

Chapter 10

Heutagogy and Work

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This chapter examines the role of agency and heutagogy in work-based learning and in preparing learners in tertiary education for work. The world is moving at a fast pace, with change occurring extremely rapidly in a volatile, uncertain, complex, and ambiguous (VUCA) world. Workplaces need people who are able to respond to change and adapt quickly. To do this requires that future employees have the ability to learn as well as exhibit agency. We will look at the role heutagogy can play in enabling agency, helping people be effective learners and also how learning at work can be harnessed, valued and used effectively. Finally, we examine the role of digital technologies in work-based learning.

Learning and work

There are three different ways of thinking about learning and work. First, there is the way in which formal education prepares people for work. Second, there is professional development, which can be formal or informal but which is aimed at the participant's work, rather than personal interest. The third is from the perspective of the learner at work in which the workplace can be seen as a learning laboratory. Every day there are countless opportunities for people to learn. The challenge concerns how the learning is harnessed, what happens to it and how it might be recognised in the same way that formal learning is recognised. In capturing the learning, the learner is able to reflect on the learning, make more sense of it, build on it, and establish a record of competence and capability for future reference.

Today's workplace requires that employees are independent, creative, and innovative, while also able to adapt quickly to complexity and chaos in the organisation. From a heutagogical perspective, organisations need: capable employees able to use their competence in novel, unfamiliar circumstances; people with high levels of self-efficacy; reflective practitioners able to engage in double loop learning; action learners; and employees with the ability to learn. In short, organisations need people who are given and claim agency.

Formal education and preparation for work

In their Learning Compass for 2030, the OECD (2019) describe the importance of learner (student) agency and co-agency with other stakeholders (e.g., peers, teachers, parents, and communities). They also state the core foundations for students to be able to exercise this agency in preparation for the

workforce and their role as citizens of the world. These core foundations include skills (social and emotional, learning to learn), knowledge (disciplinary, interdisciplinary, epistemic, procedural), and attitudes and values.

Learning Compass 2030 goes on to describe how transformative competencies build upon these core foundations. These competencies are: creating new value (e.g., knowledge, ideas, and strategies) through innovative thinking and applying knowledge in unique ways in solving problems; recognising the tensions and conflict that exist in an inter-connected environment and finding practical solutions through thoughtful exploration and assessment of problems; and being able to take on responsibility through a process of reflection and evaluation of values and goals. The focus of OECD's Learning Compass is not on the content of the curriculum, but rather the learning process.

The need to think beyond the subject curricula is gradually being recognised by higher education institutions. For example, in their research on future skills, Ehlers and Kellermann (2019) identified emerging trends and drivers within higher education that are currently shaping institutional offerings, which include a stronger focus on the future skills required of graduates (e.g., autonomy, self-organisation, and reflection), student design of their own personalised curriculum, and an emphasis on providing lifelong learning offerings.

Given the need for increasing agency in general and learning agency in particular, there is an opportunity for heutagogic principles and techniques to be applied within higher education in preparing students for the workforce (See Chapter 2).

Professional development

Heutagogy and agency have been applied in a variety of workplace contexts (Barton, 2012; Hexom & Marlaire, 2013; O'Brien et al., in press; Ridder, 2014). In a review of vocational education and training programs in Australia, Willmott and Barry (2002) found that the VET sector is applying self-determined learning in a number of ways:

- increased learner responsibility for learning
- increased choice in learning activities
- workplace problem-based learning activities
- group work
- adult learning behaviours
- reciprocal feedback between teacher and learner.

Tay and Hase (2004, 2013) were involved in a professional development program for executives in Singapore that also led to obtaining an action research doctoral research degree. These executives were mostly engineers who were well-versed in using quantitative techniques in their practice but not qualitative approaches that were used in change programs in their workplaces using action research. Tay and Hase watched the PAH continuum (see Chapter 2) in action as the learners went from being very supervisor dependent to heutagogical learners in the course of the program. Learner agency rose and dependency diminished as the participants progressed.

Hase (2014) also provides a detailed approach on how to design professional development workshops using heutagogical principles. The workshops are based entirely on the identified problems, issues, concerns, and interests of the participants rather than the interests of the facilitator. Thus, context is king in this process as it is used as the basis for the learning. The role of the 'learning leader' Hase

(2014) is to make sure that essential content, techniques and skills find their way into the process without using didactic methods. Learning leaders need to have mastery of their subject and the ability to spontaneously design learning activities that encourage learner agency.

In a study involving professional development with ontology nurses, Cordon (2015) found that using heutagogical approaches raised the confidence of participants in managing their own learning and increased their ability to solve unfamiliar problems. Studying informal learning among HR practitioners, Bailey (2013) found that heutagogic approaches enhanced the capacity for learners to become more independent learners. From a teacher's perspective Jaakola (2015) suggested that they could, in the context of using networked technologies, more easily become facilitators of self-determined learning.

Learning at work

We've already discussed in previous chapters how, when people want to learn a new skill or find something out, they choose how to achieve their goal, without the need for a 'teacher' or a formal course. Learners may choose to do this at some stage, but it is on their own terms. Lombardo and Eichinger (1996) found 70% of workplace learning occurs through experience, with 20% of learning is learned from others and 10% from formal training. Research from Johnson, Blackman and Buick (2018) has further indicated that in order for learning to be repeatable, structures must be established that support learners in codifying and internalising learning.

In short, people design their own learning journeys when motivated to do so - and when given an environment that supports this agency. Learner ability to design their learning has been further aided and abetted by the advent of the Internet and by e-learning and digital technologies that have been a popular area for use of heutagogic methods (these are described below in more detail). Due to the availability of these technologies and the demand for continuous learning, innovation, and creativity, the workplace provides a perfect opportunity to enhance learner agency and in harnessing informal learning. Some examples from the literature include situated learning (Lave and Wenger (1991), work-based learning (Boud & Solomon, 2001), reflective practice (Billett, 2001; Boud & Walker (1998), and informal learning at work (Eraut, 2011).

Having the self-efficacy to take control of personal learning is an important skill in career development (McIlveen, 2010), particularly in contexts in which people cannot rely on teacher-centred approaches to their learning and need to rely more on their own resources. McIlveen called this 'transformative career development learning.'

It is important to remember that the 'teacher' is not redundant or that informal learning has to be a completely random process. Certainly, someone needs to determine essential content and skills to be learned, with the teacher serving as a mentor or coach to assist in self-scaffolding, as suggested in Vygotsky's notion of 'zones of proximal development (Fani & Ghaemi). While content is important, self-determined learning is more concerned with process, that is, how the learner learns and how the learning is harnessed.

Some practical ways of using heutagogy and harnessing learning could take the form of keeping a learning portfolio or a reflective learning journal or diary, participating in action learning groups that meet on a regular basis, taking part in regular coaching and developing a coaching plan, creating and building communities of practice for learning, sharing information, and networking, and attending weekly learning meetings.

Using digital media to transition from formal to informal learning

Using the PAH continuum (see Chapter 2) can assist in helping learners transition from formal to informal learning from passive, traditional pedagogic learning to active, self-determined, heutagogic learning (Blaschke, 2014a). This movement along the continuum can be achieved by promoting learner agency and incorporating heutagogic design elements, specifically through the use of digital media that support heutagogic learning (Blaschke, 2014b). Scaffolding the learning process can also help learners adopt a heutagogic approach to learning, especially if they are accustomed to traditional classroom instruction.

One approach to helping learners transition to heutagogy is through the implementation of a personal learning environment (PLE), where the students identify and expand their sources and network of learning and knowledge both inside and outside of the classroom. Digital media can be useful in establishing a PLE, which learners use to find, create, and share information, as well as to connect with others in the network (Hayworth, 2016; Hicks & Sinkinson, 2015). For example, Twitter, blogs, Google Docs, e-portfolios, and learning journals give students an opportunity to create, share, and reflect on own knowledge and experience. Online communities of practice allow students to connect and collaborate with likeminded scholars, researchers, and practitioners in the field. Within the workforce, these communities of practice can be created using a company intranet or social media networking tools such as Slack (www.slack.com). Wark (2018) found that learners using emergent technologies are able to use self-determined learning to better understand and use the technologies in practice, which was then shown to encourage learners to be more responsible for their own learning and, at the same time, give them satisfaction when use of the technology is relevant to their context.

The literature has explored numerous means of using digital media to nurture and promote self-determined learning (Table 1).

Table 1

Digital media that support transitioning from formal to informal learning (Hase and Blaschke 2021).

Digital Media	Examples from the Literature
Twitter, blogs, and GoogleDocs	Blaschke (2014b); Chawinga (2017); Junco, Heiberger and Loken (2010)
Mobile devices and online communities of practice	Cochrane et al. (2014); Cochran and Bateman (2010); Cochrane and Narayan (2013, 2014); Gerstein (2014); Narayan and Herrington (2014); Narayan, et al (2017); Narayan, Herrington and Cochrane (2019); Price (2014)
Personal learning environments	Hayworth (2016); Hicks and Sinkinson (2015)
Online portfolios and learning journals	Blaschke (2014a); Blaschke and Brindley (2011); Blaschke and Marin (2020, in press)
Electronic games and augmented reality	Halupa (2017); Hornsby and Maki (2008)
Massive open online courses (MOOCs)	Agonács and Matos (2017); Anders (2015); Armellini and Padilla Rodriguez (2017); Beaven, Hauck, Comas-Quinn, Lewis, and de los Arcos (2014); Bozkurt and Keefer (2018); Crosslin (2018)

Conclusion

An exponential rate of change, and the need to learn quickly and 'just in time' requires a different approach to both informal and formal education. In order to realise this approach, we must make the learner the centre of the learning process and the main agent in his or her own learning, rather than a passive recipient. Internet and digital technologies provide significant learning affordances that promote self-determined learning, thus offering considerable potential for supporting work-based learning and in preparing learners for the workplace. At the same time, the workplace is a petri dish of informal learning opportunities. The question is how to find ways to harness this learning and to take advantage of these learning affordances.

References

- Agonács, N., & Matos, J.F. (2017). Towards a heutagogy-based MOOC design framework. In *Proceedings of EMOOCs 2017: Work in Progress Papers of the Experience and Research Tracks and Position Papers of the Policy Track*, 47-52.
- Anders, A. (2015). Theories and applications of massive online open courses (MOOCs): The case for hybrid design. *International Review of Research in Open and Distributed Learning*, 16(6), 39-61.
- Armellini, A., & Padilla Rodriguez, B.C. (2017). Developing self-efficacy through a massive open online course on study skills. *Open Praxis*, 9(3), 335-343. doi: <https://doi.org/10.5944/openpraxis.9.3.659>.
- Bailey, M. (2013). Developmentalism - from here to there - is heutagogy the way there for HR? Doctoral thesis. <https://edtechbooks.org/-pCx>.
- Barton, M. (2012). *Developing core competencies of sme managers using heutagogy principles in SMEs' Management in the 21st Century*. Czestochowa University of Technology, Faculty of Management, Publishing Section, Czestochowa, 230-244.
- Beaven, T., Hauck, M., Comas-Quinn, A., Lewis, T., & de los Arcos, B. (2014). MOOCs: Striking the right balance between facilitation and self-determination. *MERLOT Journal of Online Learning and Teaching*, 10(1). Retrieved 8th December, 2019 from <https://edtechbooks.org/-Iai>.
- Billett, S. (2001). Learning through work: Workplace affordances and individual engagement. *Journal of Workplace Learning*, 13, 209-214.
- Blaschke, L.M. (2014a). Moving forward in the PAH continuum: Maximizing the power of the social web. In L.M. Blaschke, C. Kenyon, & S. Hase (Eds.), *Experiences in self-determined learning*, 49-62. Amazon.com. <https://edtechbooks.org/-Kzdo>
- Blaschke, L. M. (2014b). Using social media to engage and develop the online learner in self-determined learning. *Research in Learning Technology*, 22.
- Blaschke, L., & Brindley, J. (2011). Establishing a foundation for reflective practice: A case study of learning journal use. *European Journal of Open, Distance, and E-Learning*. Available from: <https://edtechbooks.org/-uRm>

- Blaschke, L. M., & Marín, V. I. (2020). Applications of heutagogy in the educational use of e-portfolios. *Revista de Educación a Distancia RED*. Available from: <https://edtechbooks.org/TbP>
- Boud, D., & Solomon, N. (Eds.). (2001). *Work-based learning: A new higher education?* Philadelphia. Open University Press.
- Boud, D., & Walker, D. (1998). Promoting reflection in professional courses: The challenge of context. *Studies in Higher Education*, 23(2), 191-206.
- Bozkurt, A., & Keefer, J. (2018). Participatory learning culture and community formation in connectivist MOOCs. *Interactive Learning Environments*, 26(6), 776-788.
- Chawinga, W. D. (2017). Taking social media to a university classroom: Teaching and learning using Twitter and blogs. *International Journal of Educational Technology in Higher Education*, 14(3). doi: <https://edtechbooks.org-pAYX>.
- Cochrane, T., Antonczak, L., Guinibert, M., & Mulrennan, D. (2014). Developing a mobile social media framework for creative pedagogies. *10th International Conference on Mobile Learning*, Madrid, Spain. Retrieved from <https://edtechbooks.org-tZj>.
- Cochrane, T., & Bateman, R. (2010). Smartphones give you wings: Pedagogical affordances of mobile Web 2.0. *Australasian Journal of Educational Technology*, 26(1), 1-14.
- Cochrane, T., & Narayan, V. (2013). Redesigning professional development: Reconceptualising teaching using social learning technologies. *Research in Learning Technology*, 21.
- Cochrane, T., & Narayan, V. (2014). Cultivating creative approaches to learning. In L. M Blaschke, C. Kenyon & S. Hase (Eds.), *Experiences in self-determined learning*, 33-48. USA: Amazon.com. <https://edtechbooks.org-Kzdo>
- Cordon, C. P. (2015). *Heutagogy in oncology nursing: The experience of nurses and the factors that facilitate and hinder self-determined learning in nursing*. Doctoral dissertation, Fielding Graduate University.
- Crosslin, M. (2018). Exploring self-regulated learning choices in a customizable learning pathway MOOC. *Australasian Journal of Educational Technology*, 34(1), 131-144.
- Ehlers, U-D., & Kellermann, S.A. (2019). *Future skills: The future of learning and higher education*. Results of the International Future Skills Delphi Survey. Karlsruhe, Germany: Baden-Wuerttemberg Cooperative State University. Retrieved <https://bit.ly/2WogLKv>
- Eraut, M. (2011). Informal learning in the workplace: Evidence on the real value of work based learning (WBL). *Development and Learning in Organizations: An International Journal*, 25(5), 8-12.
- Fani, T. & Ghaemi, F. (2011). Implications of Vygotsky's Zone of Proximal Development (ZPD) in teacher education: ZPTD and self-scaffolding. *Procedia - Social and Behavioral Sciences*, 29, 1549-1554.
- Gerstein, J. (2014). Moving from education 1.0 through education 2.0 towards education 3.0. In L. M Blaschke, C. Kenyon, & S. Hase (Eds.), *Experiences in self-determined learning*, 83-98. USA:

Amazon.com. <https://edtechbooks.org/-Kzdo>

Hase, S. (2014). Skills for the learner and learning leader in the 21st century. In L. M Blaschke, C. Kenyon, & S. Hase (Eds.), *Experiences in self-determined learning*, 99-110. Amazon.com. <https://edtechbooks.org/-Kzdo>

Hase, S., & Blaschke, L.M. (2021, in press). Heutagogy, work, and lifelong learning. In L. Cairns and M. Malloch (Eds.), *Handbook of learning and work*. SAGE.

Halupa, C. (2017). Reaching 'creating' in Bloom's taxonomy: The merging of heutagogy and technology in online learning. In C. Zhou (Ed.), *Handbook of research on creative problem-solving skill development in higher education*, 429-449. IGI Global.

Hayworth, R. (2016). Personal learning environments: A solution for self-directed learners. *TechTrends*, 60(4), 359-364. doi: <https://doi.org/10.1007/s11528-016-0074-z>.

Hexom, D., & Marlaire, C. (2013). Does heutagogy equate to iLearning for faculty in higher education?. *Proceedings of the International Conference on Infocomm Technologies in Competitive Strategies (ICT)*. *Proceedings*, Global Science and Technology Forum, 148.

Hicks, A., & Sinkinson, C. (2015). Critical connections: Personal learning environments and information literacy. *Research in Learning Technology*, 23. doi: <https://edtechbooks.org/-fBsD>.

Hornsby, K.L., & Maki, W.M. (2008). The virtual philosopher: Designing Socratic method learning objects for online philosophy courses. *Journal of Online Learning and Teaching*, 4(3). http://jolt.merlot.org/vol4no3/hornsby_0908.htm.

Jaakkola, M. (2015). Teacher heutagogy in the network society: A framework for critical reflection. *Critical Learning in Digital Networks*, 163-178. Springer International Publishing.

Johnson, S. J., Blackman, D. A., & Buick, F. (2018). The 70:20:10 framework and the transfer of learning. *Human Resource Development Quarterly*. Advance online publication.

Junco, R., Heiberger, G., & Loken, E. (2010). The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning*. doi: 10.1111/j.1365- 2729.2010.00387.x.

Lave, J. & Wenger, E. (1991). *Situated learning. Legitimate peripheral participation*. University of Cambridge Press.

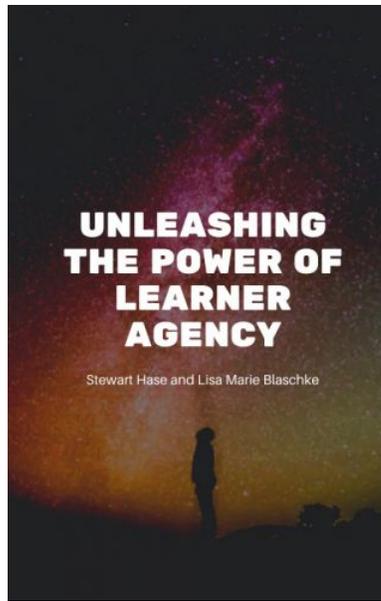
Lombardo, M. M., Eichinger, R. W. (1996). *The Career Architect Development Planner* (1st ed.). Minneapolis: Lominger.

McIlveen, P. (2010). A research agenda for career development learning in higher education. Keynote paper presented at the annual conference of the National Association of Graduate Careers Advisory Services, 28 November - 1 December, Adelaide.

Narayan, V., & Herrington, J. (2014). Towards a theoretical mobile heutagogy framework. *Proceedings ascilite 2014*. Dunedin, New Zealand (pp. 150-160). Retrieved from <https://edtechbooks.org/-fsd>.

Narayan, V., Herrington, J. & Cochrane, T. (2019). Design principles for heutagogical learning:

- Implementing student-determined learning with mobile and social media tools. *Australasian Journal of Educational Technology*, 35(3), 86-101.
- Narayan, V., Narayan, V., Herrington, J., Teras, H., & Cochrane, T. (2017). *The mobilised learner: Heutagogy and mobile social media*. <https://edtechbooks.org/-BuEr>
- O'Brien, E., Hamburg, I., & Southern, M. (in press). Using technology oriented problem based learning to support global workplace learning.
- OECD. (2019). *The OECD Learning Compass 2030*. Paris: OECD.
<http://www.oecd.org/education/2030-project/>
- Price, D. (2014). Heutagogy and social communities of practice: Will self-determined learning re-write the script for educators? In L. M Blaschke, C. Kenyon & S. Hase (Eds.) *Experiences in self-determined learning*, 111-118. USA: Amazon.com. <https://edtechbooks.org/-Kzdo>
- Ridden, J. (2014). Professional performance appraisal: From ticking the boxes to heutagogy. In L. M Blaschke, C. Kenyon & S. Hase (Eds.) *Experiences in self-determined learning*, 119-126. Amazon.com. <https://edtechbooks.org/-Kzdo>
- Tay, B. H., & Hase, S. (2004). The role of action research in workplace PhDs. *Research in Action Learning and Action Research Journal (ALAR)*, 9(1), 81-92.
- Tay B.H., & Hase, S. (2013). Transitioning from pedagogy to heutagogy. In S. Hase & C. Kenyon (Eds.), *Self-determined learning: Heutagogy in action*. Bloomsbury.
- Wark, N. (2018). *Shifting paradigms: A critical pragmatic evaluation of key factors affecting learner-empowered emergent technology integration*. Dissertation. Athabasca University. Available from: <https://edtechbooks.org/-kgj>.
- Willmott, G., & Barry, C. (2002). How does learning best occur in VET? What is some of the emerging thinking about VET pedagogy? *Paper presented for NSW TAFE Commission Directors Strategic Directions Workshop*, Sydney, November 8, 2002.



Hase, S. & Blaschke, L. M. (2021). Heutagogy and Work. In S. Hase & L. M. Blaschke (Eds.), *Unleashing the Power of Learner Agency*. EdTech Books.
<https://edtechbooks.org/up/work>