eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

Gen Z Enters the Workforce: What They Expect from Learning (And Why Traditional L&D Can't Deliver)

Jonathan H. Westover [a b c *]

[a]Utah Valley University, UT, USA
[b]Future State University, CA, USA
[c]Nexus Institute for Work & AI, Catalyst Center for Work Innovation, UT, USA
[*] Correspondence: jon.westover@gmail.com

Received May 26, 2026
Accepted for publication September 14, 2026
Published Early Access October 1, 2026

doi.org/10.70175/futureofworkjournal.2026.1.2.1

Abstract: *Generation Z enters the workforce with learning expectations fundamentally misaligned with traditional organizational L&D: they expect game-like engagement, instant feedback on performance, learning seamlessly integrated with application, and transparent connections between skill development and career advancement. These expectations aren't generational entitlement—they reflect formative experiences with consumer technology that demonstrated learning could be engaging, personalized, and immediately applicable. Traditional L&D approaches—annual training events, delayed feedback, decontextualized content, and credential-based validation—violate every principle of effective learning that Gen Z's digital native experiences have validated. Drawing on generational research, learning sciences, and organizational case studies, this article examines what Gen Z actually expects from workplace learning (beyond superficial preferences for "fun" training), why traditional L&D proves structurally inadequate to these expectations, and what evidence-based alternatives can bridge this gap. The analysis reveals that Gen Z's learning preferences—continuous feedback, gamified engagement, applied practice, and transparent progression systems—align remarkably well with learning science principles that predict effective skill development. Organizations that dismiss these as generational preferences rather than recognizing them as valid learning design principles will struggle to develop Gen Z talent effectively while missing opportunities to improve learning effectiveness for all workers. Meeting Gen Z's learning expectations requires shifting from episodic training to continuous learning ecosystems, from delayed feedback to real-time performance data, from abstract content to applied practice, and from credential-based validation to demonstrated capability—changes that improve learning outcomes across generations while becoming essential for organizations competing in fast-moving markets.*

Keywords: Generation Z, generational workforce trends, workplace learning, learning and development, gamification, immediate feedback, learning in the flow of work, deliberate practice, self-determination theory, adaptive learning, demonstrated capability

Suggested Citation:

Westover, Jonathan H. (2026). Gen Z Enters the Workforce: What They Expect from Learning (And Why Traditional L&D Can't Deliver). *Future of Work: The Journal of Labor Transformation, Technology Integration, and Human Adaptation*, *1(1).* doi.org/10.70175/futureofworkjournal.2026.1.2.1

Introduction

A chief learning officer at a global technology company recently described a revealing moment: "We brought our high-potential Gen Z employees through our flagship leadership development program—the

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

same program that's produced great leaders for 15 years. Halfway through, several participants asked if they could skip the remaining sessions and just 'learn by doing' instead. They weren't being disrespectful. They genuinely didn't understand why they needed to sit through more content when they felt ready to practice."

The CLO's response was instructive: rather than dismissing the feedback as generational impatience, she commissioned research examining what participants actually learned from the program versus what they could have learned through alternative approaches. The findings surprised her: simulation-based practice with immediate feedback produced measurably better skill transfer than lecture-based content delivery, particularly for complex interpersonal skills like conflict navigation and influence.

This wasn't a story about entitled Gen Z workers rejecting valuable learning. It was about a generation whose formative experiences with technology had taught them what effective learning feels like—and traditional L&D didn't feel effective.

The Gen Z Learning Context

To understand what Gen Z expects from workplace learning, we must first understand the technological and educational contexts that shaped their learning experiences.

Digital Natives in an AI-Transformed World

Generation Z, born roughly between 1997 and 2012 (Dimock, 2019), is the first truly "digital native" cohort (Prensky, 2001), having grown up with smartphones, social media, on-demand content, and increasingly sophisticated AI from childhood (Twenge, 2017). McGonigal (2011) estimates that young people in countries with a strong gaming culture spend roughly 10,000 hours playing games by age 21—comparable to the time often associated with expert-level skill development in traditional domains (Ericsson et al., 1993).

This isn't trivial background—it fundamentally shapes learning expectations. When you've experienced thousands of hours of well-designed game-based learning (because that's what good games are—sophisticated learning systems; Gee, 2007), traditional training feels primitive by comparison.

Consider what sophisticated games teach players:

- **Immediate, granular feedback:** Players know instantly whether actions succeeded or failed, with clear indicators of what to adjust
- **Progressive difficulty calibration:** Challenge increases precisely as capability grows, maintaining engagement in the zone of proximal development (Vygotsky, 1978)
- **Transparent progression systems:** Players see exactly what skills they're developing, how they're progressing, and what capabilities unlock next
- **Low-stakes practice spaces:** Failure provides learning without real-world consequences, encouraging experimentation
- **Intrinsic motivation through mastery:** The satisfaction comes from capability development itself, not external rewards

Now consider typical corporate training: attend a workshop, listen to content, maybe do a brief role-play, receive a completion certificate, return to work with minimal feedback on whether you're actually applying anything you learned. The contrast isn't subtle.

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

The YouTube University Effect

Gen Z also learned through unprecedented access to free, high-quality instructional content. Want to learn graphic design? Thousands of YouTube tutorials exist, many produced by world-class practitioners. Need to understand quantum physics? Accessible explanations abound. Curious about cooking techniques? Step-by-step video instruction is seconds away.

Research on Gen Z media consumption finds a strong preference for video-based learning: in a Pearson (2018) survey of 14- to 23-year-olds, 59% named YouTube as a preferred learning tool, ahead of printed books (47%). Gen Z learners also favor short-form content optimized for mobile consumption, and expect to find answers to questions within seconds rather than enrolling in structured courses.

This creates specific expectations about workplace learning:

- *Just-in-time access:* Why schedule training for next month when I need to learn something today?
- *Modular, searchable content:* Why sit through an hour-long course when I need to learn one specific skill?
- *Practitioner expertise:* Why learn from a trainer when I could learn from someone actually doing the work at the highest level?
- *Self-directed pathways:* Why follow a prescribed learning sequence when I can assess my own gaps and fill them efficiently?

Traditional L&D, with its scheduled training events, comprehensive curricula, and facilitator-led delivery, violates every one of these expectations.

Educational Disruption and Credentialing Skepticism

Gen Z also came of age during visible higher education disruption. They watched:

- Student debt crisis making traditional degrees economically questionable for many
- Employer shift from degree requirements to skills-based hiring in some sectors
- Emergence of alternative credentials (bootcamps, micro-credentials, online certificates)
- High-profile examples of successful entrepreneurs and technologists without traditional credentials

Surveys of Gen Z workers suggest greater skepticism about the value of traditional credentials than among older generations, with many believing that skills and experience matter more than degrees for career success (Seemiller & Grace, 2019).

This creates different expectations about learning validation:

- *Demonstrate, don't credential:* Prove capability through work samples, projects, and demonstrated performance rather than certificates of completion
- *Continuous skill updating:* Focus on maintaining current capabilities rather than one-time credential acquisition
- *Transparent skill visibility:* Make capabilities visible to potential employers and collaborators rather than hiding them behind generic job titles

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

- *Portable evidence:* Build career capital that travels across employers rather than locking value into single organizations

When L&D programs focus on completion certificates rather than demonstrated capability, Gen Z reasonably questions the value proposition.

What Gen Z Actually Expects from Workplace Learning

Beyond general preferences for digital delivery and engaging content, what do Gen Z workers specifically expect from organizational learning and development? Research and organizational practice reveal several core expectations.

Expectation 1: Gamified Engagement, Not Gamified Gimmicks

Perhaps no Gen Z learning preference is more misunderstood than "gamification." Many L&D teams hear "Gen Z wants gamification" and add superficial game elements—points, badges, leaderboards—to otherwise unchanged training. This misses the point entirely.

What Gen Z actually wants is the psychological engagement that well-designed games create: clear goals, immediate feedback, progressive challenge calibrated to skill level, and intrinsic satisfaction from mastery. These aren't "game" elements—they're principles of effective learning that games happen to implement well.

Research on game-based learning distinguishes between (Deterding et al., 2011; Kapp, 2012):

- *Structural gamification***:** Adding game-like reward systems (points, badges, leaderboards) to existing content without changing underlying learning design. This produces short-term engagement spikes that fade quickly and can undermine intrinsic motivation.
- *Content gamification:* Designing learning experiences that embody game-like principles—meaningful choice, immediate feedback, progressive challenge, and natural consequences. This produces sustained engagement and better learning outcomes.

Gen Z doesn't want training with points added. They want learning experiences designed with the same attention to engagement, feedback, and progression that characterizes good games (Schell, 2008).

What This Looks Like in Practice

Organizations differ in how far they move beyond structural gamification:

Deloitte's Leadership Academy offers an instructive starting point. By embedding missions, badges, and leaderboards alongside video lectures, in-depth courses, and quizzes, the program saw a 37% increase in the number of users returning to the platform each week (Meister, 2013). Gains of this kind are notable, but they rest largely on structural gamification, and engagement alone does not demonstrate improved learning or transfer. The following examples go further by building game-design principles into the practice itself.

PwC's digital upskilling program uses immersive simulations where learners practice skills in realistic contexts with immediate performance feedback. Rather than completing modules to earn badges, learners solve progressively complex challenges that require applying learned skills. The distinction matters: badges reward completion; challenges require capability.

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

Walmart's VR training program for managers places them in realistic store scenarios—handling difficult customer interactions, responding to safety incidents, managing staffing crises—with AI-powered feedback on decisions and communication. This isn't "gamification" in the superficial sense; it's deliberately designed practice with the feedback density and psychological realism that effective learning requires.

The common thread among the most promising designs: they use game-design principles (immediate feedback, progressive challenge, realistic consequences, intrinsic motivation) rather than relying on game-like rewards. The engagement comes from the learning itself being well-designed, not from extrinsic motivation layered on top.

Expectation 2: Immediate, Granular Feedback

Gen Z expects feedback that is:

- *Immediate:* Within seconds or minutes, not weeks or months
- *Specific:* Identifying exactly what was done well and what needs improvement
- *Actionable:* Providing clear guidance on how to improve
- *Continuous:* Available whenever they're practicing, not just during formal assessment

This expectation reflects their formative experiences. When playing games, feedback is instant and granular. When learning from YouTube tutorials, they can immediately attempt what was demonstrated and see results. When coding, compilers provide immediate error feedback.

Traditional workplace learning violates every aspect of this expectation: training occurs in workshops separate from work application, feedback on workplace performance comes through periodic reviews (often months delayed), and supervisors provide holistic impressions rather than specific behavioral guidance.

Research on feedback timing consistently demonstrates that immediate feedback produces better learning than delayed feedback, particularly for complex skills (Hattie & Timperley, 2007; Shute, 2008). The mechanism is straightforward: immediate feedback enables learners to connect actions to outcomes while both remain in working memory, supporting causal understanding and behavioral adjustment.

The Technology-Enabled Feedback Revolution

Several technology platforms now enable the immediate, granular feedback Gen Z expects:

AI-powered coaching tools like Rehearsal and Yoodli provide real-time feedback on communication skills. A learner practices a presentation or difficult conversation with an AI-powered simulation, receiving immediate feedback on pacing, clarity, confidence indicators, and message structure. The feedback is specific ("You said 'um' 47 times in 5 minutes, primarily when transitioning between topics") and actionable ("Practice transition phrases: 'Building on that point...' 'This leads us to...'").

Code review automation tools provide immediate feedback to developers, identifying not just errors but stylistic improvements, security vulnerabilities, and performance optimizations. Rather than waiting for senior developers to review code (which might take days), junior developers receive instant feedback enabling rapid iteration.

Sales conversation analysis platforms like Gong.io record and analyze sales calls, providing feedback on question techniques, talk-listen ratios, successful conversation patterns, and competitive positioning.

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

Rather than receiving quarterly feedback from managers based on memory, salespeople receive specific, data-driven insights after every conversation.

The technology enables feedback density that human-mediated systems cannot match. A manager might observe and provide feedback on 5-10 employee interactions per month. AI-powered systems provide feedback on hundreds, identifying patterns invisible to human observation.

Expectation 3: Learning Integrated with Application, Not Separated from Work

Perhaps the most consequential Gen Z learning expectation: they expect learning and doing to be integrated, not separated.

Traditional L&D operates on a "learn then do" model: attend training, return to work, attempt to apply what was learned. Research on transfer of training consistently finds that much of what is trained never translates into changed workplace behavior (Salas et al., 2012), partly because the gap between learning and application allows forgetting and provides no feedback on application attempts.

Gen Z's formative learning experiences followed a "learn while doing" model: attempt a task in a game, receive feedback, immediately retry with adjusted approach. Watch a YouTube tutorial, pause to try the technique, continue when successful. This tight coupling between learning and practice produces better skill development because:

- Immediate application prevents forgetting before the skill can be consolidated
- Real-world application reveals gaps that abstract learning misses
- Feedback on application attempts guides further learning
- Motivation remains high because learners see immediate relevance

Workflow Learning: The Emerging Standard

Several organizations are redesigning L&D around workflow integration rather than separate training events:

Microsoft's shift to "learning in the flow of work" (Hart, 2023) embeds learning resources directly in the tools workers use. When someone struggles with an Excel formula, help appears contextually within Excel rather than requiring them to leave their work, search a knowledge base, and attempt to translate generic instructions to their specific context. Microsoft reports significantly higher engagement with embedded learning resources compared to standalone training courses, with better skill transfer measured through usage analytics.

Khan Academy's "mastery learning" approach requires demonstrating capability through application before progressing. Learners don't just watch video explanations—they immediately practice related problems, receive instant feedback, and can only advance after demonstrating mastery. This model is now being adapted for workforce learning through platforms that require demonstrating skills in realistic scenarios rather than simply completing content modules.

Apprenticeship-style programs inherently integrate learning with application. At consulting firms like McKinsey or BCG, new consultants learn while working on actual client projects, receiving coaching from experienced consultants in real-time as work happens. The learning isn't deferred until skills are "ready"—it's embedded in authentic work from day one. The coaching matters: research on instructional guidance shows

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

that practice without structured support is markedly less effective than guided practice (Kirschner et al., 2006).

The shift from separated training to integrated learning represents fundamental redesign: rather than pulling workers out of their jobs for training, organizations build learning into how work happens.

Expectation 4: Transparent Progression Systems and Career Pathways

Gen Z expects to see clearly:

- What skills they currently possess
- What skills they need to develop for career advancement
- How they're progressing in skill development
- What opportunities become available as capabilities grow

This expectation reflects gaming experiences where progression systems are explicit and transparent. Players can see their current level, exactly what's required to advance, and what capabilities unlock at each level. Progression feels like a system with clear rules rather than opaque judgment.

Traditional career development often operates opaquely: promotion criteria are vague ("demonstrate leadership"), feedback is subjective and infrequent, and the connection between skill development and advancement is unclear. Gen Z finds this frustrating not because they expect easy advancement but because they can't see how to improve effectively when rules are unclear.

Building Transparent Skills Architectures

Several organizations are implementing transparent skill progression systems:

IBM's Skills Gateway provides employees with clear visibility into their current skills, skills adjacent to current capabilities, and skills required for target roles. Employees can see specific learning pathways from current state to desired roles, with granular steps rather than vague advice to "develop leadership skills." The system integrates learning resources, assessment mechanisms, and internal mobility opportunities into unified visibility.

Guild Education's partnership model with employers like Walmart, Chipotle, and Target provides workers with transparent pathways from current roles to higher-skill positions through education and training, with explicit visibility into what credentials or skills enable what job opportunities. Employers report improved retention and internal mobility as workers can see clear advancement pathways rather than feeling stuck in dead-end roles.

Professional services firms increasingly publish explicit capability frameworks showing skills required at each level (Analyst, Associate, Senior Associate, Manager, etc.) with behavioral indicators for each skill. Rather than wondering "Am I ready for promotion?" professionals can assess themselves against published criteria and target specific development areas.

The transparency serves multiple functions: it provides clear development targets, enables self-directed learning, reduces perceived arbitrariness in advancement decisions, and signals organizational commitment to development.

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

Expectation 5: Meaningful Work and Social Impact Connection

A final Gen Z learning expectation is less about format and more about purpose: they expect clear connections between skill development and meaningful contribution.

Research on Gen Z workplace priorities consistently finds that meaningful work, social impact, and value alignment rank among their top factors in employer selection and job satisfaction—often rating higher than compensation for early-career roles (Seemiller & Grace, 2019). This isn't naive idealism; it's a generation that came of age during visible social and environmental crises and expects work to contribute to solutions.

This affects learning expectations in several ways:

Purpose-driven skill selection: Gen Z workers want to understand how developing specific skills enables meaningful contribution, not just career advancement. Training on "stakeholder management" lands differently when framed as "how to align diverse groups around shared goals that matter" versus "how to manage up for promotion."

Impact transparency: They expect organizations to show how their work and skill development contribute to organizational mission and broader social value. If learning is framed purely as career investment rather than capability building for meaningful contribution, engagement suffers.

Values alignment: They're more likely to invest heavily in developing skills for organizations whose mission and values align with their own, and more likely to leave when that alignment breaks down—regardless of learning opportunities.

Organizations responding effectively to this expectation:

Patagonia's Environmental Internship Program enables employees to take paid time away from regular roles to work with environmental nonprofits, developing skills while contributing to mission-aligned causes. The program signals value commitment while building diverse capabilities.

Salesforce's volunteer time-off programs and skills-based volunteerism enable employees to apply and develop professional skills in nonprofit contexts. A developer might volunteer technical skills to build systems for education nonprofits, simultaneously developing capability and contributing to mission-aligned impact.

B Lab's B Corp certification movement creates standards and accountability for companies pursuing stakeholder value beyond shareholder returns. Companies earning certification can more credibly claim value alignment, affecting their ability to attract and retain Gen Z talent who prioritize purpose alongside compensation.

The pattern: Gen Z expects learning to serve not just individual career advancement but also meaningful contribution to organizations and causes they believe in. When L&D programs frame development purely as individual investment, they miss this motivational dimension.

Why Traditional L&D Can't Deliver What Gen Z Expects

The expectations above aren't outrageous demands. They're reasonable preferences for learning design that, as we'll see, align well with learning science principles. Yet traditional L&D infrastructure struggles to deliver on every dimension. Why?

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

Structural Constraint 1: The Episodic Training Model

Most organizational L&D operates on an episodic model: identify a learning need, design training to address it, schedule delivery, train a cohort, measure completion, repeat. This model was optimized for an era when:

- Skills changed slowly enough that periodic training could keep pace
- Training required bringing people together physically, making frequent sessions impractical
- Content development was expensive and time-consuming, requiring batching
- Evaluation focused on completion and satisfaction rather than application

This episodic approach structurally cannot provide the continuous, integrated, immediately-accessible learning that Gen Z expects. By the time training is scheduled, content may be outdated. By the time learners complete training and return to work, much will be forgotten before application. Feedback comes infrequently from periodic assessments rather than continuously from practice.

The alternative Gen Z expects—continuous learning embedded in workflow—requires completely different infrastructure: content libraries optimized for just-in-time access, practice environments enabling immediate application, feedback mechanisms built into work tools, and assessment systems measuring demonstrated capability rather than course completion.

Structural Constraint 2: The Knowledge Transfer Model

Traditional training often operates on a knowledge transfer model: experts possess knowledge, training transfers that knowledge to learners, learners can then apply knowledge in their work. This model works reasonably well for explicit, declarative knowledge but poorly for complex skills requiring judgment, adaptation, and tacit understanding.

Gen Z's expectations—immediate feedback, gamified practice, application integration—implicitly assume a deliberate practice model rather than knowledge transfer. Skills develop through repeated practice with feedback, not through information transfer. The knowledge transfer model structurally cannot provide the practice volume, feedback density, and application integration that effective skill development requires.

Organizations still operating primarily on knowledge transfer models—lectures, presentations, e-learning modules focused on content coverage—will struggle to meet Gen Z learning expectations because the underlying model is wrong, not just the delivery format.

Structural Constraint 3: One-Size-Fits-All Delivery

Traditional training achieves scale through standardization: develop content once, deliver to cohorts, minimize customization. This made economic sense when content development was expensive and when delivering customized learning required one-on-one instruction.

Gen Z expects personalized learning pathways adapted to their current skill level, learning pace, and development goals—expectations shaped by consumer technology that personalizes everything from social media feeds to music recommendations to shopping suggestions.

Research on adaptive learning systems demonstrates that personalized instruction calibrated to individual skill level produces significantly better outcomes than one-size-fits-all instruction, particularly for

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

complex skills where learners enter with varied prior knowledge. But delivering personalized learning at organizational scale requires technology infrastructure most organizations haven't built.

Structural Constraint 4: Delayed Feedback Cycles

Perhaps the most fundamental mismatch: traditional performance management and learning feedback operate on cycles measured in months (quarterly reviews, annual assessments, periodic training follow-ups). Gen Z expects feedback measured in seconds or minutes.

This isn't bridgeable through incremental improvement. A manager cannot observe and provide feedback on every employee action in real-time—human observation bandwidth is fundamentally limited. Closing this gap requires technology-mediated feedback systems that can provide immediate, granular, continuous feedback at scale.

Organizations without this technology infrastructure cannot deliver the feedback density Gen Z expects and that learning science validates as optimal for skill development.

Structural Constraint 5: Credential-Focused Validation

Traditional L&D validates learning primarily through completion credentials: certificates showing someone attended training, passed assessments, or completed programs. These credentials serve important functions—signaling commitment, maintaining professional standards, providing transferable evidence of education.

But Gen Z is skeptical of credentials disconnected from demonstrated capability, preferring portfolio-based evidence, work samples, and verified performance records. They want to show what they can do, not just what courses they've completed.

Most organizations lack infrastructure for capturing, verifying, and making portable the demonstrated capability evidence Gen Z values. Internal projects don't automatically generate shareable work samples. Assessment data sits in closed HR systems rather than worker-controlled portfolios. Skill demonstrations happen informally without systematic verification.

Building this infrastructure—portable, verifiable records of demonstrated capability—requires investment and standardization that hasn't yet occurred at scale.

Evidence-Based Responses: Meeting Gen Z Expectations Through Learning Science

The encouraging finding: Gen Z learning expectations, rather than being generational quirks requiring accommodation, align remarkably well with learning science principles that predict effective skill development for all learners.

Principle 1: Immediate Feedback Enhances Learning

Research on feedback timing consistently demonstrates that immediate feedback produces better learning outcomes than delayed feedback (Hattie & Timperley, 2007; Shute, 2008). The mechanism is well understood: immediate feedback enables learners to connect actions with outcomes while both remain in working memory, supporting causal attribution and behavioral adjustment.

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

Studies examining feedback delay in skill acquisition find that even moderate delays (24-48 hours) significantly reduce learning effectiveness compared to immediate feedback, particularly for complex motor and cognitive skills.

Gen Z's expectation for immediate feedback isn't a preference for instant gratification—it reflects valid learning science. Organizations that provide immediate feedback will see better skill development across all workers, not just Gen Z.

Principle 2: Spaced Repetition and Retrieval Practice Enhance Retention

Learning science research demonstrates that spaced repetition (practicing the same skill multiple times with increasing intervals) and retrieval practice (actively recalling information rather than passively reviewing) produce significantly better long-term retention than massed practice or passive review (Roediger & Karpicke, 2006).

Well-designed games implement both principles naturally: players repeatedly practice skills across varied contexts (spaced repetition), and gameplay requires active recall and application rather than passive consumption (retrieval practice).

Gen Z's preference for game-like learning aligns with evidence-based learning design. Organizations that build spaced repetition and retrieval practice into learning experiences—which game-like designs naturally encourage—will see better retention and transfer.

Principle 3: Deliberate Practice in Authentic Contexts Builds Transferable Skills

Research on expertise development, particularly Ericsson's work on deliberate practice (Ericsson et al., 1993), establishes that skill mastery requires focused practice with immediate feedback on performance, typically requiring thousands of hours. Critically, practice must occur in contexts approximating authentic application for skills to transfer. Practice under artificial conditions produces skills that don't generalize to real-world performance. This is why simulation-based medical training, which enables practice in realistic clinical contexts, produces better skill transfer than lecture-based instruction.

Gen Z's expectation for learning integrated with application reflects this principle. They want to practice skills in realistic contexts rather than abstract training environments, which learning science validates as superior for transfer.

Principle 4: Intrinsic Motivation Produces Better Learning Than Extrinsic Rewards

Self-determination theory and related motivation research demonstrates that intrinsic motivation—engagement driven by inherent interest, mastery satisfaction, or purpose alignment—produces better learning outcomes and persistence than extrinsic motivation through rewards or punishments (Deci & Ryan, 2000; Ryan & Deci, 2000).

Research on gamification distinguishes between designs that support intrinsic motivation (autonomy, mastery, purpose) and those that rely on extrinsic rewards (points, badges, leaderboards). The former produce sustained engagement and better learning; the latter produce short-term compliance that often undermines intrinsic motivation (Hamari et al., 2014; Zichermann & Cunningham, 2011).

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

Gen Z's preference for meaningful work connection and their skepticism toward superficial gamification reflect sophisticated intuition about motivation. They respond to learning that feels intrinsically valuable, not extrinsic rewards for compliance.

Principle 5: Personalized Learning Paths Optimize Efficiency

Adaptive learning research demonstrates that instruction calibrated to individual skill level—challenging but not overwhelming—produces better outcomes than one-size-fits-all instruction that is either too easy (boring for advanced learners) or too difficult (frustrating for beginners).

Meta-analyses of adaptive and intelligent tutoring systems find moderate to large positive effects compared to traditional instruction (VanLehn, 2011), with benefits particularly pronounced for learners at the tails of the skill distribution who benefit most from personalization.

Gen Z's expectation for personalized learning pathways isn't entitlement—it reflects valid recognition that standardized instruction serves no one optimally.

The Pattern: Gen Z as Proxy for Effective Learning Design

The pattern across these principles is striking: what Gen Z expects from learning aligns closely with what learning science says actually works. Their expectations aren't generational preferences requiring accommodation—they're sophisticated intuitions about effective learning design shaped by formative experiences with well-designed consumer learning technologies.

Organizations that meet Gen Z expectations aren't just accommodating generational preferences. They're implementing evidence-based learning design that improves outcomes for all workers.

Organizational Responses: Building Gen Z-Compatible (and Evidence-Based) L&D

How can organizations redesign L&D to meet Gen Z expectations while implementing learning science principles? Several approaches are emerging.

Response 1: Build Continuous Learning Ecosystems, Not Episodic Training Programs

The highest-leverage shift: move from episodic training programs to continuous learning ecosystems where learning resources, practice environments, feedback mechanisms, and capability validation are available continuously rather than scheduled periodically.

This doesn't mean eliminating structured programs—it means embedding them within broader learning infrastructure accessible daily rather than treating programs as complete learning experiences.

What This Looks Like:

Degreed, Guild Education, and similar platforms enable organizations to build continuous learning ecosystems: content libraries with resources from multiple providers; personalized learning pathways adapted to role and skill level; integration with work tools enabling just-in-time access; assessment and verification mechanisms measuring demonstrated capability; and career pathing tools connecting skill development to advancement opportunities.

LinkedIn Learning's integration with talent systems enables similar continuous access: employees access learning resources when needs arise, complete modules in small increments rather than dedicated

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

training time, and skills developed through learning automatically update talent profiles visible to internal hiring managers.

Amazon's Career Choice program provides continuous education funding and transparent pathways from hourly warehouse roles to professional positions, with learning happening continuously alongside work rather than requiring workers to leave jobs for education.

The common pattern: learning infrastructure that's always available rather than episodically scheduled, enabling the just-in-time, self-directed, continuous access Gen Z expects.

Response 2: Implement AI-Powered Feedback Systems Enabling Real-Time Capability Development

Gen Z's expectation for immediate, granular feedback requires technology enablement—human feedback cannot achieve necessary density. Organizations are implementing AI-powered feedback systems across multiple domains:

- *Communication skills:* Tools like Yoodli, Poised, and Rehearsal analyze video or audio of presentations, meetings, and conversations, providing real-time feedback on clarity, pacing, confidence indicators, and content structure.
- *Technical skills:* Code review automation, data analysis validation tools, and design critique systems provide immediate feedback on technical work quality.
- *Customer interaction:* Conversational AI platforms analyze sales calls, customer service interactions, and client meetings, identifying successful patterns and improvement opportunities.
- *Leadership behaviors:* Some organizations experiment with "digital observer" systems that analyze meeting facilitation, delegation patterns, and team communication, providing feedback on leadership behaviors that traditionally required executive coaching.

The technology doesn't replace human feedback—it complements it by providing volume, consistency, and immediacy that human observation cannot match.

Response 3: Shift from Content Completion to Demonstrated Capability as Primary Metric

Rather than measuring learning through course completions and time-in-training, organizations are measuring demonstrated capability through performance assessments, work samples, and verified skill demonstrations.

What This Requires:

- *Performance-based assessment infrastructure:* Rather than quizzes testing knowledge recall, assessments require demonstrating skills in realistic scenarios. A leadership assessment might require facilitating an actual team meeting rather than answering questions about facilitation techniques.
- *Work sample portfolios:* Systems enabling workers to capture and share evidence of their best work, creating portable demonstrations of capability more convincing than completion certificates.
- *Skills verification mechanisms:* Third-party validation of claimed capabilities through observed performance, peer review, or automated assessment, creating trusted capability records.
- *Transparent skills taxonomies:* Clear definitions of what skills mean and what demonstration looks like at different proficiency levels, enabling consistent assessment and portable skills language.

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

Several organizations are building this infrastructure:

FSU's verified outcomes approach uses immersive 3D simulations where learners demonstrate capabilities through realistic workplace scenarios, generating cryptographically verified records of demonstrated performance that learners control and can share with potential employers.

IBM's skills-first talent systems prioritize verified skills over credentials in hiring and internal mobility decisions, creating demand for demonstrated capability evidence.

Professional certification bodies increasingly supplement written exams with performance assessments requiring actual skill demonstration rather than knowledge recall.

The shift from "completed training on X" to "demonstrated capability in X" aligns with Gen Z's preference for portfolio-based evidence while implementing better assessment validity.

Response 4: Design for Intrinsic Motivation Through Meaningful Challenge, Not Extrinsic Rewards

Rather than adding points and badges to unchanged training (structural gamification), organizations are redesigning learning experiences to be intrinsically engaging through meaningful challenge, progressive difficulty, immediate feedback, and transparent progression (content gamification).

Design Principles That Work:

- *Clear, achievable goals:* Learning objectives are specific and proximal rather than vague and distant. Not "develop leadership skills" but "by the end of this week, facilitate a team meeting where everyone contributes ideas."
- *Challenge calibrated to skill level:* Practice environments adapt difficulty based on demonstrated capability, maintaining optimal challenge that's neither boring nor overwhelming (Csikszentmihalyi, 1990).
- *Immediate, specific feedback:* Learners see immediately whether approaches worked and receive specific guidance on improvement, not delayed generic feedback.
- *Visible progress:* Learning systems show skill development explicitly, helping learners see growth that might otherwise feel gradual and invisible.
- *Meaningful application:* Skills clearly connect to work that matters—either job performance or personal goals learners care about.

PwC's Digital Fitness program implements these principles: employees develop digital skills through realistic business scenarios requiring application, receive immediate feedback on decisions, see explicit skill development, and can immediately apply capabilities to actual work projects. Engagement comes from the challenge and skill development, not from badges for completion.

Response 5: Build Transparent Career Pathways Connecting Skill Development to Advancement

Gen Z's expectation for transparent progression requires organizations to make explicit the skills required for different roles and how skill development connects to opportunities.

Implementation Approaches:

- *Published capability frameworks:* Explicit documentation of skills required at each level with behavioral indicators showing what demonstration looks like. Rather than "demonstrate strategic

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

thinking," specific behaviors like "identifies second and third-order effects of proposed decisions" and "synthesizes data from multiple sources to identify patterns."

- *Skills-based internal mobility:* Internal job postings focused on required capabilities rather than experience or credentials, with clear pathways showing how current workers could develop needed skills.
- *Personalized development planning:* Tools showing individuals their current skills, adjacent capabilities buildable through focused development, and roles accessible at different skill levels with specific learning pathways to bridge gaps.
- *Transparent promotion criteria:* Clear articulation of what distinguishes performance at different levels, enabling workers to self-assess readiness and target specific development areas rather than wondering what's required.

Walmart's Live Better U program exemplifies this approach: clear pathways from hourly roles to professional positions, explicit skills required at each level, free education and training to develop those skills, and transparent application processes for advancement. Workers can see exactly how skill development translates to opportunity.

Individual Responses: Gen Z Workers Navigating L&D That Doesn't Meet Their Expectations

For Gen Z workers in organizations where L&D hasn't yet evolved, several strategies can help navigate the gap:

Strategy 1: Build Your Own Learning Ecosystem

Don't wait for organizational learning to meet your expectations—build personal learning infrastructure using freely available resources:

- *Curate learning resources:* Identify high-quality YouTube channels, podcasts, blogs, and online courses in your domain. Build personal learning libraries optimized for just-in-time access.
- *Join professional communities:* Engage with communities of practice through Reddit, Discord, professional associations, or industry-specific forums where practitioners share knowledge and solve problems collectively.
- *Seek project-based learning:* Volunteer for stretch assignments, side projects, or cross-functional initiatives providing practice in realistic contexts rather than waiting for training.
- *Find mentors and coaches:* Seek relationships with more experienced practitioners willing to provide the immediate, specific feedback organizational systems don't offer.

The autonomy Gen Z values includes taking ownership of personal development rather than depending exclusively on employer-provided learning.

Strategy 2: Demonstrate Capability Through Public Work

Build portable evidence of capability independent of organizational validation:

- *Maintain work portfolios:* Document your best work (appropriately respecting confidentiality) in portfolio format showcasing actual capability rather than credential lists.
- *Contribute to open source:* For technical workers, open-source contributions provide verified evidence of capability visible to anyone.

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

- *Write, present, teach:* Share knowledge through blog posts, conference presentations, tutorials, or mentorship. Teaching demonstrates mastery while building public evidence of expertise.
- *Build side projects:* Create things—apps, analyses, content, solutions to real problems—generating tangible demonstrations of capability.

This strategy addresses Gen Z's preference for demonstrated capability over credentials while building career insurance portable across employers.

Strategy 3: Advocate for Better Learning Infrastructure

Use voice to push organizations toward more effective learning design:

- *Provide specific feedback:* Rather than simply criticizing training, provide concrete suggestions: "This would be more valuable with immediate practice opportunities and feedback" or "Can we access this content just-in-time when we need it rather than in scheduled sessions?"
- *Share what works:* When you find external learning resources, platforms, or approaches that work well, share them with managers and L&D teams as examples of effective design.
- *Connect with like-minded colleagues:* Build coalitions of workers who share learning expectations, creating critical mass for organizational change.
- *Engage constructively:* Frame feedback as helping the organization improve effectiveness rather than complaining about inadequacy. Organizations respond better to "here's evidence this approach works better" than to "your training is boring."

Gen Z's willingness to provide direct feedback represents potential advantage if channeled constructively toward system improvement.

Strategy 4: Prioritize Learning Velocity and Agility Over Accumulated Expertise

In an era where skill half-lives are shrinking (Bersin, 2023; World Economic Forum, 2025), prioritize developing strong learning velocity—the ability to learn quickly—over accumulating deep expertise in rapidly evolving domains:

- *Practice learning new things:* Regularly push yourself to learn unfamiliar skills, building confidence and capacity for rapid skill acquisition.
- *Develop meta-skills:* Focus on capabilities that transfer across domains—learning agility, problem decomposition, communication effectiveness, collaboration capacity—rather than exclusively domain-specific technical skills.
- *Build learning habits:* Establish regular practices of reading, practice, reflection, and skill development rather than relying exclusively on formal training.
- *Track your learning:* Maintain records of what you've learned and how quickly you acquired capabilities, building self-awareness about your learning velocity and areas for improvement.

This strategy acknowledges that sustained career success may depend less on what you currently know and more on how quickly you can learn what you'll need next.

Strategy 5: Evaluate Employers Partly on Learning Infrastructure

When choosing employers or deciding whether to stay, evaluate organizational learning infrastructure as strategic factor:

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

- *During interviews, ask:* What learning resources are available? How do employees develop new capabilities? Can you share examples of employees who developed significantly new skills? What feedback mechanisms exist for skill development?
- *Observe during onboarding:* High-quality learning infrastructure usually appears immediately through structured onboarding, clear development pathways, and available resources.
- *Assess development culture:* Do managers provide regular, specific feedback? Are employees encouraged to experiment and learn from failure (Edmondson, 2018)? Is development explicitly valued rather than just rhetorically supported?
- *Weight learning in retention decisions:* When considering whether to stay with an employer, factor in learning velocity and skill development alongside compensation and other factors. Organizations that can't help you develop capabilities may not be worth staying with regardless of pay.

Gen Z's willingness to prioritize learning and development represents appropriate response to accelerating skill obsolescence—making employer learning infrastructure a legitimate selection criterion.

Looking Forward: Gen Z as Canary in the Coal Mine

Gen Z's learning expectations represent more than generational preferences requiring accommodation. They're advance indicators of what all workers will increasingly expect as:

- Consumer technology continues demonstrating that learning can be engaging, personalized, and immediately applicable
- Skill obsolescence accelerates, making continuous learning non-optional for career sustainability
- Technology enables feedback density and personalization previously impossible at scale
- Competition for talent intensifies, making learning infrastructure a differentiator in talent attraction and retention

Research on generational workplace preferences finds that Gen Z expectations often predict broader workforce trends: preferences initially labeled "millennial" or "Gen Z" quirks often become mainstream expectations within 5-10 years as younger workers' formative experiences reshape general expectations.

Organizations dismissing Gen Z learning expectations as generational accommodation miss the deeper pattern: these workers' intuitions about effective learning, shaped by well-designed consumer technology, align with learning science principles and anticipate where organizational L&D must evolve.

The organizations that meet Gen Z expectations now—through continuous learning ecosystems, AI-enabled feedback, demonstrated capability assessment, intrinsic motivation design, and transparent progression systems—aren't accommodating generational preferences. They're building learning infrastructure that will become table stakes for competing effectively in an economy where workforce adaptability represents core competitive capability.

The question isn't whether to meet Gen Z learning expectations. It's whether your organization will build next-generation learning infrastructure while it remains competitive advantage, or wait until it becomes survival requirement.

Conflict of Interest Disclosure: The author is Co-Founder and Chief Academic & Learning Officer of Future State University, whose verified outcomes approach is discussed in this article.

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

References

Bersin, J. (2023). The skills crisis is here, and it's not going away. *MIT Sloan Management Review, 64*(3), 1–6.

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. Harper & Row.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227–268.

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining "gamification." In *Proceedings of the 15th International Academic MindTrek Conference* (pp. 9–15). Association for Computing Machinery.

Dimock, M. (2019). Defining generations: Where Millennials end and Generation Z begins. *Pew Research Center*.

Edmondson, A. C. (2018). *The fearless organization: Creating psychological safety in the workplace for learning, innovation, and* growth. *Wiley*.

Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review, 100*(3), 363–406.

Gee, J. P. (2007). *What video games have to teach us about learning and literacy* (2nd ed.). Palgrave Macmillan.

Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does gamification work? A literature review of empirical studies on gamification. In *Proceedings of the 47th Hawaii International Conference on System Sciences* (pp. 3025–3034). IEEE.

Hart, J. (2023). *Modern workplace learning 2023*. Centre for Learning & Performance Technologies.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research, 77*(1), 81–112.

Kapp, K. M. (2012). *The gamification of learning and instruction: Game-based methods and strategies for training and education*. Pfeiffer.

Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist, 41*(2), 75–86.

McGonigal, J. (2011). *Reality is broken: Why games make us better and how they can change the world*. Penguin Press.

Meister, J. (2013, January 16). How Deloitte made learning a game. *Harvard Business Review*.

Pearson. (2018). *Beyond millennials: The next generation of learners*. Pearson.

Pew Research Center. (2024). *Gen Z and the future of work*. Pew Research Center.

Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon, 9*(5), 1–6.

Roediger, H. L., & Karpicke, J. D. (2006). Test-enhanced learning: Taking memory tests improves long-term retention. *Psychological* Science, 17*(3), 249–255*.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68–78.

Salas, E., Tannenbaum, S. I., Kraiger, K., & Smith-Jentsch, K. A. (2012). The science of training and development in organizations: What matters in practice. *Psychological Science in the Public Interest, 13*(2), 74–101.

Schell, J. (2008). *The art of game design: A book of lenses*. CRC Press.

Seemiller, C., & Grace, M. (2019). *Generation Z: A century in the making*. Routledge.

Shute, V. J. (2008). Focus on formative feedback. *Review of Educational Research, 78*(1), 153–189.

Twenge, J. M. (2017). *iGen: Why today's super-connected kids are growing up less rebellious, more tolerant, less happy—and* completely unprepared for adulthood. *Atria Books*.

 © 2026 HCI Academic Press

eISSN: 3143-8148 (online) doi.org/10.70175/futureofworkjournal.2026

VanLehn, K. (2011). The relative effectiveness of human tutoring, intelligent tutoring systems, and other tutoring systems. *Educational Psychologist, 46*(4), 197–221.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

World Economic Forum. (2025). *Future of jobs report 2025*. World Economic Forum.

Zichermann, G., & Cunningham, C. (2011). *Gamification by design: Implementing game mechanics in web and mobile apps*. O'Reilly Media.

 © 2026 HCI Academic Press