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COMMENTARY

Self-regulated learning: A person-centric approach to training

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Beier and colleagues (2025) "call for . . . a person-centered perspective on workplace learning," proposing that industrial and organizational (I-O) psychologists have "primarily ignored self-directed, work-related learning" and "tended to take an organization-centered perspective on training and development" (p. 2). These arguments overlook over a century of research on self-regulated learning, defined as the modulation of affective, cognitive, and behavioral processes until reaching a desired level of achievement (Karoly, 1993; Sitzmann & Ely, 2011). We begin with a broad overview of self-regulated learning, including the utility of interventions to promote self-regulated learning. We conclude by illuminating how artificial intelligence (AI) may further shift the landscape from organization-centric to person-centric learning.

Prominent I-O psychologists have made significant advancements toward deriving person-centric learning theories, focusing on how employees engage in self-regulated learning to attain a competitive advantage in their chosen career paths. Although decades of scholarship cannot be condensed to a few paragraphs, we know that self-regulation varies at both the within- and between-person levels (Sitzmann & Weinhardt, 2018; Vancouver & Kendall, 2006). At the within-person level, employees establish learning goals, create a plan, direct effort toward learning, regulate affect, seek feedback on goal progress, learn from errors, and gauge their efficacy for learning, eventually leading to goal attainment or goal abandonment (Bandura, 1977; Carver & Scheier, 1990; Frese & Zapf, 1994; Kanfer & Ackerman, 1989; Locke & Latham, 1990, 2002). At the between-person level, "people's ability to self-regulate may be their most essential asset" (Porath & Bateman, 2006, p. 185), accounting for 17% of the variance in learning after controlling for cognitive ability and pretraining knowledge (Sitzmann & Ely, 2011).

Although self-regulated learning is person-centric, interventions effectively nudge employees toward more fruitful learning techniques. Setting learning goals enhances learning and performance by initiating self-regulation (Açıkgöz & Latham, 2022; Locke & Latham, 2019). Error management training encourages employees to learn from errors, increasing learning and training transfer (Keith & Frese, 2008). Prompting employees to question their current knowledge and knowledge gaps also increases learning and the probability that employees will attain learning goals (Sitzmann & Ely, 2010; Sitzmann et al., 2009). Moreover, adaptive guidance through scaffolding and cues enhances learning (Bell & Kozlowski, 2002). Teaching employees to self-regulate their learning may be more effective than formal training because most workplace learning occurs informally (Wolfson et al., 2019). Importantly, each of these interventions aims to increase the capacity of individuals, whereas organization-centric learning focuses on enhancing organizations' human capital to benefit the corporation (Beier et al., 2025).

Notably, the underlying motivation for self-regulation is inherently driven by employees, representing a foundational shift from the organization-centric approach to learning, where "the

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motivation . . . is often to improve organizations rather than serving individual learners" (Beier et al., 2025, p. 4). Indeed, self-regulated learning enables employees—"whether self-employed, affiliated with an organization, or looking for work"—to "engage in continuous learning to remain productive, employed, and employable" (Beier et al., 2025, p. 4). Thus, self-regulation scholars have already advanced understanding of many of the knowledge gaps identified by Beier and colleagues.

We argue that advances in AI may further the shift from formal to informal learning, rendering the organizational approach to training increasingly obsolete. The organizational approach to training relies on a formal needs assessment, trainers who create and deliver material, and a series of courses for each employee. This approach is antiquated, cumbersome, and may become unnecessary with technological advances. AI is developing the potential to listen to conversations, observe employees' performance at work, and intervene just in time (Fitria, 2021), reducing the need for traditional needs assessment and content creation. AI is also capable of understanding employees' skill development needs and designing personalized learning plans. For instance, Accenture's product, Solutions.AI, is a modular AI software that helps clients identify outdated and emerging skills based on data (Accenture, 2024). Via skill mapping, Solutions.AI can create personalized, trackable learning plans; generate learning content; and help employees meet their career goals. When workers decide to adjust their career trajectory, AI can also provide lessons customized to workers' interests. For instance, AI can transform the lyrics from a Taylor Swift song to enable workers to memorize concepts for the real estate brokerage licensure exam (Price, 2024). Ultimately, AI is reducing the need to train all employees with the same materials and entrusting employees to decide on the most fruitful path for learning.

We propose that a hybrid AI/self-regulated learning model will accelerate the shift away from organization-centric training to providing real-time access to critical information during employees' workflows (Castle, 2021). To illustrate, AI can nudge employees to prevent safety violations, minimize diversity and inclusion blunders, and enhance workplace efficiency while employees are empowered to assess the accuracy of AI-generated information. Air Canada is heavily investing in AI to transform their business operations (Castle, 2021). Front-line employees—including gate agents and maintenance teams—are provided with actionable data and authorized to make safety decisions. McDonald's partnered with Google to develop an AI-powered chatbot, *Ask Pickles*, which learns from company manuals and real-time data to answer employees' questions (Desai, 2023; Sirtori-Cortina, 2023). For instance, employees can *Ask Pickles* how to clean the ice cream machine rather than attending organization-led training. Similarly, Walmart developed *My Assistant* for office workers in the U.S. to enable them to focus on more meaningful tasks, outsourcing laborious tasks to AI (e.g., writing initial drafts and condensing lengthy documents) and inspiring creativity through topic-based thought starters (Fried, 2023; Morris & Ainoa, 2023; Walmart, 2024). Rather than attending training to learn mundane tasks, employees manage "tasks that are distinctly human, like generating new ideas, crafting strategy and building relationships" (Walmart, 2024, para. 4). Simultaneously, many AI tools are available to make writing more inclusive and avoid potentially discriminatory language (Gison, 2024). AI-powered virtual assistants, including Alexa and Siri, can also aid employees with everyday tasks, like setting reminders or searching for information, making work more efficient (Kagan, 2024). With technological advances, knowledge is freely available, empowering employees to invest in skill acquisition or shift careers without requiring costly degrees or organizational training.

Importantly, AI can overcome many of the noted deficiencies with self-regulated learning, including redressing inaccuracies in employees' self-assessed knowledge and nudging employees to learn rather than wasting time. It may also become possible for AI to read employees' emotions to facilitate emotion control and detect overconfidence, which is valuable given that failures in emotion control can mitigate learning from errors and inflated self-efficacy can undermine

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devoting sufficient time to correcting knowledge deficiencies (Keith & Frese, 2005; Vancouver & Kendall, 2006).

Although AI can provide nudges and level the playing field across employees, employees' self-regulation skills will remain an essential asset. To ensure their skills remain up to date, employees must be self-motivated, exert effort without managerial oversight, maintain emotion control, overcome learning deficiencies, and seek help from colleagues to fill skill gaps. Employees who can master the art of self-regulation may be the most essential asset to the workforce as we shift from organization-centric to person-centric learning.

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