

Changes in the approach to employee development in organisations as a result of the COVID-19 pandemic

Katarzyna Mikołajczyk

Institute of Human Capital, Warsaw School of Economics, Warsaw, Poland

Abstract

Purpose – This paper aims to explore the direction and extent of changes in the approach of organisations to employee development that have occurred as a result of the COVID-19 pandemic.

Design/methodology/approach – This research is of a qualitative nature. The thematic exploration uses the analysis of findings from 19 in-depth interviews with experienced HR managers and is preceded by desk research.

Findings – The findings advance our understanding of how the COVID-19 pandemic has affected developmental processes in organisations. The results indicate, apart from the change in the form and methodology of employee trainings due to the pandemic, that employees also desire new subjects to aid their development. One also noticed decreased employee engagement and increased fatigue with the use of multiple, online development initiatives.

Practical implications – For learning and development (L&D) practitioners, there are implications in relation to tailoring developmental offerings to fit the needs of employees to help them to progress more in the course of their work. In this new reality, an agile approach to employee development can work much better. The activities of the L&D departments should also take into greater account the changing and unpredictable reality as well as the evolving nature of information and communication technologies (ICT). The COVID-19 pandemic may contribute to the analysis and modernisation of existing offerings for development in organisations and foster a culture of lifelong learning.

Originality/value – This research makes an important contribution to the literature by examining the impact of situational context on modifications in development activities undertaken in organisations. The results indicate the need to change the existing role of L&D teams in organisations, taking into account the maximum use of e-learning potential, while understanding its limitations. It can be assumed that while the pandemic develops, designing hybrid learning will become even more important and L&D professionals will focus on combining the flexibility of self-training and available online resources with highly engaging real-world experiences.

Keywords Training and development, E-learning, Learning and development, Human resource development, Employee learning, Learning ecosystem, Learning culture in organisations

Paper type Research paper

Introduction

The pace of change, uncertainty, unpredictability and ambiguity of events, as well as intensified development of modern technology dynamically shape the work environment,



influencing trends and methods used in employee development. Expectations change, developmental forms evolve and the need for new tools and training emerges (Williams, 2020). Currently, human capital development is no longer just a set of organised, time-based activities aimed at changing human behaviour (Swanson and Holton, 2008), but there is a shift occurring from formal training to shaping a culture of lifelong individual development (Sloman, 2007; Morgan-Klein and Osborne, 2007; Jarvis, 2010); this shift encourages learning, teaching and re-learning in the course of work (Bersin, 2018; Gottfredson and Mosher, 2010; Wong and Aspinwall, 2004). Employees are expected to take more responsibility for enhancing current skills and adding new ones to meet current job demands, prepare for leadership opportunities and ensure their own employability to move and adapt within and between organisations as needed (Molloy and Noe, 2010). Such a new approach is required by the dynamic times of VUCA, i.e. the environment in which organisations currently operate. Volatility means that it is increasingly difficult to predict future events, their pace and scale. Examples include the digitalisation of the labour market, the intensification of migration flows in Europe, global conflicts, as well as the current COVID-19 pandemic caused by the SARS-CoV-2 coronavirus, a struggle for the entire world. All this leads to a sense of uncertainty and anxiety. Change is more rapid than before and has a global reach affecting businesses, the economy and social attitudes.

The crisis caused by the COVID-19 pandemic has consequences on many levels – in the health sector, the economy, the labour market, education, perception to technological advances technology or the approach to new related, legal regulations. It turns out that new technology is crucial in the fight against the crisis, because it enables communication and remote work or online learning on an unprecedented scale. The key advantage of incorporating collaborative technologies into the learning environment is that users are able to have constant accessibility on the training materials (on-demand) from anywhere using various devices (Fake and Dabbagh, 2020). At the country level, a nation's human resource development (HRD) policy and human resource trainings schemes become catalyst for the growth of the workforce's productivity, especially in the Industrial Revolution 4.0, which requires advanced technological knowledge (Man, 2020). To some extent, the crisis has also forced us to face a number of outstanding issues related to the scale of technological interference in both professional and private life. It raises uncomfortable questions about how to approach the use of digital technologies and data in the spirit of common European values, with respect for human rights and fundamental freedoms. Deep transformations in many areas of life are not over yet – we are in the process. This also applies to human resources at the companies. This pandemic also redefined the area of learning and development in organisations (Training Magazine, 2019; Kshirsagar *et al.*, 2020; Jingfang and Yates, 2020; CIPID, 2020; Gartner Report, 2020; Raheja, 2021). Development in companies is a topic more important than ever today. The time of radical changes means the need to re-evaluate beliefs, attitudes and redefine the required competences. We ask questions about the sense and effectiveness of the actions taken and the methods by which we carry out these actions. The roles of CEOs, leaders, managers and L&D departments have been completely redefined. Despite a recognition of the importance of employee development in organisation, research on what contributes to employee development is still nascent (Nielsen *et al.*, 2017).

The aim of this article is to analyse the direction and extent of changes in the approach of organisations in Poland to employee development that have occurred as a result of the COVID-19 pandemic. The conducted research was of a qualitative nature. Thematic exploration was used to analyse the findings of 19 in-depth interviews with experienced HR managers.

The research shows that businesses have approached training and development during the pandemic in different ways. In some companies, the development area has completely

ceased to exist due to layoffs, reduced budgets and the termination of contracts with trainers. Yet, other organisations are investing in remote tools and forms of employee development, starting a time of an unprecedented rapid development of the digital transformation in HRD (Kniffin *et al.*, 2020; McGuire *et al.*, 2021). In some cases the gamification has become increasingly common in employee training (Armstrong and Landers, 2018). There is also another direction of actions in organisations – maintaining the existing development plans. This situation is experienced by companies that have not yet been affected by the crisis; in some cases, new opportunities and even better prospects have emerged. So, what does an individual need to adapt to this new reality? Above all, one must develop and nurture flexibility and courage in light of unexpected events. According to Thomas Friedman, an American journalist and publicist, curiosity and passion are currently the most important components of development processes in the world. Employers who support workplace education and training programs enjoy a more conscientious, resourceful, loyal and dependable workforce (Goldglantz, 2013).

The important goal of this study is to show the impact of situational context on modifications in development activities undertaken in organisations and in particular, to describe how companies have modified HRD activities under the influence of the COVID-19 pandemic. For learning and development (L&D) practitioners, there are implications in relation to tailoring developmental offerings to fit the needs of employees to help them to progress more in the course of their work. In this new and unpredictable reality, an agile approach to employee development seems to work much better.

Theoretical background

Employee development in organisations

Human capital is nowadays perceived as a valuable and desirable good, which, when properly applied, stimulates the growth of the company's market value and, in the long run, proves to be much more important than the possession and use of material resources and financial capital (Tharenou *et al.*, 2007; Nadiv *et al.*, 2017; Somogyi, 2020). According to Mayo (2000) employee development, including the continuing generation and exchange of knowledge and experience, is concluded to be the key driver of value growth in any kind of organisation. Training should have specific goals which are in one of these three categories: increasing the personal effectiveness of employees (such as competence improvement); increasing the added value being achieved currently (such as the use of new systems and better methodologies); generating future value (e.g. developing the expertise and potential of people). Professional development can be understood as broadening the knowledge and skills necessary for the proper performance of tasks in a current position while developing additional competences in terms of promotion, transfer to another position or organisational change. Professional development is used to achieve a strictly planned goal over a certain period of time, requiring adequate preparation for career planning while assisting in an employee's personal development. Very often, activities outside of work permeate indirectly the professional sphere and thus enrich the employee's competences with new knowledge, skills and experience, not necessarily directly related to the job, but perhaps at some point helpful in its performance (Cerasoli *et al.*, 2018; Skule, 2004; Spaan *et al.*, 2016). It is extremely difficult to analyse professional development in isolation from personal development, as these are processes that run in parallel, intertwine and influence each other at some point in life (Noe *et al.*, 2014). It is worth to emphasise that HRD interventions can positively contribute to organisation's innovation activities. HRD is also found to positively influence employee engagement, leadership, manager's motivation to learn, the promotion of a learning culture and social capital development (Sheehan *et al.*, 2014). Emerging

technologies in particular are playing a key role in helping to find innovative ways of helping people of all ages to develop knowledge and skills (Mulvie, 2021) and become almost the only available option to guarantee the employee development during the COVID-19 pandemic. Technology trends will become even more important in 2021 and beyond. They will decide not only about the competitive advantage but also about survival – professional and organisational to be or not to be.

Professional career development

Professional development, in a narrower sense, is defined, inter alia, as a process used to create opportunities to develop the professional interests and abilities of employees (Matthews *et al.*, 2004, p. 168), which eventually should lead to the expansion of their knowledge and skills in a specific area. This is defined in more detail by Sutherland and Canwell (2004, pp. 181-182), pointing to five basic functions of professional development:

- (1) expanding knowledge – helpful in problematic situations, especially in conceptual work;
- (2) learning from experience – gaining practical knowledge by observing oneself and other employees and implementing new solutions to one's work;
- (3) developing new attitudes and beliefs – changes in views, system of values, rules and standards of conduct;
- (4) possibility of rebuilding professional qualifications – individual competences of an employee, their diagnosis and improvement to a higher level; and
- (5) cooperation and contribution to the development of personnel – sharing skills and knowledge, using knowledge of other employees, mutual learning and action (coaching, mentoring, peer tutoring, etc.).

From a management perspective, professional development is usually defined as the development of an employee within an organisation according to the needs of the organisation and the results, capabilities and preferences of the employees (Armstrong and Taylor, 2020). This understanding of the term puts great emphasis on looking at professional development from two perspectives of the organisation: employer's and employee's. First, the development of an employee is stimulated by the organisation in which he or she works. It sets requirements, expectations, enforcing behavioural changes and acquisition of new skills and knowledge. An important developmental impulse is the feedback from the professional environment, both positive and negative, which influences the learning process. Also, any changes inside and outside the organisation make it necessary to adapt to new conditions, shaping the relevant competences. On the other hand, the employee feels the need for professional development, which results from his/her ambitions, motivations and interests. Therefore, one of the objectives of an effectively operating organisation should be a balanced and coherent way of supporting the development of its employees' competences. Competence is understood here as knowledge, skills, attitudes, abilities, styles of action, personality, principles, interests and other characteristics which, when used and developed in the work process, lead to results that are in line with the strategic goals of the organisation (Mourão and Fernandes, 2020).

Lifelong learning culture

Nowadays the opportunities for development and education are greater than ever before. It is easier to find knowledge, catalogue and collect data or information. Thanks to the wide reach of the Internet, vast knowledge is open to us. What we need to work on today in particular is maintaining internal motivation to use these diverse and developing knowledge

resources in the workplace on a daily basis. Lifelong learning is becoming more important than formal education (Maheshwari and Vohra, 2018). Employers know that and use modern development methods and tools increasingly often to attract and retain the greatest talents in the organisation. The current concept of a career forces companies to provide employees with an always accessible development environment, allowing them to quickly build, develop and transform skills, often on their own terms. Organisations that largely base success on human capital should remember to systematically invest in expanding knowledge and facilitating the acquisition of new skills by its employees. The business environment is constantly changing, technology is developing dynamically, therefore, an employee who is supposed to be professionally effective should constantly update his or her knowledge, broaden competences and have a chance to develop the potential inherent in it (Britz, 2018), also during the pandemic (Cormier *et al.*, 2020).

Some recent research findings suggest that developing a lifelong learning mindset in employees enhances both objective and subjective career success (Drewery *et al.*, 2020) and what more, the employee professional development increases job satisfaction and reduces turnover (Glazer *et al.*, 2019). It should be emphasised that now is the time for scholars to acknowledge an expanded domain of development activities, and integrate employee-driven development into traditional development theory (Dachner *et al.*, 2019).

Changes in development processes that occurred with the emergence of COVID-19 – desk research results

The need for social isolation due to the ongoing pandemic is also stigmatising the education and training market. It has become necessary to move the area of development from physical training spaces and face-to-face contact to the internet environment. A survey of 1,675 L&D experts at the beginning of 2020 shows that 57% of them planned higher online learning budgets last year. The coronavirus has been a catalyst for change and has only accelerated the transformation of learning (LinkedIn Learning Report, 2020). The priorities in organisations have changed, and there is a need for new competences. L&D experts are convinced that this is the beginning of a larger and more lasting transformation that will take place not only at the technological level but also in the awareness of employers and employees. Workers, managers and business leaders are all feeling the pressure to upskill and reskill. Most of them say COVID-19 and the resulting economic crisis have accelerated their need to acquire new skills. What more, development opportunities are harder to find at work amid the global health and economic crisis. Nearly half of workers (46%) say their employers have reduced upskilling and reskilling opportunities during the pandemic (Degreed Report, 2020).

The COVID-19 pandemic has somehow forced the training market to intensively use the video format as the best available alternative to face-to-face meetings. Videoconferences, webinars, virtual trade fairs, open days and networking meetings are everyday life for professionals in many industries. There are many reasons to believe that the situation in which a large part of business interactions has moved to different forms of remote communication will last longer and become our new, everyday life. Therefore, it is worth considering how to effectively implement development processes under such conditions to gain competitive advantages.

The role of learning and development departments

One of the key objectives of L&D departments in organisations has always been to help people retrain and develop their skills. This need has existed for a long time due to intense demographic, socio-economic and economic changes. Senior employees are moving to

advisory positions or are retiring. Younger workers take their place in the labour market. Many workers emigrate in search of work, many do not have a permanent job, or their professional profile does not coincide with that desired in modern economies. Still others need to develop newer, more useful professional skills. The COVID-19 pandemic highlighted the issues mentioned above, and, in this sense, created an even greater opportunity and need for active involvement of L&D departments in organisations (Lee, 2020). The L&D departments were in many cases completely unprepared for such a change – both in terms of competences and tools. Only one in four companies, out of 108 participating in the survey conducted by Fosway Group in May 2020 in Europe, admitted that they went through it without major problems, and practically all of them were forced to change their existing learning and development strategy in response to the COVID-19 pandemic (Fosway Group Report, 2020). This change has mainly consisted of the need for a rapid shift towards the use of digital learning, for which the demand has radically increased, both from stakeholders and learners themselves. In total, 21% of those surveyed indicated that digital learning solutions were implemented and developed in a great hurry, and often required the introduction of completely new, modern tools previously unused in the organisation. Only 5% of those questioned considered that both the learning and development strategies, as well as tools and development resources will return to their original state after the pandemic.

In another study – The Ken Blanchard Companies (2020) survey, L&D specialists were asked how the meaning of face-to-face training may change in COVID world. 56% of the respondents believe that traditional classroom activities will not lose their importance and will become part of hybrid development programs (blended experience), but 24% of respondents believe that live meetings in place will only be organised for high impact events. Only 17% claim that classroom training will remain the standard and the preferred form of development.

Also, the research results carried out by The Association for Talent Development in August 2020 indicate a significant increase in the use of e-learning in organisations. In total, 99% of organisations provide e-learning to their employees, compared to 76% only five years ago. Over the next five years, 100% of the organisations participating in the survey declare that they intend to offer e-learning within the framework of HRD activities (ATD Research Report, 2020).

The study conducted in Poland by Digital University and Great Digital Report (2020) tested employees' beliefs about remote education, their experiences and learning preferences, and employers' attitudes to virtual education. In total, 77% of respondents believe that remote education can be the same experience as residential education – good or bad.

The overall conclusion that emerges in the result of desk research, is that the global health and economic crisis has had three big impacts on the state of the workforce skills. First, it's accelerating the need for new skills. Second, it's reducing opportunities for upskilling. Third, it's reskilling and making the workforce more stressed and vulnerable.

Methodology

The research described is of a qualitative and exploratory nature. In the context of the theoretical premises discussed above, it appears important to recognise the changes that occurred in the development processes in organisations in Poland as a result of the COVID-19 pandemic. The results presented below are an attempt to fill this research gap. They are a part of a larger research project carried out within the framework of the statutory study entitled "Human capital management in the conditions of sustainable development",

conducted at the Institute of Human Capital of SGH Warsaw School of Economics in the period from May to August 2020.

The research group included 19 people, employed as HR Managers in various organisations in Poland. Invitations to take part in the interview were addressed to representatives of specific global companies. The purposeful selection of the respondents was made to assure reaching people working in large international organisations, and it will be likely to encounter the best or inspiring practices in this area within selected organisations. The profile of respondents is presented in [Table 1](#).

Individual in-depth interview (IDI) preceded by desk research (mentioned above) were used as research methods. This article discusses the results of studies in the practices in the field of employee development, which have been implemented and transformed organisations in Poland and on the impact the COVID-19 pandemic had on the existing activities in this scope. The collected transcriptions of the interviews were then subjected to qualitative analysis and coding. The in-depth interviews allowed participants to share their insights into the changes taking place in organisation in the L&D area. The following research questions were formulated, and addressed to HR experts:

RQ1. Has the COVID-19 pandemic changed the approach to employee development in the organisation? If so, why and to what extent?

RQ2. Have existing programs been changed? What new solutions have been introduced?

RQ3. Which practices/solutions were abandoned? What tools have proved successful?

The interviews were recorded, and then transcripts were prepared in the form of text documents. The detailed steps for the study procedure are presented in [Figure 1](#).

The key analytical process in qualitative research in social sciences is coding – classifying and categorising individual pieces of data, combined with a system of finding them. The content of interviews was catalogued by topic. The concept was also in this case the main principle of encoding qualitative data. Coding and searching for relationships

Organisation's size	No. of respondents
large	17
medium	1
small	1
<i>Industry</i>	<i>Number of respondents</i>
trade	1
production	2
public sector	3
services	10
high tech	3
<i>Seniority in HR</i>	<i>Number of respondents</i>
5–10 years	12
11–20 years	7
<i>Gender</i>	<i>Number of respondents</i>
woman	13
man	6

Table 1.
Profile of interview
participants

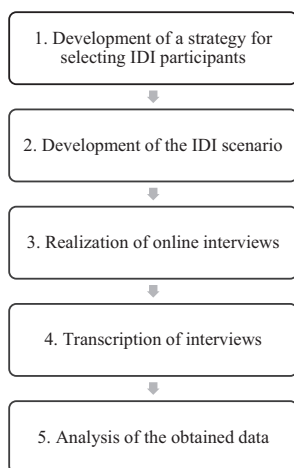


Figure 1.
The detailed steps for the study procedure

between concepts was a key element in the process of research analysis (Lofland and Lofland, 1995, p. 188). During the analysis, open coding was used to name and categorise phenomena by carefully examining the collected data. In this approach, the codes somehow impose themselves on the researcher as a result of analysing and checking data (Strauss and Corbin, 1990, p. 62). Figure 2. presents the used codes-to-theory model.

The detailed codes, categories and concepts, which have been used to data analysis are presented in Table 2.

Findings

The research carried out clearly indicates that like many other countries, the new reality forced a significant portion of Polish companies to modify their employee development plans. Companies rarely gave up the training aspect altogether but were more likely to introduce budgetary constraints due to the difficult situation. The available resources were most often invested in the development of new, important and required competences:

A key element of our new development strategy is to quickly adapt employees to the change and use its potential to increase revenue (R2).

New challenges, the nature of responsibilities, and the form and conditions of work in a reality dominated by the pandemic highlight an urgent need for new competences, which, however, have no chance of being developed in the traditional, offline way. Companies, therefore, have developed remote tools and forms of development:

[...] all initiatives that were supposed to be conducted offline were conducted online. The development activities were transferred to the internet (R1).

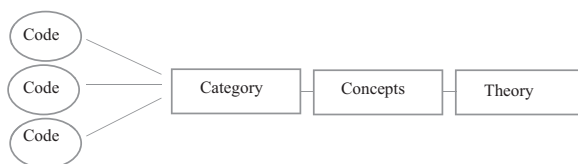


Figure 2.
The used codes-to-theory model

Codes	Categories	Themes/Concepts
Change as a potential Change as a threat Focusing on thriving Survival attitude	Attitude to change in the context of development activities	Organisations' perception of changes in HRD
Modification of development plans Shift towards digital learning Budget constraints Suspension of developmental activities Maintenance of existing activities	HRD strategy adopted in the organisation during the pandemic	
Stress management Mindfulness Remote work Time management Work-life balance Well-being, resilience and mental health Communication in remote teams	The most frequently implemented topics of development activities	Direction and scope of changes in development activities
E-learning Blended learning Webinars Interactive learning materials Self-directed learning Online meetings Suspension of f2f trainings	Shift to digital learning forms	
Knowledge pills Microlearning Online psychological support Online office events Limiting group work	Shift to passive online learning methods	
Learning management system Learning experience platform Social media Video Podcast Video conferencing	The most frequently used tools	
Departure from creating and managing the HRD process Diagnosing competency gaps Indicating directions of development Identifying tools and existing developmental resources Active engagement in acceleration of digital transformation Simplification and modernisation of development tools Creating a coherent learning ecosystem	Changing L&D functions and tools	Changing the role of L&D in the organisation
Proactivity in action Supporting employees with reduced commitment Servant role Giving employees more freedom and flexibility	Changes to the current L&D strategy	

Table 2.
Codes used in data
analysis

(continued)

Table 2.

Codes	Categories	Themes/Concepts
Empowering employees Building a true lifelong learning culture within organisation Use of different digital tools Digital learning fluency Data analytics Instructional designing Online facilitation skills Agile methodology Remote cooperation Critical thinking Empathy Creativity and innovation Ability to work under time pressure and resistance to stress Willingness to learn and self- development	The demand for technical competences of L&D employees The demand for soft skills of L&D employees	L&D competencies in new digital workplace

[. . .] all forms connected to development have been transferred to the Internet. There have not been such strong solutions in our organisation so far. So, all the forces of the organisation were pushed to create such an offer. In the form of webinars, which was not so easy, because maintaining focus, engagement of participants is different in the classroom, and different in the webinars. So, there was a lot of effort, not only from coaches and consultants, everyone was involved. This is a very big job, and it was very difficult (R18).

There is another course of action on the market – maintaining the existing development plans. However, only companies that have not been influenced by the crisis are in such a comfortable position. Their businesses have not been affected, and in some cases, even new opportunities for action have emerged, even better prospects. At these companies, employee development plans have only been postponed for the future – so as to secure the budget for unforeseen risks or only, keeping the health of employees in mind, to return to the stationary forms of development when the pandemic is over. These companies have also started to buy online trainings for their employees instead of the previously intended in-house trainings:

We offered employees short versions of online trainings, because the traditional ones were temporarily suspended, but participants who were enrolled can benefit from a simpler version of this training, which is delivered virtually. So, the participants were not alone. Then they will be able to make a transfer or sign up again when everything returns to normal, but they have this basic information in a shortened online form (R1).

[. . .] we have opened up a much larger pool of development opportunities, which are not strictly related to job development, in a given role. We have access, for example, to training courses offered by the ICAN Business Academy. These are e-learning modules offered by ICAN, and last year by Harvard Business Review. And we distributed this as a certain pool of open development trainings (R5).

HRD is going through the biggest transformation in its history at an exponential rate, but, importantly, it's not about moving everything one-to-one online. Both tools and formats change as the industry tries out new solutions. Not only employers from various industries but also training companies that have not yet provided online services had to adapt incredibly quickly to the situation and implement the necessary technologies. The challenge

was to find a balance between optimal technology, duration of the development service, its cost and maintaining the highest quality standards. Another challenge for L&D was to wisely manage the expectations of employees, who often lacked sufficient knowledge of the specifics of individual online training forms and were looking for formats that were not necessarily the best for everyone in terms of learning efficiency – but cheaper and requiring little involvement:

Of course, all the development activities that we had planned have moved to the online platform – maybe not in the same form, because the content has also been modified. Adapted to the remote form and also to the new needs which appeared in this specific period. There was a moment of downtime because the company had to reorganise itself into remote trainings. However, we have to admit that due to the fact that we are a large global organisation, most of these solutions are prepared by teams working around the world. As a result, this offer has been changed as quickly as possible, and we make available everything that can be made available. So that employees do not feel that there will be any stagnation in their development. So first of all, we prepared quite a rich package of online trainings from the available platforms that employees can capitalise on when some of them are less busy – to use the spare time for trainings they would like (R15).

Due to the pandemic, apart from the change in the form and methodology of training implementation, the subjects of developmental forms desired by employees have also changed. According to the respondents, the most frequently selected training courses were those devoted to topics such as remote work and communication in dispersed teams, time management, healthy lifestyle and work–life balance. It is impossible not to mention the psychological aspect – these difficult changes often caused anxiety in employees, being in isolation impacted their mood and the need to combine family responsibilities with work at home increased the feeling of fatigue. Therefore, training offers related to emotions and stress management, attentiveness training, empathic communication and assertiveness were often conducted. Workshops and therapeutic sessions conducted online by psychologists with staff have also become popular:

In addition, the company offers a mental health programme, i.e. we have the right people designated and trained in mental support. So, if anybody has a problem, they can report to that person. In addition, we have an external helpline where every employee can anonymously call and get psychological advice but also about life (R1).

It should be emphasised that most of the respondents see the potential in this somewhat forced by the COVID-19 pandemic transformation of development activities offered by organisations:

[. . .] despite the obvious side effects of the whole situation, various difficult situations, I think there are areas where it worked very well, because if it wasn't for this crisis, it would probably not have happened. In the case of our organisation, it is a test of remote work, but also such a fairly strong impulse for many people, who until now were a little bit on the backwater with different modern solutions, because they were afraid of it, because they did not know how to do it – it was a little bit of an impulse for them that they can. Thanks to the trainings, that there was no way out, the level of efficiency in the use of MS Teams or other remote contact solutions was a little bit aligned. So that's a plus. Some kind of a benefit from the whole situation (R12).

However, mainly due to the fact that remote cooperation is more cognitively burdensome than direct cooperation, and during online meetings employees experienced more fatigue and stress compared to situations related to other professional duties, some of the respondents also pointed out the observed decrease in employee engagement and lack of interest in very interesting online initiatives:

[. . .] I notice that the employees are already so overloaded and it's a bit of wait-and-see. Any additional activities, whether engaging in additional initiatives or development or whatever, I see that it meets more resistance than before (R13).

Research shows that e-learning during the COVID-19 pandemic is often the only possible form of development. However, it is not easy to keep in employees that are busy, tired, stressed and uncertain of tomorrow in front of the e-learning training screens. Solutions supporting cooperation, group work and quick access to information can help in this:

We used to leave for 2 days, this night was necessary, two full days, 8 hours of training each day. Now you're going away from it. Unless the intensity of the processes that take place in the group is necessary and people need to spend a lot of time together. There are some things that can't be skipped. But a lot of things can be done remotely. Also, interactive exercises, including those offered by Microsoft Teams, allow one to divide into rooms, people can work in subgroups physically being in different places (R4).

Can every competence be developed online? What effectiveness can be achieved through blended learning, i.e. combining different forms and development tools? When is it worth organising a webinar, and what will employees gain from ready-made online trainings to be displayed anytime and anywhere? Perhaps, in a given situation, it is enough to take a knowledge pill. What should one choose if a classic on-site training formula is best known for the organisation; how does one prepare for live online training? Before L&D representatives decide to choose a specific development form, it would be worthwhile to look for answers to the key questions indicated above. Then, the employee will be able to consult an expert from his or her L&D department, examine the needs – so that the time actually devoted to development can bring tangible results. No one doubts that this is only the beginning of numerous changes, and digitisation in development processes will be continued. It can be expected that training offerings will be further enriched with various online forms and that an agile approach to employee development will become increasingly important. It is high time for new technologies to enter in a modern way these areas of development. Although many employees will soon be happy to return to the training rooms, the quality change seems to be certain:

Networking will certainly remain an important element of trainings and conferences. But we will also learn to acquire information effectively online – we will see that it works, that it saves us time, and supports our personal productivity (R3).

It turns out that such an approach of quick bites – so to speak – training, short online meetings, intensive, it really works very well (R4).

A huge change will be probably soon brought by another technological leap, i.e. the use of virtual reality, augmented reality and artificial intelligence in development areas on a greater scale (Maity, 2019; Martirosov and Kopecek, 2017).

Discussion and conclusions

The findings show that the COVID-19 pandemic has affected developmental processes in organisations in Poland. The results indicate, apart from the change in the form and methodology of employee trainings due to the pandemic, that employees also desire new topics to aid their development. What else was noticed is the decreased employee engagement and increased fatigue with the use of multiple, online development initiatives. Screen-fatigue syndrome takes its toll when trying to recreate old habits online (Bailenson, 2021). The most important conclusions and usefulness of the presented reflection are related to the thesis that the coronavirus forced us to quickly cross digital borders, and in many cases, we paid a high price for it. It is time to diligently but carefully prepare for

organisational change, balancing the functioning of all in a planned manner areas of the company, including HRD.

The consequences of the changes resulting from the COVID-19 pandemic for leaders, teams and organisations are not easy to estimate at this stage – it is difficult to determine clearly what exactly this change will mean in the long term. For many organisations, this will be a confusing experience, but it can also be an opportunity to rethink the way people are managed and developed. Employees and leaders need to understand new tasks and their roles; they need information and a plan to rebuild a shaken or demolished structure. Many of the managers' actions are concerned with changing the work organisation due to remote working. However, it seems risky to look at it only from a technical point of view. L&D leaders certainly have an important task ahead of them – to manage their own expectations so as to mobilise the team to proactively adapt to changes. Before COVID-19, L&D department who tried to advocate online learning had faced many resistances and slow implementation time. With the mass shift of staff working from home during pandemic, the need for continuous learning and ongoing performance support has never been more acute. Existing standards and beaten paths are rapidly losing importance. Digital transformation is no longer a matter of choice, but an inevitable action resulting from a pressing need and involving all the company's teams. Its basis is building the common readiness of employees, overcoming barriers step by step, at the educational, tool and, above all, psychological level. Acting while recognising and taking into account the psychological needs of team members can significantly increase their motivation and effectiveness in the undertaken development processes.

It is worth noting that we are also currently in the middle of a transformation of the methodology of learning and development, centred around the digitisation of text, image, sound and related data via the internet. This stage is sometimes called the new media era. However, research indicates that there is no link between access to modern technologies, their use and the results obtained from science (Hattie, 2009). This means that, for example, using computers alone does not improve developmental effects. Only their deliberate, specific and conscious use (for example, gaining control over the learning process, ability to use different learning strategies, involving other people, including colleagues in the process) increases effectiveness. Therefore, in the light of the literature on the subject, as well as the research described, L&D managers should first of all remember that it is not the technology itself that is at stake, but its sensible, methodical and purposeful use in the employee development processes. Digital solutions will of course not replace other forms of development, but the increasing quality of online learning coupled with scalability, accessibility and the ability to personalise this type of learning highlights its potential to play a far stronger future role in supporting workplace and adult skills development. Also in development activities, we are in for a strengthening of the trend of expecting real business results. While each of us hopes that 2021 will turn out to be a year of economic rebound, whether or not it does, development funds will be spent carefully. For economic reasons, trainings may simply be less. This should result in focusing on certainty and quality in development activities.

Research implications, limitations and future research

Working using modern technologies constantly requires employees to acquire new competences and improve, or even completely change, the already well-established ones. This constant change, resulting from the increasingly newer technological solutions in the work environment, may cause an intensification of negative emotions and stress, especially among employees showing less ability to adapt to such a variable and demanding

professional reality, which we are currently dealing with (Bliese *et al.*, 2017; Brynjolfsson and McAfee, 2016; Maiti and Awasthi, 2020). This issue probably requires further research, which could indicate the direction of actions to be taken by L&D managers to reduce negative feelings among employees.

Organisations wishing to offer their employees high quality online training should first be aware of the important differences between the individual educational formats. For example, a webinar is a short form providing knowledge on a particular topic. For a participant to turn theory into action and develop skills according to the information gained, a high level of motivation and openness to development is needed. During the pandemic, some of the organisations were looking for webinars for several hundred people, preferably lasting one hour and guaranteeing a significant increase in knowledge, skills and, most importantly, a change in participants' attitudes. It is worth stressing that a much better answer to such expectations could be a full-scale, for example, a two-day, live, online and small group training. This type of training gains the highest satisfaction ratings from participants and may be able provide change on the level of beliefs, attitudes and behaviours of participants. Therefore, an important mission of L&D departments seems to be to educate employees about advantages, disadvantages and specifics of various online development solutions.

It can be assumed that, as the pandemic continues to unfold, designing hybrid learning will become more important than ever, and L&D professionals need to combine the flexibility of self-training and online resources with highly engaging live experiences. This mode gives hope for a new level of efficiency and effectiveness of development programmes and certainly requires further research. In the era of galloping digitisation, blended development processes may face a number of barriers. Maintaining attention and commitment when the teacher or trainer is separated from the participants by a screen, or the selection of key content with the increasing supply of stimuli and information nowadays are examples of such challenges. We see in practice how important it is to design educational hybrids well and use the strengths of each method so that development activities are friendly and provide the best results. A common mistake in designing development processes is the misuse of technological tools. They should be deliberately chosen and respond to different learning needs and ways. The intended results, the characteristics of the target group and the previous experiences of the participants as well as the organisational culture should lead to the choice of tools and not the other way around.

Although this research makes important theoretical and empirical contributions (mentioned above) to the existing literature, some limitations must be kept in mind when drawing conclusions from the reported results. It is worth noting at this point that although the respondents in the in-depth interviews were solely HR managers from Poland, the vast majority of them work in international corporations. It can therefore be considered that the research results described may also be of international importance. Some limitation may be the intentional selection of the research sample, which preclude the generalisation of the obtained results. What is important, we do not yet know the full impact of the pandemic on careers (Hite and McDonald, 2020). This definitely requires further research.

In what direction will the forms of employee development evolve and what impact will the ongoing pandemic have on these changes? Certainly, this issue requires further research, especially with regard to the increasingly common model of hybrid work and the accompanying challenges in terms of searching for effective solutions that can be applied in a situation of performing professional duties, more and more often in a private space. Quantitative research may be the next research step that allows to deepen the obtained results. The quantitative analysis could help to reliably estimate how much this specific COVID-19 reality has changed the approach to employee development in different organisations.

The direction of change in the role of L&D specialists in the organisation

What should L&D development teams do with the information described above? First, focus on their current role in the organisation. For a long time, the HRD departments were responsible for creating and managing the training process. Now, when many things no longer have to be created from scratch, because they are available on the market and most often online, and the management of the development process is taken over by the employees themselves, the main task of L&D departments should be to constantly examine the skills and competence gaps, as well as to create the right conditions for employees to learn and help implement these conditions along with materials and development resources. Everything seems to indicate that L&D departments have an interesting future changing their approach to employee development. The more competitive the market and the broader the access to knowledge is for all, the more important are the competences of employees. Perhaps the most important task of L&D departments in the near future will be to skilfully combine the development needs of employees with the online knowledge already available on the market. Internal face-to-face trainings will be conducted much less frequently. L&D professionals must master both learning design and online facilitation skills in the digital world.

Practical implications for human resource development

The undoubted advantage of the events of 2020 is the popularisation of e-learning as a teaching method, accepting it as a form of development and the rapidly growing offer of ready-made courses and modules. The demand for e-learning is reported by companies and organisations that have never used it before. At the moment, it is difficult to say clearly whether this turn towards online training will last, or whether, after the pandemic has passed, companies will return to face-to-face trainings on a larger scale. What L&D representatives in the organisation should now pay special attention to is to ensure that the hasty and forced transition from on-site training to online training does not adversely affect the quality of development processes. The aim is to make maximum use of the potential of e-learning, while understanding its limitations and abandoning the simple online copying of traditional trainings. Perhaps this pandemic is a good time for L&D departments to create, in consultation with development tools providers, the so-called Learning Ecosystem, i.e. a coherent and transparent infrastructure covering all (internal and external) systems, tools and educational sources used in the company (Johnson, 2019; Chang and Guetl, 2007; Strada Institute for the Future of Work Report, 2019; Straub, 2019). This integration seems to be crucial in the constantly developing, educational environment in companies. According to the HR.com report (2020), survey respondents think that one of the main weaknesses of their current education platform was the poor ability to integrate with other systems, which limited the possibility of incorporating new tools into their programmes and technologies that they might want to use in their existing learning strategy. Now is the perfect time to finally perform such an integration and create a single, integrated learning ecosystem as the expected direction of HRD in the organisation. Why? Because such an educational environment shortens the time of searching for needed materials, improves users' experience (UX), supports the exchange of experience and collaboration. In short, it pays off for both employees and organisations. A single training ecosystem is nothing new. Yet, its character has changed. It used to come down to a single system that had all the possible functions and materials. Now suppliers are beginning to specialise in different areas and combine with other solutions, tools, instead of trying to have everything in one LMS. After this first reaction and the mass transfer of all training courses to remote forms, it would be worthwhile for L&D departments to focus more on the recipient and to think about which of

the development activities currently have a multidimensional sense. This would be a good time also to ask employees how they are doing and really listen. And give employees a break if they are not doing so well.

References

- Armstrong, M.B. and Landers, R.N. (2018), "Gamification of employee training and development", *International Journal of Training and Development*, Vol. 22 No. 2, pp. 162-169, doi: [10.1111/ijtd.12124](https://doi.org/10.1111/ijtd.12124).
- Armstrong, M. and Taylor, S. (2020), *Armstrong's Handbook of Human Resource Management Practice*, 15 ed., Kogan Page Ltd., London.
- ATD Research Report (2020), "E-learning: the evolving landscape", available at: www.td.org/research-reports/e-learning-the-evolving-landscape (accessed 5 October 2020).
- Bailenson, J.N. (2021), "Nonverbal overload: a theoretical argument for the causes of Zoom fatigue", *Technology, Mind, and Behavior*, Vol. 2 No. 1, doi: [10.1037/tmb0000030](https://doi.org/10.1037/tmb0000030).
- Bersin, J. (2018), "'Learning in the flow of work', keynote presentation delivered at LinkedIn talent connect", available at: www.youtube.com/watch?v=niOI9VoS7IY&feature=emb_logo (accessed 12 September 2020).
- Bliese, P.D., Edwards, J.R. and Sonnentag, S. (2017), "Stress and well-being at work: a century of empirical trends reflecting theoretical and societal influences", *Journal of Applied Psychology*, Vol. 102 No. 3, pp. 389-402.
- Britz, M. (2018), "Don't think training first for employee development", *The Central New York Business Journal*, Vol. 32 No. 18, pp. 5-7.
- Brynjolfsson, E. and McAfee, A. (2016), *The Second Machine Age. Work, Progress, and Prosperity in a Time of Brilliant Technologies*, Norton and Company, New York, NY.
- Cerasoli, C.P., Alliger, G.M., Donsbach, J.S., Mathieu, J.E., Tannenbaum, S.I. and Orvis, K.A. (2018), "Antecedents and outcomes of informal learning behaviors: a meta-analysis", *Journal of Business and Psychology*, Vol. 33 No. 2, pp. 203-230, doi: [10.1108/13665620310483895](https://doi.org/10.1108/13665620310483895).
- Chang, V. and Guetl, C. (2007), "E-Learning ecosystem (ELES) – a holistic approach for the development of more effective learning environment for small-and-medium sized enterprises (SMEs)", in Chang, E. and Hussain, F.K. (Eds), *Inaugural IEEE International Conference on Digital Ecosystems and Technologies*, Cairns, New York, NY, pp. 440-445, doi: [10.1109/DEST.2007.372010](https://doi.org/10.1109/DEST.2007.372010).
- Cormier, G., Gino, F., Green, P.I., Chatman, J., John, L., Southwick, D., Tussing, D., Boghrati, R., Duckworth, A., Jang, L., Quirk, A., Tsay, C. and Ungar, L. (2020), "The future of employee development: Fostering developmental relationships and addressing barriers", *Academy of Management Annual Meeting Proceedings*, Vol. 1 No. 7232, doi: [10.5465/AMBPP.2020.17232symposium](https://doi.org/10.5465/AMBPP.2020.17232symposium).
- Dachner, A.M., Ellingson, J.E., Noe, R.A. and Saxton, B.M. (2019), "The future of employee development", *Human Resource Management Review*, Vol. 100732, doi: [10.1016/j.hrmr.2019.100732](https://doi.org/10.1016/j.hrmr.2019.100732).
- Degreed Report (2020), "The state of skills 2021: ENDANGERED", available at: <https://stateofskills.degreed.com/> (accessed 8 March 2021).
- Digital University and Great Digital Report (2020), "Employee education in the time of COVID: survey report", available at: <https://greatdigital.pl/raport-edukacja-pracownikow-w-czasach-covid/>, (accessed 8 March 2021).
- Drewery, D.W., Sproule, R. and Pretti, T.J. (2020), "Lifelong learning mindset and career success: evidence from the field of accounting and finance", *Higher Education, Skills and Work-Based Learning*, Vol. 10 No. 3, pp. 567-580, doi: [10.1108/HESWBL-03-2019-0041](https://doi.org/10.1108/HESWBL-03-2019-0041).
- Fake, H. and Dabbagh, N. (2020), "Personalized learning within online workforce learning environments: exploring implementations, obstacles, opportunities, and perspectives of workforce leaders", *Technology, Knowledge and Learning*, Vol. 25 No. 4, pp. 789-809.

- Fosway Group Report (2020), "How is COVID-19 changing learning?", available at: www.fosway.com/research/next-gen-learning/learning-technologies-summer-forum-2020/, (accessed 12 August 2020).
- Glazer, S., Mahoney, A.C. and Randall, Y. (2019), "Employee development's role in organizational commitment: a preliminary investigation comparing generation X and millennial employees", *Industrial and Commercial Training*, Vol. 51 No. 1, pp. 1-12, doi: [10.1108/ICT-07-2018-0061](https://doi.org/10.1108/ICT-07-2018-0061).
- Goldglantz, H.F. (2013), "Invest in employee training", *Pest Management Professional*, Vol. 81 No. 8, p. 68.
- Gottfredson, C. and Mosher, B. (2010), *Innovative Performance Support: Strategies and Practices for Learning in the Workflow*, McGraw-Hill Education, New York, NY.
- Gartner Report (2020), "Future of work trends post-COVID-19. Long-term impact and actions for HR", available at: www.gartner.com/smarterwithgartner/9-future-of-work-trends-post-covid-19/ (accessed 6 March 2021).
- Hattie, J. (2009), *Visible Learning: A Synthesis of over 800 Meta-Analyses Relating to Achievement*, Routledge, New York, NY.
- Hite, L.M. and McDonald, K.S. (2020), "Careers after COVID-19: challenges and changes", *Human Resource Development International*, Vol. 23 No. 4, pp. 427-437, doi: [10.1080/13678868.2020.1779576](https://doi.org/10.1080/13678868.2020.1779576).
- HR.com Report (2020), "The state of learner experience, engagement, and solutions", available at: www.hr.com/en/resources/free_research_white_papers/hrcom-learner-experience-engagement-2020-research_k7y5ad4v.html (accessed 20 September 2020).
- Jarvis, P. (2010), *Adult Education and Lifelong Learning: Theory and Practice*, Taylor and Francis Ltd., London.
- Jingfang, C.L. and Yates, C. (2020), *Share: How Organizations Can Thrive in an Age of Networked Knowledge, Power and Relationships*, Bloomsbury Business, London.
- Johnson, W. (2019), "Your organization needs a learning ecosystem", *Harvard Business Review*, available at: <https://hbr.org/2019/07/your-organization-needs-a-learning-ecosystem> (accessed 5 October 2020).
- Kniffin, K.M. Narayanan, J. Anseel, F. Antonakis, J. Ashford, S.P. Bakker, A.B. Bamberger, P. Bapuji, H. Bhawe, D.P. Choi, V.K. Creary, S.J. Demerouti, E. Flynn, F.J. Gelfand, M.J. Greer, L. Johns, G. Kesebir, S. Klein, P.G. Lee, S.Y. Ozcelik, H. Petriglieri, J.L. Rothbard, N.P. Rudolph, C.W. Shaw, J.D. Sirola, N. Wanberg, C.R. Whillans, A. Wilmot, M.P. and Vugt, M. (2020), "COVID-19 and the workplace: implications, issues, and insights for future research and action", Working Paper 20-127, Harvard Business School, available at: www.hbs.edu/ris/Publication%20Files/20-127_6164cbfd-37a2-489e-8bd2-c252cc7abb87.pdf (accessed 8 March 2021).
- Kshirsagar, A. Mansour, T. McNally, L. and Metakis, M. (2020), "Adapting workplace learning in the time of coronavirus", McKinsey and Company, available at: www.mckinsey.com/business-functions/mckinsey-accelerate/our-insights/adapting-workplace-learning-in-the-time-of-coronavirus, (accessed 19 October 2020).
- Lee, S. (2020), "The brave new world of L&D: Stepping up in the age of disruption", *Training Industry Magazine – Building a Great Training Organization*, Vol. 13 No. 6, p. 49.
- LinkedIn Learning Report (2020), "4th annual 2020 workplace learning report", available at: <https://learning.linkedin.com/resources/workplace-learning-report> (accessed 12 March 2021).
- Lofland, J. and Lofland, L.H. (1995), *Analyzing Social Settings: A Guide to Qualitative Observation and Analysis*, 3rd ed., Wadsworth.
- McGuire, D., Germain, M.L. and Reynolds, K. (2021), "Reshaping HRD in light of the COVID-19 pandemic: an ethics of care approach", *Advances in Developing Human Resources*, Vol. 23 No. 1, pp. 26-40, doi: [10.1177/1523422320973426](https://doi.org/10.1177/1523422320973426).
- Maheshwari, S. and Vohra, V. (2018), "Role of training and development practices in implementing change", *International Journal of Learning and Change*, Vol. 10 No. 2, pp. 131-162.

- Maiti, D. and Awasthi, A. (2020), "ICT exposure and the level of wellbeing and progress: a cross country analysis", *Social Indicators Research*, Vol. 147 No. 1, pp. 311-343.
- Maity, S. (2019), "Identifying opportunities for artificial intelligence in the evolution of training and development practices", *Journal of Management Development*, Vol. 38 No. 8, pp. 651-663, doi: [10.1108/JMD-03-2019-0069](https://doi.org/10.1108/JMD-03-2019-0069).
- Man, M.M.K. (2020), "Human resource development requirements in industrial revolution 4.0", in Turkmenoglu, M.A. and Cicek, B. (Eds), *Contemporary Global Issues in Human Resource Management*, Emerald Publishing Limited, pp. 129-139, doi: [10.1108/978-1-80043-392-220201011](https://doi.org/10.1108/978-1-80043-392-220201011).
- Martirosov, S. and Kopecek, P. (2017), "Virtual reality and its influence on training and education – literature review", in Katalinic, B. (Ed.), *28th DAAAM International Symposium*, DAAAM International, Vienna, pp. 708-717, doi: [10.2507/28th.daaam.proceedings.100](https://doi.org/10.2507/28th.daaam.proceedings.100).
- Matthews, J.J., Megginson, D. and Surtees, M. (2004), *Human Resource Development*, Kogan Page, London Sterling, VA.
- Mayo, A. (2000), "The role of employee development in the growth of intellectual capital", *Personnel Review*, Vol. 29 No. 4, pp. 521-533, doi: [10.1108/00483480010296311](https://doi.org/10.1108/00483480010296311).
- Molloy, J.C. and Noe, R.A. (2010), "Learning' a living: continuous learning for survival in today's talent market", in Kozlowski, S.W.J. and Salas, E. (Eds), *Learning, Training, and Development in Organizations*, Routledge/Taylor and Francis Group, New York, NY, pp. 333-361.
- Morgan-Klein, B. and Osborne, M. (2007), *The Concepts and Practices of Lifelong Learning*, Taylor and Francis Ltd., London.
- Mourão, L. and Fernandes, H. (2020), "Perception of workers about inhibitors and fuels of professional development", *Psicologia: Teoria e Prática*, Vol. 22 No. 2, pp. 273-295, doi: [10.5935/1980-6906/psicologia.v22n2p273-295](https://doi.org/10.5935/1980-6906/psicologia.v22n2p273-295).
- Mulvie, A. (2021), *Learning and Development for a Multigenerational Workforce: Growing Talent Amongst Age Diverse Employees*, 1st ed., Routledge, London, doi: [10.4324/9780429293481](https://doi.org/10.4324/9780429293481).
- Nadiv, R., Raz, A. and Kuna, S. (2017), "What a difference a role makes: occupational and organizational characteristics related to the HR strategic role among human resource managers", *Employee Relations*, Vol. 39 No. 7, pp. 1131-1147.
- Nielsen, K., Nielsen, M.B., Ogbonnaya, C., Kånsälä, M., Saari, E. and Isaksson, K. (2017), "Workplace resources to improve both employee well-being and performance: a systematic review and meta-analysis", *Work and Stress*, Vol. 31 No. 2, pp. 101-120, doi: [10.1080/02678373.2017.1304463](https://doi.org/10.1080/02678373.2017.1304463).
- Noe, R.A., Clarke, A.D. and Klein, H.J. (2014), "Learning in the twenty-first-century workplace", *Annual Review of Organizational Psychology and Organizational Behavior*, Vol. 1 No. 1, pp. 245-275.
- Raheja, R. (2021), "L&D trends that will define the segment in 2021", *People Matters Digital Magazine*, available at: www.peplemattersglobal.com/article/training-development/ld-trends-that-will-define-the-segment-in-2021-28092 (accessed 9 March 2021).
- Saldaña, J. (2009), *The Coding Manual for Qualitative Researchers*, Sage Publications Ltd.
- Sheehan, M., N. Garavan, T. and Carbery, R. (2014), "Innovation and human resource development (HRD)", *European Journal of Training and Development*, Vol. 38 Nos 1/2, pp. 2-14, doi: [10.1108/EJTD-11-2013-0128](https://doi.org/10.1108/EJTD-11-2013-0128).
- Skule, S. (2004), "Learning conditions at work: a framework to understand and assess informal learning in the workplace", *International Journal of Training and Development*, Vol. 8 No. 1, pp. 8-20.
- Sloman, M. (2007), *The Changing World of the Trainer*, Butterworth-Heinemann, Oxford.
- Somogyi, D.I. (2020), "The educational dimension of the human capital", *Ovidius University Annals, Series Economic Sciences*, Vol. 20 No. 1, pp. 390-394.
- Spaan, N.R., Dekker, A.R.J., Van der Velden, A.W. and De Groot, E. (2016), "Informal and formal learning of general practitioners", *Journal of Workplace Learning*, Vol. 28 No. 6, pp. 378-391, doi: [10.1108/JWL-12-2015-0090](https://doi.org/10.1108/JWL-12-2015-0090).

- Strada Institute for the Future of Work Report (2019), "The new learning ecosystem", available at: www.stradaeducation.org/report/the-new-learning-ecosystem/ (accessed 15 September 2020).
- Straub, R. (2019), "The power of ecosystems", *Global Focus. The EFMD Business Magazine*, available at: www.globalfocusmagazine.com/the-power-of-ecosystems/ (accessed 23 November 2020).
- Strauss, A. and Corbin, J. (1990), *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*, 4th ed., Sage Publications.
- Sutherland, J. and Canwell, D. (2004), *Key Concepts in Human Resource Management*, Palgrave, London, doi: [10.1007/978-0-230-20464-5](https://doi.org/10.1007/978-0-230-20464-5).
- Swanson, R.A. and Holton, E.F. III (2008), *Foundations of Human Resource Development*, Berrett-Koehler Publishers, Inc., San Francisco.
- Tharenou, P., Saks, A.M. and Moore, C. (2007), "A review and critique of research on training and organizational-level outcomes", *Human Resource Management Review*, Vol. 17 No. 3, pp. 251-273.
- The Ken Blanchard Companies (2020), "2021 trends: learning and development in COVID world", available at: <https://resources.kenblanchard.com/research-insights/2021-trends-report> (accessed 12 March 2021).
- Training magazine (2019), "2019 training industry report", available at: https://trainingmag.com/sites/default/files/2019_industry_report.pdf (accessed 15 October 2020).
- Williams, A. (2020), *Betting Big on Employee Development*, MIT Sloan Management Review, Cambridge, MA.
- Wong, K.Y. and Aspinwall, E. (2004), "Knowledge management implementation frameworks: a review", *Knowledge and Process Management*, Vol. 11 No. 2, pp. 93-104, doi: [10.1002/kpm](https://doi.org/10.1002/kpm).

Further reading

- CIPD Report (2020), "Learning and skills at work 2020", Chartered Institute of Personnel and Development, London, available at: www.cipd.co.uk/Images/learning-skills-work-report-1_tcm18-79434.pdf (accessed 8 March 2021).

Corresponding author

Katarzyna Mikołajczyk can be contacted at: kturek@sgh.waw.pl