally, it's likely better to first watch a demonstration of a process on your own before attempting to do it alone or with others.

Activities that tend to work best for collaborative learning are non-structured tasks with multiple possible solutions, rather than those with a clear, single, correct answer. This is because the benefits of collaborative learning often come from forming arguments, presenting evidence, and justifying them to others. Discussions like this are less likely to happen in a group activity where learners are matching terms with definitions or completing simple math calculations.

Bringing it all home

At General Assembly, we believe in our learning philosophy. And we believe that effective learning should always:

Engage you

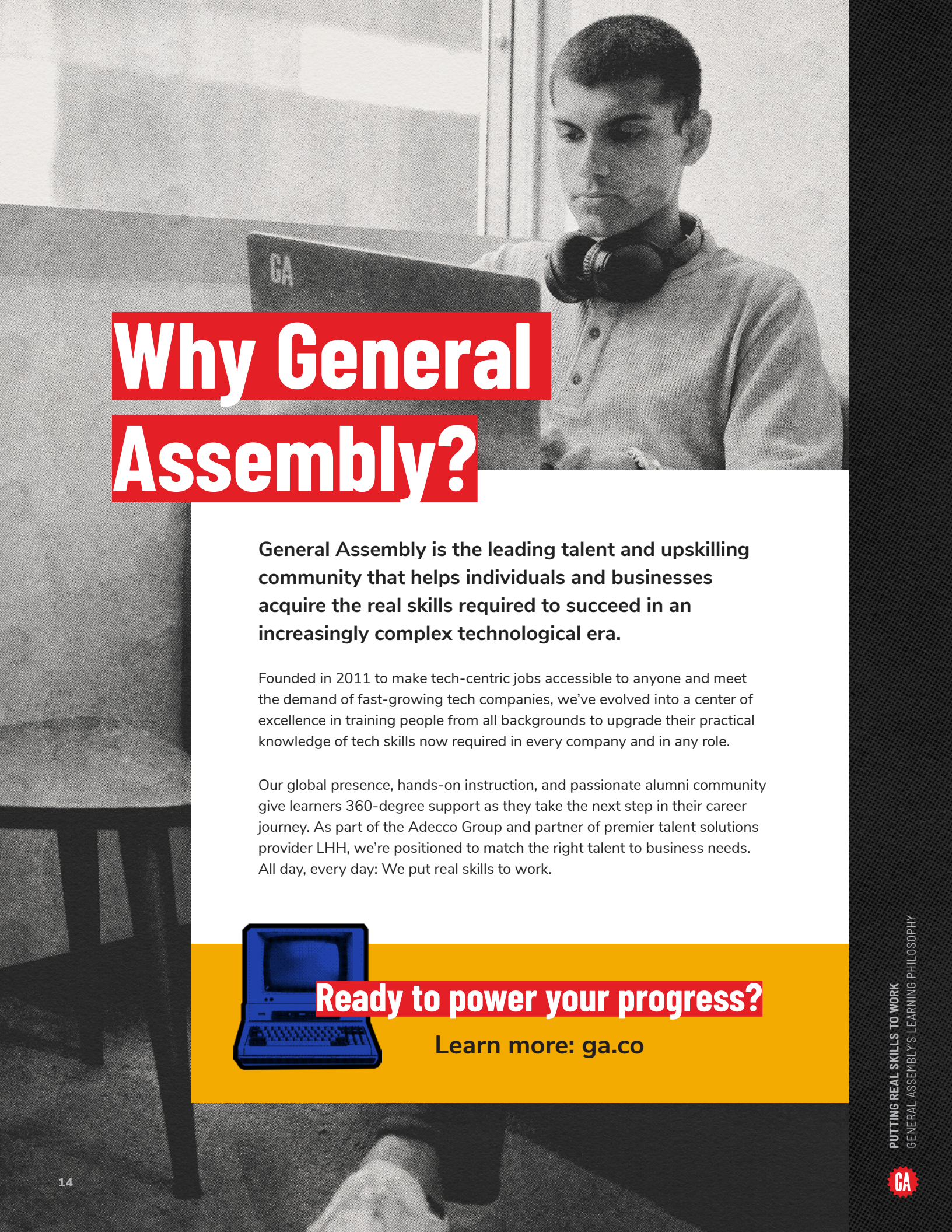by capturing your attention, encouraging you to keep going, and fitting easily into your life

Prepare you

by focusing on real-world application and building your independence

Support you

by emphasizing feedback and providing community

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Why General Assembly?

General Assembly is the leading talent and upskilling community that helps individuals and businesses acquire the real skills required to succeed in an increasingly complex technological era.

Founded in 2011 to make tech-centric jobs accessible to anyone and meet the demand of fast-growing tech companies, we've evolved into a center of excellence in training people from all backgrounds to upgrade their practical knowledge of tech skills now required in every company and in any role.

Our global presence, hands-on instruction, and passionate alumni community give learners 360-degree support as they take the next step in their career journey. As part of the Adecco Group and partner of premier talent solutions provider LHH, we're positioned to match the right talent to business needs. All day, every day: We put real skills to work.

Ready to power your progress?

Learn more: ga.co

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