Introduction

The Digital Learning Consortium brings together many of the world’s largest firms, most innovative platform providers, and top academic institutions in order to strengthen the digital learning ecosystem for professionals. In the spring and summer of 2018, we surveyed over 5,000 learners spanning 5 generations, from 114 countries in 15 professional fields.

Our questions probed professionals’ preferences across a specific set of digital learning issues covering the importance of delivery mode and satisfaction with learning experiences, along with motivators for workplace learning. We also surveyed learning technology features and learner demographics. To maximize responses, we used a snowball sampling method of email and social media, explaining through email and social media channels that participants could share their voice to shape the future of learning. DLC member organizations sent email to our employees, while DLC member organizations and individuals created social media posts to recruit more respondents. Two caveats to keep in mind: first, the snowball sampling method invites participant bias, in that respondents from our professional networks may tend to hail from similar backgrounds as our own. Second, because we couldn’t know the total number of people seeing our own request to complete the survey, we couldn’t calculate a response rate.

During the past few years, learning technologists and instructional experts have proposed plentiful, sometimes contradictory answers to our questions. Discussion has been fruitful. Now, to help focus future directions for digital learning on the people who consume it, the Digital Learning Consortium adds the Voice of the Learner.

Following are the summarized findings from our survey’s global traverse. These findings are generalizations; when we say “Learners want…” or “Learners dislike…” we are sharing majority opinions, not universal consensus. Some findings are different than some readers might hope or expect. But they can help us make better choices as we map out the future of digital learning.
Respondents were from 114 countries, with the U.S. (n=1589), India (n=904), and the UK (n=353) providing the largest numbers of responses. Other countries with more than 100 respondents were Argentina, Brazil, China, Mexico, Colombia, Japan, Germany, Canada, Italy, and Peru.
Technology Adoption

- 36% - "I use new technology before most people"
- 13% - "I eventually use new technology, but most people use it before I do"
- 9% - "I actively use the newest technology before anyone else I know"
- 3% - "I avoid using new technology unless I need to"

Career Development

- 44% - "I am constantly seeking better opportunities to build my career"
- 22% - "I am comfortable with my current job"
- 19% - "I currently need or want to make a career change"
- 9% - "I have just begun building and developing my professional career"
- 4% - "I tend to be self-employed (e.g. consultant, freelancer)"
- 2% - Other

Who shared their voice?

- Employees: 36%
- Managers: 13%

Primary Profession

- IT: 24%
- HR: 13%
- General: 11%
- Consulting: 9%
- Others, including Project Management, IT Architecture, Development Engineering, Finance, Sales, Other Engineer, Communications, Marketing, Research, Legal, Product Management: 43%

Primary Role

- Employees: 76%
- Managers: 13%
- Others, including Freelancers and Students: 9%

Additional insights about the survey respondents:

36% - "I use technology around the time most people do"
3% - "I avoid using new technology unless I need to"
11% - "I have just begun building and developing my professional career"
4% - "I tend to be self-employed (e.g. consultant, freelancer)"
2% - Other
Digital learning specialists envision an AI “learning companion” that observes factors in the context of the job role and a company’s business strategy, potentially including a person’s learning activities, social postings, physiological readiness, and performance evaluations. It would identify skill gaps, then recommend and deliver precisely selected learning activities to help fill those gaps. Although a solid majority of learners are open to this concept (including late adopters of technology), some worry about how others (such as their managers) might use the AI’s findings when making assignments or during coaching and performance evaluation.

**THE PATH FORWARD**

We recommend investing in AI that provides highly personalized learning recommendations within a unified learning experience, based on each learner’s skill gaps, interests, online behaviors, lifestyle, career path, and professional passions. Does this person prefer audiobook recommendations on Monday mornings at 6 am (just in time for a long commute)? Micro-learning videos on Wednesday evenings at 8 pm (while doing laundry)? The promise of AI is to fully tailor the experience to help learners fit learning into the flow of work and into the flow of life. Even so, it remains the responsibility of the learning creator to ensure that learning is delivered through subject-appropriate media (you can’t teach tennis with a white paper) with content mapped to job roles, so that learners can trust that AI recommendations will actually produce the promised learning outcomes. Furthermore, sharing should be on an opt-in basis so that, for example, this technology would not report errors, gaps, or interests that might signal a confidential career search. And the AI should not make recommendations so focused on skill gaps in a current or projected job role that it fails to feed other perhaps divergent areas of a person’s passion or future professional growth. Any of these failings could sink learner motivation rather than enhance it.
More than two-thirds of learners desire powerful viewable, shareable learning records that travel with them throughout their career. However, many would prefer to control access to their own records.

In line with the DLC’s “Skills Wallet” work, we recommend developing and broadly promulgating an advancement of Learning Record Store standards. The more advanced standards would enable learners to capture, store, and share the records of their own learning experiences. Individual records should belong to the learner, and should be readable as supercharged resumés or LinkedIn profiles that the learner could transfer seamlessly across job roles, industries, and geographies.
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Learner preferences reveal a need for efficient, targeted learning. They value having learning reached through a single, unified portal that offers personalized recommendations that help them fill knowledge and skill gaps. They also value mobile learning across devices and offline learning that synchronizes across their devices. However, they are less interested in synchronous learning, in seeing the speaker online, or in virtual reality applied to professional learning.

THE PATH FORWARD →

The design of digital learning experiences must, of course, start with knowledge transfer or skill-building delivered through effective methods and media. But that design should also reflect an empathy for learners. Starved for time, they value ways that learning can provide the promised results quickly and efficiently, through multiple and mobile devices when appropriate. People also want coherent learning search and comprehensive sourcing. So we recommend investment in a next-generation, AI-powered learning catalog that would provide personalized search with unified access to the best-in-class methods for instructional and social online learning.
Learners most value online courses, digital reading, then video.

The time people spend learning in various modes tracks with the importance of those modes. Online courses achieve the highest mean importance, with digital reading in second but leading the way in time spent. Video is a close third on mean importance, with audio and webcasts much lower. Audio and webcasting also had the lowest satisfaction scores, however, the gap between importance and satisfaction was largest for digital reading and online courses, indicating the greatest opportunity for improvement.

THE PATH FORWARD →
Companies should reduce their use of webcasts for training, except when short in duration and explicitly focused on updates and policy announcements. Although webcasts are inexpensive and easy to generate on short notice, at their worst, they earn little respect and deliver scant skills transfer. In comparison, media that please the learning population are also more likely to provide learning in proportion with their cost and production time. For these we offer three recommendations.

01. We should consult with instructional designers as to which modes are more effective at skills transfer, behavior change, or both. Online courses that provide opportunities to practice skills are likely to be more effective than digital reading for skill building, even if this method is not a learner’s preferred learning mode.

02. Learning technologists should ensure that our online learning delivery mechanisms support active learning such as simulations and related formats that provide skill-building practice.

03. User experience designers and software interface specialists should improve the digital learning experience to both ease use and bolster the variety of available activity types.

MODES & MEDIA

Digital Reading
1.6 hours/week
Mean importance: 3.5

Online Courses
1.4 hours/week
Mean importance: 3.6

Video
1.2 hours/week
Mean importance: 3.4

Webcasts
0.6 hours/week
Mean importance: 2.8

Audio
1.0 hours/week
Mean importance: 2.9

Total
5.8 hours/week
Whether reading or online, people prefer solo learning to group learning. The majority of people prefer to engage with digital learning alone. Still, a majority also recognize the value of social learning in agreeing that peer interaction adds value to their learning. Among group sizes, small groups of 3 - 6 people are most preferred and learning in pairs, least preferred.

The Path Forward

How can technologists and designers convince the 30 percent of respondents who don’t value peer interaction that it does have significant value? By making digital collaborative learning experiences more engaging and the learning outcomes of collaboration more tangible so that learner satisfaction and impact will increase. Compared with asynchronous, written discussion, live video and Augmented Reality/Virtual Reality can offer more immersive learning experiences. We also believe small group coaching or self-directed learning cohorts can reinforce skill-building, resulting in learning that sticks and is useful when applied to work.
Microlearning doesn’t resonate with most learners

Learners fit learning into their busy days in different ways. 20% rely on just-in-time learning on the job with quick videos, 9% learning during a commute, and 37% learning in the evenings and weekends. When asked what type of learning they perceive as “most effective,” Microlearning, in 1- to 3-minute segments, is not their top pick. Half the learners surveyed believe sessions that last from 20 to 45 minutes, made up of shorter activities such as reading, viewing video, exploring simulations, etc. Longer courses such as Massive Open Online Courses and university offerings would also be productive if units are portioned accordingly. Microlearning is most effective in just-in-time performance support and help files that are easily accessed and consumed during the flow of work.

THE PATH FORWARD →

Since actual knowledge and skill acquisition and perceived effectiveness can be different, we recommend a mix of learning options. These can be organized into learning experiences that total 20 to 45 minutes, made up of shorter activities.

Learning dose preference by percentage of respondents:

- Small (5-10 min): 9%
- Medium (20-45 min): 51%
- Large (1-2 hrs): 24%
- 10%, duration doesn’t matter; 4%, XL doses of >1 day; 2%, other write-in amounts.

NEW TECHNOLOGIES
Learners are motivated when they clearly see a link between learning, and their current or future role and responsibilities, and also by a culture of learning and credential prestige.

What leads people to consume more learning? Most respondents—over 70%—are most motivated to learn when they see a link between learning and their current or future job role. They are also motivated by credential prestige from a prestigious university (63%) or corporation (58%). They are less motivated by others recommending (37%) or completing (27%) learning, which is contrary to the popular focus on gamification and social learning. In short, they respond eagerly to opportunities embedded within a culture that embraces learning, to learning from a prestigious organization or, to a lesser extent, to the prospect of an opportunity interview.

We recommend linking learning to current or aspirational roles, and curating content to form a learning path that is easy to follow. We also recommend nurturing an organization’s culture of learning, supported by recognition, digital credentials, awards, and potential advancement through interviews and recommendations. This culture can be enhanced by association with an outside, prestigious institution, particularly if that entity offers certification. While stars and similar user-rating systems can be part of that culture, they are not sufficiently beneficial to warrant a continued large software investment.
We should consider carefully what these findings tell us and what they do not. This survey did not explore areas such as adaptive learning, practice and interactivity in learning, assessments and skill measurement, mobile learning reinforcement, learning in the flow of work, or the specific learning needs of different functional areas—such as IT and Sales—that might reveal different insights.

Our survey did measure some areas of learner preference, but decades of research remind us that positive preferences do not always correlate with skills transfer or behavior change. We should consider providing something preferred when it suits the learning goal, in order to enhance learner delight in our offerings. But if outcomes are best when delight isn’t at its peak, then outcomes should lead the instructional design.

On the other hand, learner dislikes can be useful red flags indicating problems we should address. In any case, learner preferences don’t reliably tell us what people will actually learn, though they can suggest a willingness to enroll.

By careful consideration of both ends of the rating scale, we can better determine what to enhance, what to fix, and where to invest our resources as we prepare for the future of digital learning.