

CURRENT TRENDS IN UPSKILLING AND RESKILLING: ANALYZING MODERN LEARNING AND DEVELOPMENT PROGRAMS

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Abstract

Over the past 5 years, upskilling and reskilling have emerged as critical strategies for organizations aiming to navigate the rapidly evolving technological and economic landscape. This paper analyzes contemporary trends in learning and development programs, focusing on how organizations are equipping their workforce with the necessary skills to stay competitive. Our study highlights how companies are leveraging advanced technologies to identify skill gaps, tailor training programs, and track employee progress. Additionally, we examine the shift towards continuous learning cultures and the role of remote and hybrid learning models, accelerated by the COVID-19 pandemic. Key case studies and industry examples illustrate successful upskilling and reskilling initiatives, providing a comprehensive overview of effective L&D strategies. We also discuss some of the challenges organizations face in implementing these programs. In conclusion, the dynamic nature of today's workforce requires innovative and adaptable L&D programs. This paper underscores the importance of strategic investment in upskilling and reskilling to foster organizational resilience and sustained growth.

Key words: *upskilling, digital learning platforms, learning and development*

1. Introduction

The current disruptive work environment is pushing organizations to significantly restructure their operations, greatly impacting the skills business leaders expect from their workforce. Many leaders recognize the growing need for upskilling and reskilling, acknowledging that learning has evolved from merely a retention tool to a critical component in executing business strategy. Learning and Development (L&D) focuses on creating a culture of continuous learning across the

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organization, highlighting the importance of coaching, feedback, leadership, and personal accountability (ey.com, 2022).

According to Ruona (2016) and Hamlin and Stewart (2011), the primary goal of L&D is individual development, particularly in relation to work-based or work-related contexts. L&D involves not only specific learning activities but also fostering a culture that encourages continuous professional growth (Harrison, 2011).

Learning in the workplace is complex and often less directly observable compared to educational contexts like schools, where learning is typically assessed through assignments. Measuring this learning is also challenging, as it often involves tacit, skill-based knowledge rather than explicit facts (Kopp et al. 2020). However, L&D practices, along with the role of L&D practitioners, are now well-established in both organizational practice and academic research (Garavan, 2023).

Workplace training is a structured approach to learning aimed at enhancing the effectiveness of individuals, teams, and organizations. I-O psychologists have contributed significantly to improving training quality through research on learning and knowledge transfer, developing training evaluation tools, refining training design and delivery methods, and strategically positioning the training function within organizations (Kraiger & Ford, 2021).

The need for continuous skill adaptation to meet new demands poses a challenge for organizations, given the often informal and social nature of workplace learning. Many organizations are responding by increasing their investment in training and development (Kodwani, 2017).

2. Current trends in L&D

The COVID-19 pandemic has disrupted the education and training market, shifting development from in-person settings to online platforms. This shift has prompted organizations to reassess their priorities, with a growing need for new skills. Experts believe this marks the start of a long-term transformation, not only in technology but also in the mindset of employers and employees. The demand for upskilling and reskilling has intensified, accelerated by the pandemic and the resulting economic crisis (Mikołajczyk, 2021).

The training market has quickly adapted to the widespread use of video formats, such as webinars and virtual meetings, as alternatives to face-to-face interactions. It's likely that remote communication will remain a dominant part of business operations moving forward (Mikołajczyk, 2021).

A case study from Lizier and Reich (2021), suggests moving away from strictly structured learning approaches towards a blend of formal and informal learning methods, emphasizing learning through work and complex social networks. To improve L&D systems, organizations should design initiatives that are more embedded in everyday practices, encouraging professionals to see themselves as continuous learners beyond formal training (Lizier & Reich, 2021).

Maheshwari and Vohra (2018) argued that training and development practices can be effectively described through strategy, design, implementation, and effectiveness. These practices are primarily used for skill enhancement and

fostering a positive mindset. Effective training and development align with change objectives and benefit from strong leadership support (Maheshwari & Vohra, 2018). In their study, various types of training were observed, including technical, product, process, behavioral, and attitude training. Notably, during change initiatives, behavioral and attitude training—such as yoga and meditation—were incorporated to foster a positive environment and mindset. Secondly, factors such as active leadership, identifying influencers, on-the-job learning, and a positive environment were crucial for successful change implementation. Finally, training and development practices are effective in achieving change objectives like increased productivity and efficiency through new technologies (e.g., MOST, ERP). They also help in establishing new norms and behaviors (Maheshwari & Vohra, 2018).

Csillag et al. (2019) identified two contrasting patterns regarding informal learning dominance in small firms. First pattern is integrated learning approach, or blending formal and informal learning methods. For instance, they may fund formal training or conferences and then encourage employees to share their newly acquired knowledge through internal workshops. Secondly, there is combination of knowledge sources, or a strategic use of both external and internal knowledge sources. Some small firms actively seek external knowledge and employ individuals with diverse backgrounds to foster a learning environment within the company (Csillag et al., 2019). The study also confirms that small business owners and managers play a crucial role in shaping learning processes (Csillag et al., 2019).

According to Fullwood and Rowley (2021), the culture of knowledge sharing is crucial for the development of volunteers as well. Unlike paid employees, volunteers are not motivated by concerns over performance evaluations or career advancement, which often leads to more open and effective knowledge sharing. Volunteers are driven by different motivations, and providing ample learning and social opportunities is vital for their well-being and engagement, which in turn benefits the organization (Fullwood & Rowley, 2021).

Thunnissen & Sanders, (2021) concluded that there are some differences between L&D practices in the public and the private sector. Their research was conducted in the Netherlands, and it shows that compared to the private sector, the public sector is often considered a better employer regarding the range and frequency of L&D opportunities offered. Public sector employees generally engage in training more frequently than those in other sectors. However, there are concerns about the actual value and relevance of these opportunities, as the L&D approach in the public sector may be outdated. L&D activities in the public sector are mainly focused on helping employees remain effective in their current roles rather than preparing for future job changes or new skills (Thunnissen & Sanders, 2021).

Garavan et al. (2020) have predicted in 2020 that several key external factors will be shaping learning and development in organizations. Based on surveys and interviews, four major trends have emerged as critical for the future of L&D over the next five years:

1. Globalization will remain a key driver influencing L&D.
2. Demographic shifts are becoming increasingly significant.

3. Technology and flexible work practices are reshaping how employees engage with organizations, with cloud-based and collaborative technologies playing a crucial role.
4. Changes in the nature of work, such as the rise in knowledge work and the need to work across cultures and diverse teams, will continue to evolve.

3. L&D and The Fourth Industrial Revolution

The Fourth Industrial Revolution has driven creativity and innovation across politics, society, and the economy, transforming knowledge management globally. This digital shift challenges traditional practices in work, meetings, and learning, leading to new and innovative L&D approaches. Globalization and technological advancements are pushing organizations to radically change their L&D strategies. Employees now seek more autonomy in managing their development, skills, and career transitions. L&D programs must adapt to the pressures of rapid technological change, with specialists supporting sustainable employee engagement, focusing on environmental, economic, and social responsibilities. (Govender, 2022).

Today, L&D work is predominantly conducted online, leveraging 4IR technology to guide learners through abundant information and data. Since the global COVID-19 pandemic, the role of L&D has become crucial in ensuring that employees develop skills for lifelong learning and adaptability, which are essential for businesses to thrive in the virtual world of today (Llandis et al., 2020).

In their research, Garavan et al. (2020) conclude that although L&D professionals recognize the importance of technology, they are generally dissatisfied with current learning technologies. These technologies, while offering better user interfaces, integration, and flexibility, are still primarily used for delivering learning rather than creating knowledge, curating content, or evaluating L&D effectiveness. Additionally, L&D professionals tend to rely on informal and social sources of evidence rather than leveraging data analytics, highlighting a gap in data-driven decision-making (Garavan et al. 2020).

Traditional knowledge management tools like trainings and workshops are widely used in enterprises, with 64% of companies in the artificial intelligence (AI) sector employing them to improve employee skills. Additionally, 46% of surveyed companies use e-learning platforms for knowledge sharing. These tools offer benefits such as easy access and customization for organizational needs. However, employees directly involved in AI development rate more innovative learning tools like knowledge bases, knowledge pills, gamification, and simulations as more useful for driving innovation. In contrast, office and administrative staff, who are not involved in product creation, place greater value on traditional methods like workshops, trainings, and e-learning (Drewniak & Posadzińska, 2020).

A growing body of literature is exploring the power and potential of generative AI tools like ChatGPT (Passmore & Tee, 2023).

The first version, launched in November 2022, was designed for a wide range of user requests, offering an interactive, conversation-like experience. In March

2023, GPT-4 was introduced, boasting the ability to perform in the top decile on standardized tests such as SATs and law exams (CNN, 2023).

In their research, Passmore & Tee (2023) tested six propositions about GPT-4's capabilities, with three being supported. GPT-4 was found to generate acceptable content on topics related to coaching ethics, mindset, and research, as assessed by an expert. However, it failed to meet standards for defining coaching, producing scientific-quality content for publication, or coaching to an international coaching body's standards. This suggests GPT-4 is effective at generating plausible content that can convince experts, but it falls short in replicating human-level performance for more complex tasks, such as full coaching conversations or scientific outputs. In terms of coaching conversations, GPT-4 was able to generate open questions and summaries in a coaching style, but its performance was rated below the ICF ACC coaching standard by a professional assessor. While AI is not yet capable of meeting professional coaching standards, the ongoing development of generative technologies raises the possibility of AI tools achieving accreditation in the future (Passmore & Tee, 2023).

4. Popular practices in L&D

Faraz Naim (2021) highlights some of the most popular L&D practices today, focusing on a consulting firm in India, such as:

1. **Mentoring program** where new employees are paired with senior leaders for guidance. Each new recruit is assigned a buddy from a different team on their first day to provide feedback, clarify roles, and discuss career development.
2. **Cross Training** involves teaching employees to perform the duties of other positions, providing backup for absences.
3. **eLearning** is used for delivering consistent content across the organization. Employees can access materials at their own pace via laptops or mobile devices, with participation being informal and self-directed.
4. **Job Rotation** helps employees develop skills by working in different teams and departments, which provides broader experience and helps employees understand various challenges and skills needed across the business.
5. **Job Shadowing** is a practice in which employees interested in acquiring new skills or taking on additional roles can observe and follow the operations of their colleagues and seniors through job shadowing.
6. **Knowledge Sharing** is useful for sharing insights and expertise by delivery managers. The company utilizes tools and technology for this purpose.
7. **Social media-Based Learning** is commonly used for induction and client interaction training. ABC has introduced an internal social networking tool integrated with Twitter and Facebook, to foster communication and discussion among employees (Faraz Naim, 2021).

5. Coaching culture

According to Alabdali (2019), implementing a coaching culture is crucial for ensuring the success of learning and development programs, as it boosts information retention. Organizations must foster this culture to drive progress, activate learning, and align with their overall goals (Alabdali, 2019).

Coaching offers several individual benefits, such as skills development, stronger employee-manager relationships, and personal goal achievement. The benefits extend to the organization as well, and some of them are: reduced turnover, succession planning, and increased motivation and engagement. Coaching can help meet organizational goals in two key ways:

1. Talent development - prepares employees for future roles, facilitates knowledge transfer, and builds coaching capabilities in the next generation.
2. Organizational development, which enhances individual skills, which contributes to overall organizational growth and competitiveness (Alabdali, 2019).

6. Conclusion

The pandemic has reshaped employee development, not just in format but in content. Employees seek new topics for growth, though engagement has declined due to the fatigue from numerous online initiatives (Mikołajczyk, 2021). Workplace learning analytics can be effectively integrated with traditional performance management approaches to showcase its impact across the organization. A holistic and streamlined framework is advantageous for demonstrating this broader impact (Kopp et al., 2020). In the 4IR era, L&D specialists must shift from traditional training to fostering collaborative, innovative learning cultures. Their role now involves creating learning strategies, facilitating change, managing networks, and promoting lifelong learning to align with organizational goals and employee growth. (Govender, 2022). Innovative learning tools may play a key role in fostering innovation within AI-focused companies (Drewniak & Posadzińska, 2020). Coaches and trainers are encouraged to engage with AI to explore how it can enhance their practice, as AI tools hold potential to support and improve coaching and training efforts (Passmore & Tee, 2023). Despite organizational rhetoric that emphasizes the importance of learning through work, both the daily experiences of professionals and organizational documentation suggest that this is not fully realized. Adopting a complex adaptive systems approach highlights the need to integrate work and learning more effectively and reveals the ongoing need to transform L&D systems and practices within organizations (Lizier & Reich, 2021). While L&D practitioners have been encouraged to adopt more strategic roles over the past two decades, progress in this area has been modest. There is still a need for L&D professionals to more fully embrace strategic responsibilities to enhance their impact (Garavan et al., 2020).

REFERENCES

- [1] Alabdali, M. (2020). Activate the learning and development agenda using coaching culture. *European Journal of Human Resource Management Studies*, 3(2), 134–139.
- [2] Murphy Kelly, S. (March 16, 2023). CNN Business Online. 5 jaw-dropping things GPT-4 can do that ChatGPT couldn't. <https://edition.cnn.com/2023/03/16/tech/gpt-4-use-cases/index.html>
- [3] Csillag, S., Csizmadia, P., Hidegh, A. L., & Szászvári, K. (2019). What makes small beautiful? Learning and development in small firms. *Human Resource Development International*, 22(5), 453–476.
- [4] Drewniak, Z., & Posadzinska, I. (2020). Learning and development tools and the innovative potential of artificial intelligence companies.
- [5] EY. (2022). The ever-growing importance of L&D in the future of work. https://www.ey.com/en_be/workforce/the-ever-growing-importance-of-l-d-in-the-future-of-work
- [6] Fullwood, R., & Rowley, J. (2021). The role of knowledge sharing in volunteer learning and development. *Nonprofit Management and Leadership*, 32(1), 121–139.
- [7] Garavan, T. N., Heneghan, S., O'Brien, F., Gubbins, C., Lai, Y., Carbery, R., & Grant, K. (2020). L&D professionals in organisations: Much ambition, unfilled promise. *European Journal of Training and Development*, 44(1), 1–86.
- [8] Garavan, T. (2023). Learning and development practitioners in organisations: Organising, belonging, learning and performing tensions. *Irish Journal of Management*, 42(2), 88–103.
- [9] Govender, C. M., & Adegbite, W. M. (2022). Evolving role of learning and development specialists in the 21st century fourth industrial revolution workplace. *International Journal of Entrepreneurship*, 26(1), 1–16.
- [10] Hamlin, B., & Stewart, J. (2011). What is HRD? A definitional review and synthesis of the HRD domain. *Journal of European Industrial Training*, 35(3), 199–220.
- [11] Harrison, R. (2012). Learning and development (fifth edition). *Development and Learning in Organizations*, 26(1).
- [12] Kodwani, A. D. (2017). Decoding training effectiveness: The role of organisational factors. *Journal of Workplace Learning*, 29(3), 200–216.
- [13] Kopp, T., Kinkel, S., Schäfer, T., Kieslinger, B., & Brown, A. J. (2020). Measuring the impact of learning at the workplace on organisational performance. *International Journal of Productivity and Performance Management*, 69(7), 1455–1474.
- [14] Kraiger, K., & Ford, J. K. (2021). The science of workplace instruction: Learning and development applied to work. *Annual Review of Organizational Psychology and Organizational Behavior*, 8(1), 45–72.
- [15] Lizier, A. L., & Reich, A. (2021). Learning through work and structured learning and development systems in complex adaptive organisations: Ongoing disconnections. *Studies in Continuing Education*, 43(2), 261–276.

- [16] Llandis, B. E., Steven, H. G., & Erica, S. (2020). Learning and development practitioners: Identity, profession and future trajectory. *Asia Pacific Journal of Human Resources*, 58, 220–246.
- [17] Maheshwari, S., & Vohra, V. (2018). Role of training and development practices in implementing change. *International Journal of Learning and Change*, 10(2), 131–162.
- [18] Mikołajczyk, K. (2021). Changes in the approach to employee development in organisations as a result of the COVID-19 pandemic. *European Journal of Training and Development*, 46(5/6), 544–562.
- [19] Naim, M. F. (2021). Evolving face of workplace learning and development: A case of an Indian HR consulting firm. *Strategic HR Review*, 20(1), 23–26.
- [20] Passmore, J., & Tee, D. (2024). The library of Babel: Assessing the powers of artificial intelligence in knowledge synthesis, learning and development and coaching. *Journal of Work-Applied Management*, 16(1), 4–18.
- [21] Ruona, W. E. (2016). Evolving human resource development. *Advances in Developing Human Resources*, 18(4), 551–565.
- [22] Thunnissen, M., & Sanders, J. (2021). Learning and development in the public sector. In B. Steijn & E. Knies (Eds.), *Research Handbook on HRM in the public sector* (pp. 119-131). Edward Elgar Publishing.



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