Beyond Access: Why Corporate AI Training Requires Systemic Equity, Not Just Opportunity

Abstract: Corporate investments in artificial intelligence (AI) training have increased rapidly, yet most initiatives still depend on voluntary, access-based participation models. While these models are often seen as fair because training is "available to all," emerging evidence shows they consistently reinforce existing workplace inequalities. This position paper argues that access-focused approaches to corporate AI education overlook structural barriers related to time, managerial discretion, information flow, and learning infrastructure. Drawing on recent research in organizational justice, adult learning, workplace education, and digital equity, it critiques the dominant voluntary training model. It shows how it violates principles of distributive and procedural justice. To move beyond superficial inclusion, a four-dimensional equity framework is proposed that highlights resource equity, process equity, outcome equity, and systemic accountability. The paper concludes by urging learning designers, educational technologists, and organizational leaders to view AI literacy as a shared educational responsibility rather than an individual opportunity dependent on privilege.

Keywords: AI education, workplace learning, equity, organizational justice, professional development, digital divide, corporate training

Introduction

Organizations across sectors are investing heavily in artificial intelligence technologies and, in parallel, launching internal AI training initiatives to prepare employees for rapidly changing work environments. Initiatives are typically described in optimistic terms: free, self-paced, flexible, and available to everyone. Corporate communicators present such descriptions as evidence of inclusivity and fairness. Yet research contradicts this narrative. Studies of workplace learning demonstrate that AI training participants are overwhelmingly salaried knowledge workers, while hourly employees, frontline staff, and non-technical workers remain significantly underrepresented (Kyndt et al., 2019; Billett & Choy, 2013).

Organizational leaders typically frame non-participation as individual choice rather than structural constraint, a logic that treats access as equity. Scholars in adult education and digital equity have challenged the access-as-equity paradigm, emphasizing that access alone rarely produces equitable outcomes (Ball et al., 2022; Selwyn, 2020; Czerniewicz et al., 2019; Knox, 2019). Structural barriers that systematically disadvantage certain groups prevent participation, so we cannot attribute non-participation solely to individual motivation. As AI literacy becomes increasingly tied to employability and economic security, this disparity grows more consequential (Organisation for Economic Co-operation and Development [OECD], 2021). Employees who gain AI skills access emerging roles, while those excluded face the risk of displacement. Training inequities, therefore, amplify broader workplace inequalities, determining who benefits from technological transformation and who bears its costs.

This paper challenges the prevailing access-based model of corporate AI training. Drawing on organizational justice theory and recent research in workplace learning and educational technology, it argues that voluntary participation models are structurally inequitable by design. The paper then proposes a systemic equity framework for AI training that repositions responsibility from individual learners to organizations and learning designers. In doing so, it contributes to ongoing EdMedia conversations about equity, learning design, and the social implications of educational technologies.

2. The Dominant Model of Corporate AI Training

2.1 Voluntary Participation as the Norm

Companies across industries typically offer AI training as optional professional development. Program designers frame these initiatives as empowering opportunities that emphasize learner autonomy and self-direction, concepts aligned with classical andragogical principles (Knowles et al., 2014). Employees are invited to enroll in courses, certifications, or learning pathways, often hosted on digital platforms such as Coursera, Udemy, or internal learning management systems.

This approach assumes that motivation, when combined with access, is sufficient to produce participation. However, recent scholarship cautions that autonomy without structural support can exacerbate inequality in workplace contexts characterized by unequal power and resource distribution (Mackaway et al., 2024; Billett &

Choy, 2013). Organizations measure success by tracking aggregate enrollment figures or completion counts rather than equity-oriented indicators such as participation by role, employment status, or demographic group.

2.2 Structural Features of Voluntary Programs

Several structural features consistently shape these programs. Enrollment is usually self-nominated, occasionally supplemented by manager nomination. Time expectations are frequently ambiguous, with training described as flexible but rarely embedded into formal work schedules. Studies of workplace learning show that salaried employees are far more likely to engage in learning during paid work time, while hourly workers are expected to participate outside of paid hours, if at all (Kyndt et al., 2019).

Delivery formats are predominantly online, justified as a means of maximizing accessibility. However, digital education research demonstrates that online delivery may introduce new barriers related to digital literacy, learning confidence, and access to appropriate learning environments (Ball et al., 2022; Van Deursen & Van Dijk, 2019; Selwyn, 2020).

3. Participation Patterns and Invisible Exclusion

3.1 Who Participates in AI Training

Research on workplace learning consistently demonstrates uneven participation patterns in corporate training initiatives. Studies of professional development access show that employees in technical and managerial roles participate at significantly higher rates than those in operational or frontline roles (Chai et al., 2024; Kyndt et al., 2014; Subramanian, 2008; Ellström, 2001). Recent analyses of digital skills training reveal similar stratification, with participation strongly correlated to job autonomy, employment status, and organizational power (Van Deursen & van Dijk, 2020; Billett & Choy, 2013).

These disparities extend to AI-specific training. Workforce studies examining AI adoption and skills development find that technical workers and executives receive disproportionate access to training resources. At the same time, non-technical employees report inadequate support for developing AI literacy (Tambe et al., 2019). Research on the digital divide further demonstrates that online training delivery does not equalize access but rather introduces new barriers related to connectivity, devices, and digital confidence (van Deursen & van Dijk, 2019).

3.2 Organizational Interpretations of Non-Participation

Despite these patterns, organizations often interpret non-participation through an individual deficit lens. Leadership often describes employees who do not enroll as unmotivated or resistant to change. Professional development narratives often frame success as the result of effort and failure as a consequence of personal shortcomings, aligning with broader meritocratic ideals (Brown & Tannock, 2009; Littler, 2018).

Educational research emphasizes that learner choice is always situated within structural constraints (Biesta, 2019). Recent scholarship on workplace learning equity explicitly critiques deficit-based interpretations, demonstrating how framing non-participation as individual choice obscures organizational responsibility for creating genuinely accessible opportunities (Mackaway et al., 2024). Treating unequal outcomes as evidence of individual preference obscures the role of organizational design in shaping learning opportunities.

4. Why Access-Based Models Fail: A Justice-Oriented Critique

Organizational justice theory provides a valuable lens for analyzing why voluntary AI training models produce inequitable outcomes. Justice scholars distinguish between distributive justice (fairness of outcomes), procedural justice (fairness of processes), and interactional justice (fairness in interpersonal treatment) (Colquitt et al., 2013).

4.1 Time as an Unequally Distributed Resource

Time is a critical but often invisible learning resource. Research consistently shows that employees with greater job autonomy have more opportunities to engage in learning during work hours (Billett & Choy, 2013). Hourly workers, shift workers, and frontline employees face rigid schedules, productivity pressures, and limited coverage, making voluntary learning significantly more costly. Research on shift work and learning opportunity demonstrates how temporal constraints systematically exclude specific worker categories from professional development (Chai et al., 2024; Kyndt et al., 2014). Requiring training during unpaid or discretionary time violates distributive justice. Access exists in theory but not in practice.

4.2 Information and Communication Inequities

Procedural justice requires transparent and inclusive communication. However, learning opportunities are often communicated through channels that privilege desk-based employees, such as email or enterprise collaboration platforms (Czerniewicz et al., 2020). Frontline workers may receive fragmented or delayed information, if any is available. Research on workplace learning networks shows that informal communication and social capital play a significant role in who learns what at work (Littlejohn & Margaryan, 2014). Uneven distribution of these networks reinforces participation gaps.

4.3 Managerial Gatekeeping and Power

Managerial discretion significantly shapes access to learning. Studies in human resource development demonstrate that managers' beliefs about who is "worth investing in" influence nomination, encouragement, and time allocation for training (London & Sherman, 2021; Kyndt et al., 2014; Subramanian, 2008; Ellström, 2001). Critical HRD scholarship has documented how managerial discretion in training allocation often reflects and reinforces organizational hierarchies and implicit biases (Garavan et al., 2020). Without accountability mechanisms, these decisions usually reinforce existing hierarchies.

4.4 Digital and Learning Infrastructure Barriers

Finally, digital access itself is uneven. While organizations may assume universal connectivity, research on the digital divide emphasizes differences in device quality, bandwidth, digital confidence, and learning environments (van Deursen & Van Dijk, 2020). Research on barriers to workplace learning identifies five categories of obstacles: individual, organizational/structural, technical, change-related, and uncertainty-related factors (Anselmann, 2022). Critically, organizational and structural barriers, not individual motivation, most strongly predict participation disparities. Online learning platforms can exacerbate anxiety among learners with negative prior educational experiences, reducing persistence and completion (Ball et al., 2022; Selwyn, 2020).

5. Toward Equity-Centered AI Training

If access-based models predictably fail, what would equity-centered AI training require? Building on recent research in equity-oriented learning design and workplace learning (Engström et al., 2024; Mackaway et al., 2024; Czerniewicz et al., 2019; Reich & Ito, 2017; Selwyn, 2020), this section outlines four interrelated dimensions of equity. Together, these dimensions reframe AI training as a systemic educational responsibility embedded in organizational structures rather than an optional opportunity dependent on individual capacity or motivation.

5.1 Resource Equity

Resource equity requires treating AI training as legitimate work rather than an extracurricular activity. Organizations can support equity by providing protected, paid learning time during regular work hours; arranging coverage for operational roles; and supplying devices, software, and reliable connectivity. Research in workplace learning consistently demonstrates that when learning is embedded into job design and supported by formal time allocation, participation gaps between salaried and hourly employees narrow substantially (Billett & Choy, 2013; Subramanian, 2008; Ellström, 2001). Studies of workplace learning effectiveness demonstrate that formal time-allocation policies significantly reduce participation gaps across employee categories (Subramanian, 2008; Ellström, 2001). Conversely, when professional development is positioned as voluntary and outside formal work time, participation predictably concentrates among higher-status workers with greater schedule autonomy (Chai et al., 2024; Kyndt et al., 2014).

Studies of AI adoption further indicate that firms vary widely in how they resource workforce training, and that these differences significantly shape who benefits from AI-enabled work transformation (Tambe et al., 2019). Without intentional resourcing strategies, AI training investments tend to reinforce rather than reduce existing inequities (van Deursen & Van Dijk, 2020; van Deursen & Van Dijk, 2019).

5.2 Process Equity

Process equity focuses on how learning opportunities are designed, communicated, and administered. Equitable AI training requires proactive, multi-channel communication strategies that reach non-desk-based employees, transparent eligibility criteria, and clearly articulated selection processes when capacity constraints exist (Czerniewicz et al., 2020; Selwyn, 2020). Research on information dissemination in complex organizations shows that reliance on single communication channels systematically excludes non-desk workers (Czerniewicz et al., 2020). Equitable communication strategies require redundancy and role-appropriate channels. For instance,

combining digital announcements with supervisor-led team briefings and physical postings in break rooms ensures information reaches employees across varied work contexts.

Managerial discretion plays a central role in shaping access to workplace learning, and research in human resource development shows that managers' beliefs and operational pressures strongly influence who is encouraged or permitted to participate (Chai et al., 2024; Kyndt et al., 2014; Subramanian, 2008; Ellström, 2001). From an educational technology perspective, process equity also involves designing learning systems that assume diversity in roles, schedules, and prior experience, aligning with Universal Design for Learning principles that emphasize flexibility and multiple pathways from the outset (CAST, 2018). When process equity is absent, formally inclusive policies can operate as mechanisms of exclusion.

5.3 Outcome Equity

Outcome equity extends beyond participation to examine who completes training, applies new skills, and benefits professionally as a result. Research in adult learning and online education consistently finds that learners with less prior exposure to technical domains are more likely to disengage from self-directed digital learning environments without structured support (Kizilcec et al., 2020; Littlejohn & Margaryan, 2014). Research on completion rates in workplace e-learning reveals significant disparities by prior educational attainment and role type (Kizilcec et al., 2020). Structured support interventions, including peer cohorts, scheduled check-ins, and scaffolded practice activities, have been shown to narrow these gaps substantially (Littlejohn & Margaryan, 2014; Siadaty, M., Gašević, D., & Hatala, M., 2016). Moreover, studies of skill application demonstrate that without deliberate integration of new competencies into job design, training investments often fail to translate into practice, particularly for workers in highly routinized roles (Billett & Choy, 2013).

Equity-centered AI training, therefore, requires default supports such as coaching, peer learning communities, guided practice, and scaffolded application opportunities rather than relying solely on self-help models (Gratton, 2025; Billett & Choy, 2013). Recent AI workforce research further suggests that organizations derive greater value from AI when algorithmic literacy and domain expertise are broadly distributed rather than concentrated in elite roles, underscoring the importance of equitable training outcomes across job families (Tambe et al., 2019). Evaluating learning outcomes by role, employment status, and demographic group is essential to ensure that AI training does not merely credential existing privilege (OECD, 2021).

5.4 Systemic Accountability

Systemic accountability ensures that equity commitments are sustained rather than symbolic. The inclusion of routine collection and review of disaggregated data on participation, completion, and post-training outcomes, as well as the integration of learning equity indicators into managerial performance evaluations (Chai et al., 2024; Kyndt et al., 2014; Colquitt et al., 2013). Accountability requires defining clear equity metrics. Research on organizational justice implementation suggests tracking participation rates by role, employment status, department, and demographics; monitoring completion disparities; and examining post-training outcomes, including internal mobility and compensation changes (Colquitt et al., 2013). Without systematic measurement, equity commitments remain symbolic rather than operational (Cropanzano et al., 2007).

Organizational justice research emphasizes that accountability mechanisms are critical for aligning stated values with actual practices, particularly in systems characterized by discretionary decision-making (Cropanzano et al., 2007). Evidence from AI and workforce studies indicates that without clear accountability structures, reskilling initiatives tend to benefit already-advantaged workers, even when equity is an explicit organizational goal (Tambe et al., 2019). In this sense, accountability functions as the mechanism through which equity becomes durable, measurable, and actionable rather than aspirational.

6. Conclusion

Corporate AI training initiatives are often presented as inclusive simply because they are available. This paper has argued that such access-based models systematically reproduce inequality by ignoring structural barriers related to time, power, information, and infrastructure. Drawing on recent research in organizational justice, workplace learning, and digital equity, this study shows that voluntary participation is not neutral but is profoundly shaped by organizational context. For learning designers and educational technologists, this analysis has practical implications. Designing equitable AI training requires moving beyond user-centered approaches that assume individual autonomy to systems-oriented approaches that acknowledge structural requirements. It requires asking not only, 'Is this training accessible?' but also, 'Whom does the system systematically exclude, and what organizational changes must address that exclusion?' For researchers, this framework suggests a rich agenda. Empirical studies examining equity

interventions, comparative analyses of organizational approaches, and longitudinal research tracking career outcomes across participation patterns would substantially advance understanding. The educational technology community is well-positioned to lead such inquiry, given its commitment to examining the social dimensions of educational technology.

For the larger educational technology community, this argument underscores the importance of viewing AI training not merely as content delivery or platform design, but as a socio-technical system embedded in power relations. If AI literacy will shape future participation in the workforce and society, organizations must build equity into training systems from the start. The alternative is complicity in deepening workplace inequality under the guise of opportunity. Moving beyond access rhetoric to systemic equity is not optional; it is an educational and ethical imperative.

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