### First published online December 5, 2017

## Distinguishing lifelong learning from lifelong education

#### STEPHEN BILLETT\*

School of Education and Professional Studies, Griffith University, Mount Gravatt, Brisbane, Australia

(Received: February 2, 2017; accepted: October 4, 2017)

This article advances a conceptualization of lifelong learning that offers a platform for a broader consideration of what it comprises and how it might be supported and guided across adults' lives. It makes a clear delineation between lifelong learning and lifelong education, as they are often advanced as being consonant in contemporary policy accounts, when they are quite distinct concepts. Unless lifelong learning is seen as a personal fact (i.e., something that arises from and is secured by persons), it will remain misunderstood and limited in its explanatory power and utility in guiding lifelong education. This is particularly the case when it is confused with the provision of educational experiences (i.e., lifelong education), as is commonly the case. Given the range of circumstances and means through which adults' learning occurs across their lives, it is erroneous to view lifelong learning as being synonymous with or limiting to being merely the product of intentional educational experiences, albeit within educational institutions, workplaces, or community settings. Instead, it is necessary to consider the range of experiences that generate that learning and a broader account of how such learning might be supported.

**Keywords:** lifelong learning; lifelong education; work life learning; employability; occupational purposes; curriculum; social suggestion

# LIFELONG LEARNING AND LIFELONG EDUCATION

There is much discussion within popular, policy, and scientific discourses about lifelong learning. Since the Year of Lifelong Learning in 1996, that discussion has focused on learning associated with individuals' employability throughout their working lives (Organisation for Economic Co-operation and Development, 1996). This learning focuses on their contributions to sustaining or advancing the viability of their workplaces and collectively to securing national social and economic goals (Organisation for Economic Co-operation and Development, 2010). In countries with advanced industrial economies, the growing requirement for adults to be employed and employable up until the end of their seventh decade illustrates this trend (Billett, 2014a). This requires adults to remain work-competent within changing occupational practices and with dynamic workplace requirements. Given such requirements, confidence that an initial occupational preparation, often at the commencement of working life, will be sufficient for lifetime employability has become misplaced. As a consequence, there has probably never been a time when so much consideration has been given to adults' learning and development across their life span, albeit directed increasingly toward employment-related outcomes.

It is important, therefore, to have a clear understanding of what constitutes lifelong learning and to use that understanding as a premise for advancing how it can be supported, including the ways that lifelong education might contribute to adults' learning and development. Without this understanding, policies and practices associated with sustaining individuals' employability throughout lengthening working lives may be inappropriate and ill-directed. As lifelong learning is often presented in the documents of supranational and national governments as being consonant with, and confined to, lifelong education (Organisation for Economic Co-operation and Development, 1996; Schuller & Watson, 2009), it begs the need for a clearer, comprehensive, and more-informed explanation. If the resources of state and local governments, educational institutions, and workplaces are to be effectively mobilized to promote and support individuals' lifelong learning, they need to be welldirected (Edwards, 2002). Therefore, recognition of what that learning is composed of, and directing support for that learning is necessary, not least because that learning is far from being a concept limited to intentional educational experiences: lifelong education. Yet, despite lifelong learning and lifelong education being distinct concepts, commentators often see them as being synonymous (Schuller & Watson, 2009), represented in policy documents (Organisation of Economic and Cultural Development, 1996; Organisation for Economic Co-operation and Development, 1998, 2000) and considered in educational terms. More than that, these authors and agencies inevitably privilege

This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium for non-commercial purposes, provided the original author and source are credited, a link to the CC License is provided, and changes – if any – are indicated.

<sup>\*</sup> Correspondence: Stephen Billett, School of Education and Professional Studies, Mt Gravatt Campus, Griffith University, 176 Messines Ridge Road, Mount Gravatt, Brisbane, QLD 4122, Australia; Phone: +61 7 3735 5855; e-mail: S.Billett@griffith.edu.au

lifelong education over lifelong learning, which is unhelpful for elaborating what constitutes lifelong learning.

Lifelong learning is a personal process. It is something that people do. Conversely, lifelong education is an institutional fact (Searle, 1995), arising from and enacted by the social world, usually in the form of the provision of particular kinds of experiences. Lifelong learning is something that occurs all of the time as individuals think and act, some of which occurs through their engagement in educational programs and institutions (i.e., lifelong education; Billett, 2009a). Yet, such programs only contribute periodically across individuals' life histories. A fundamental categorical error is exercised when these two concepts (i.e., lifelong learning and lifelong education) are conflated (Billett, 2010). One comprises a personal fact and practice: it is initiated and enacted by individuals, quite likely in personal-particular ways, as shaped by individuals' ontogenetic development or legacies of life histories (Billett, 2003). The other (i.e., lifelong education) is a set of experiences generated in the social world, manifested in the form of social suggestions that comprise particular forms, norms, and practices whose intent is to realize particular kinds of changes in people (i.e., learning). Those who intentionally design such experiences, for example, teachers and instructional designers, acknowledge this by referring to the intended outcomes of these experiences. They know that there is no guarantee that what is provided will lead to specific kinds of learning. In this way, these two concepts are categorically distinct, not synonymous.

To clarify and be precise about what constitutes the distinction between lifelong learning and lifelong education, this short paper first suggests why making such distinctions is important. These distinctions are initially delineated, described, and elaborated, and then more comprehensively elaborated using a set of factors that illuminate that distinctiveness. It is anticipated that by more comprehensively making these distinctions, identification of some of the confusion surrounding the conflation of these terms will be addressed. Then, some considerations for promoting lifelong learning are briefly advanced.

#### DELINEATING LIFELONG LEARNING

Making distinctions between lifelong learning and lifelong education has become important, because how they are represented in the public and governmental (and even at times academic) discourse is central to what they comprise, what processes underpin them, and what is taken as worthwhile or legitimate learning across adult lives. That is, what is enacted in their name. This representation extends to considerations of how that learning can best be supported and augmented, for purposes such as remaining employable until individuals' seventh decade. That distinction also emphasizes that lifelong learning cannot be defined, accounted for or held captive by the norms, practices, and interests of educational institutions. This is because most learning throughout human lives arises outside of them and their contributions. Indeed, throughout most of human history, the vast majority of individuals' learning and development has occurred outside of educational provisions (Billett, 2014b). Across the millennia comprising the history of humanity, the vast majority of the learning that has arisen has

done so without teaching and schooling. While we, in contemporary "schooled societies," find this proposition difficult to comprehend, most human existence and development have occurred before the advent of mass educational provisions, including teaching. Making this distinction is far more than semantics or academic predilections. It is about understanding more fully the process of adult learning and development, particularly pertaining to paid work and occupations.

Even in contemporary schooled societies, it is likely that most of the learning adults secure throughout their lives for work, family, community, or cultural purposes arise through experiences that are not part of educational provisions, rather than through teaching (Australian Bureau of Statistics, 2013). However, this is not to deny that important learning can and does arise through educational provisions, often in ways and for purposes that are reliant upon them. Yet, despite their differences, these two concepts are often conflated and assumed to be synonymous (Billett, 2010). Such is the prevalence of contemporary populations' ubiquitous experience of schooling, which can become difficult to set these two concepts apart, as with the assumed nexus between teaching and learning. In some ways, addressing these issues is analogous to the problem found in Newtonian physics. That is, because all humans experience gravity, it is difficult for us to understand motion and force unconstrained by the impact of gravity. Consequently, it becomes important to be clear about what comprises both lifelong learning and lifelong education, not least for those who seek to support or develop adults' learning across their life courses, including making decisions about what provisions might support it.

There are at least three other reasons to distinguish between these two concepts. First, when considering adults' learning to sustain their employability through their working lives, much, if not most of the learning arises through experiences in their working lives, not in educational programs. We require premises that acknowledge, accommodate, and support that learning, often in ways that are remote and different from provisions of school-like experiences. Second, it is insufficient to align processes of individuals' learning directly with the provision of experiences that comprise teaching or guidance (e.g., educational programs). Much of what learned is the product of individuals' mediation of what they experience, within and outside of intentional educational experiences (Donald, 1991). Despite the kinds of assurances that governments and employers want, there can be no guarantees about what will be learnt for educational or other experiences, which curriculum theorists wholly understand. How individuals' experience (i.e., construe and construct) what they encounter ultimately determines how and what they learn. Therefore, it is insufficient to view lifelong learning as being either consonant with, or the product of, lifelong education. Third, it is important to understand which contributions to individuals' lifelong learning are likely to generate what kinds of learning. If governments and workplaces are concerned about the capacities underpinning employability, knowing how these attributes can best be learned requires an understanding of what experiences the individuals need to engage with and secure that learning. Beyond acknowledging what is afforded by workplace, educational, and community settings, accounting for how individuals' experience and mediate those affordances is essential.

Hence, there is a need to delineate the inevitable differences between what governments or employers want or intend to be learnt and what individuals wish to learn or seek to learn. To do this, it is necessary to understand how best to progress to address diverse intentions. Moreover, conflicts between learning solely for occupational purposes, which may come at the cost of community, cultural, societal, or the environment goals, need to be considered when making judgments about the worthiness of lifelong learning or lifelong education. This short paper sets out what might constitute some bases for the overall intents for lifelong learning and how learners, educators, educational institutions, workplaces, and communities might engage to support learning and its important, but subservient, counterpart: lifelong education.

#### CONCEPTUALIZING LIFELONG LEARNING

Delineating lifelong learning from lifelong education requires the listing of bases that can be used to differentiate and illuminate their differences as being distinct. Table 1 presents those differentiations. In this table, a set of explanatory bases comprising: (i) foundational categories, (ii) enactments, (iii) outcomes, (iv) antecedents, (v) mediational means, and (vi) manifestations in paid work are set out in the left column. These explanatory bases are drawn from considerations of delineating phenomena within the social sciences. Searle's (1995) delineation of institutional facts is used here as foundational categories to contrast those associated with personal factors. That is, one concept is associated with persons and one with institutions. Then, concepts used in curriculum theorizing about enactments, antecedents, and outcomes are drawn on. For instance, human learning enacted requires consciousness, the engagement of the cognitive, neural, and sensory systems. The process of experiencing requires these facilities and they are, in part, persondependent. The enactment of lifelong education is usually through the provision of experiences that are shaped by the physical facilities, the intentions of the educational program, the appropriateness of resources, and the interest and perspectives of those who teach and/or guide the educational process. Therefore, there are important distinctions between experiences and experiencing. The outcome of experiencing for individuals is change in what they know, can do, and value (i.e., learning). The intended outcomes for lifelong education are societal continuity or change, albeit through individuals positioned as students.

Antecedents comprise existing circumstances. For individuals, this is what they know, can do, and value – often captured as their readiness to engage in particular kinds

of learning. These antecedent conditions are products of individual life histories or ontogenies that are, by degree, person-dependent. The antecedents of lifelong education are bases from which to proceed. Before 1996, much of lifelong education was associated with individuals' personal and cultural betterment. Since then, much of the focus has been on personal, workplace, or national economic goals (Organisation for Economic Co-operation and Development, 2010). Hence, the kinds of experiences (e.g., educational programs) being offered and the means of their offering are shaped by these imperatives. Given that the mediation of knowledge and experience is acknowledged from a range of theoretical perspectives as being central to understanding how human learning and development progress, a consideration of mediational means is included. Much of constructivist theorizing is differentiated by the extent that mediation is seen as a product of either social suggestion or human action. The former emphasizes the provision of experiences: lifelong education. However, others suggest that the personal mediation of experience is central to human meaning making and learning. Finally, given the emphasis here on work and working life, a distinction in conceptions of work as a vocation or an occupation is used to provide a way of considering how these are aligned with the two concepts. Of these, the former is taken as a personal fact and the latter as an institutional one.

These delineations between the two concepts are now described in greater detail.

### Foundational categories: Personal and institutional

Presented in the top row of this table is a delineation based on foundational factors. One category comprises personal fact and practice (i.e., lifelong learning). The other is a set of experiences generated in the social world, manifested in the form of social suggestions that comprise particular forms, norms, and practices (i.e., lifelong education), and what Searle (1995) refers to as institutional facts. Lifelong learning constitutes personal facts: comprising what individuals know, can do, and value, and processes they initiate, enact and whose intentions and direction are shaped by individuals' agency, subjectivity, and interest (Baldwin, 1894; Billett, 2009b; Malle, Moses, & Baldwin, 2001). The human process of experiencing and construing and then deriving change from it (i.e., learning) is person-dependent, arising through the legacies of earlier processes of experiencing across a life history or ontogeny (Billett, 2009a). What people know, can do, and value arise in specific ways from the sets of experiences they have had throughout their lives and how they have reconciled them (construed and

Table 1. Differing premises of lifelong learning and education

	Lifelong learning	Lifelong education
Foundational category	Personal factors and goals	Institutional/social factors and goals
Enactments	Process of experiencing	Provision of experiences
Outcomes	Learning and development	Societal continuity and/or change
Antecedents	Individual knowing and knowledge	Social institutions, practices, norms, and forms
Mediational means	Knowing, what individuals know, can do, and value	Projection of the social world
Manifestation of paid work	Vocations	Occupations

constructed them). These processes shape how and what individuals' experience, which, in turn, shapes changes to what they know, can do, and value. That is, what individuals know, can do, and value shapes how they engage with what they experience, which in turn iteratively variously reinforces, challenges, confronts, or hones what they know, can do, and value. Yet, these processes have, by degree, been derived and are exercised through person-dependent experiencing. For instance, if individuals' knowledge is confirmed by what they experience, this leads to reinforcement and refinement, but dissonance between their knowledge and what they experience leads to the formation of new learning and knowledge. Yet, inevitably, those personal sets of factors, ways of knowing, and change arising through individuals' experiences are in some ways that are persondependent. That is, the experiences, which individuals have had previously or premediately (Valsiner & van der Veer, 2000), shaped what they know, can do, and value, their subjectivities and intentionalities. As no two individuals' experiences are the same, their lifelong learning is inevitably a personal fact.

In contrast, lifelong education is categorized as an institutional fact. That is, something created in, arising through, and suggested by society (Searle, 1995) are as presented in the right column of this table. Hence, whether organized in the form of intentional programmed experiences offered by an educational institution, or through a set of experiences reflecting the interests, practices, and needs of particular workplaces or other institutions, these experiences comprise suggestions and invitations to change that are the product of a social practice. These suggestions can be quite intentional and linked to societal norms, forms, and practices, such as seeking to achieve particular kinds of outcomes (e.g., achievement of certification, completion of course, work readiness, contributions in workplace activities, etc.). Institutional facts can comprise norms, forms, practices, and means by which to project the suggestion of the social world. These facts are also subjected to change and transformation, as shaped by imperatives of the social world (i.e., changes in educational programs, workplace activities, and organizations), but this kind of change is quite distinct from change in humans, that is, learning. To be simple, it is people who learn sometimes by participating in intentionally organized experiences (i.e., lifelong education). That learning requires having human consciousness, knowledge, ways of knowing, and engaging with experiences arising beyond the person, and the ability to mediate those experiences. The process of experiencing is premised on an individual's cognitive, sensory neural system, which comprises the multimodal ways by which humans engage in the process of experiencing (Barsalou, 2009).

The process of learning will always be person-dependent, because what people know, can do, how individuals come to know, engage, and change through those experiences are premised on personal attributes or factors.

#### **Enactments**

Enactments are the means by which something progresses or is implemented. This premise is illustrative of the basis upon which a particular phenomenon is put into action: enacted. The bases of enactment across these two concepts are quite distinct. Lifelong learning arises through the process of individuals' experiencing. Their engagement with what they experience (i.e., construing and constructing) is what leads to change (i.e., learning), as experiences are categorized, propositions enacted, procedures enacted and honed or contested, and values appraised. This learning continuously occurs through individuals' processes of experiencing and change, which is referred to as microgenetic development (Scribner, 1985). This comprises the moment-by-moment learning that occurs as we construe and construct knowledge from what we experience. Yet the direction, intensity, and intentionality of those processes will be dependent upon how individuals elect to exercise them. It is a personal process of engaging and responding to what is experienced. This kind of enactment is clearly quite distinct from the provision of experiences that comprise the enactment of lifelong educational provisions, as indicated in the second row of this table. For instance, within curriculum theorizing, experiences afforded by educational programs and institutions (or any other social institutions) are held merely to be invitations to change. Ultimately, they are nothing other than intentions, which are enacted in particular ways, as shaped by the facilities available, the physical and social setting, the interests, capacities, and preferences of those who organize those experiences (e.g., teachers, educators, and trainers). The degree to which these experiences are provided, supported, and individuals directed to engage with them will widely differ. However, it is the degree by which those engaging in educational programs or workplace experiences elect to engage with what is afforded to them that determine what and how they learn through what is enacted. Therefore, the enactment of lifelong learning as a personal practice is shaped by individuals' capacities, interests, and intentions. In this way, this conception is quite distinct from the provision of experiences, intentional, or otherwise in an educational or work setting.

#### **Outcomes**

Outcomes are the consequences of something happening or being enacted. As indicated in Table 1, it is held that there are two quite distinct outcomes associated with lifelong learning and lifelong education. The processes of experiencing lead to change in what individuals know, can do, and value (i.e., learning) through a process of moment-by-moment learning, or what is referred to as microgenetic development (Scribner, 1985), which is both shaped by and contributes to individuals' ongoing development throughout their lives (i.e., ontogenetic development). Therefore, these changes are the outcomes of lifelong learning as microgenetic development, and emphasize what has been described earlier as personal facts about individual meaning-making. This is because both of these changes (i.e., microgenetic and ontogenetic development) are person-dependent. They are shaped by earlier legacies that arise through unique personal histories and through their enactment of new legacies as they arise for individuals. The kinds of outcomes that arise from lifelong education – the provision of experiences – are about continuity or change in norms, forms, and practices comprising workplace activities, including intended change in individuals. Most typically, educational programs arise from particular needs or concerns, and are directed toward achieving particular kinds of outcomes. These programs seek to secure goals selected to achieve particular social or societal purposes, such as reproduction (e.g., development of particular skills) or change in norms, forms, and practices (e.g., innovative practices in workplaces). The development of the kinds of capacities that are required for occupations and workplaces are examples of such outcomes and these are often the intended outcomes; however, there is no guarantee that the intended outcomes will be realized. This distinction is well understood in educational science where outcomes of educational programs are referred to as intended outcomes or educational intents, because regardless of what is implemented and how, these are the only intentions. Ultimately, the outcomes associated with these two concepts are quite distinct. One is about personal continuity (i.e., learning and development) and the other is about social or societal continuity (i.e., achievement of socially derived goals).

#### **Antecedent conditions**

Antecedents are the existing situation upon which something progresses. For lifelong learning, it comprises individuals and what they know, can do, and value (i.e., their knowledge). That is, the kinds of capacities, interests, and values they bring to the process of experiencing. In considerations of learning, this is often referred to as readiness. That is, individuals' ability to productively engage with experiences to effectively learn from them. In terms of adults' learning, readiness often refers to what they know, can do, and value being aligned with what needs to be learned (Billett, 2015). Therefore, for instance, if a worker does not understand the language or technical terms being used in the workplace, they might have great difficulty in engaging with and learning from what is being discussed and evaluated. Equally, if individuals lack the procedural abilities (i.e., how they undertake work tasks), they may not be in a position to begin to engage in and undertake tasks from which they can learn. This readiness can be quite situational. The nurse or doctor who is competent in a major city hospital may find that the capacities required for medicine or nursing in a small country town practice are quite different and potentially overwhelming for them. Hence, these antecedent conditions are person-dependent, as based on personal experiences and circumstances.

However, for lifelong education, they comprise norms, social forms, and practices that are the premises for what is afforded to learners. For educational provisions, this can include the physical resources, kinds of equipment, ability to access practice, and the capacities and interests of those who are teaching or guiding the learning. It also extends to the kinds of participants and programs, and their ability or readiness to engage with the experiences being provided. It is all of these elements that individuals will encounter within an educational program, regardless of whether it is an educational institution or workplace setting. These factors shape what exists at the time and the circumstances in which individuals engage with them. The focuses here are quite distinct. One comprises a personal fact and practice: it is

shaped by individuals' previous experiences and quite likely in personal-particular ways. The other is the basis for the sets of experiences generated in the social setting (i.e., workplace or educational institution) manifested in the form of social suggestions that comprise particular forms, norms, and practices whose intent is to realize particular kinds of changes in people (i.e., learning).

#### Mediational means: Personal and social

Then, there are also differences in the mediational means for both these sets of personal and institutional facts. As noted, how individuals mediate what they experience (i.e., the process of experiencing, construal, and construction) is premised upon what they know, can do, and value. In short, how they make sense and respond to what they experience is personally shaped. That mediation is premised upon individuals' cognitive, neural, and sensory processes as well as the procedural, conceptual, and dispositional knowledge they possess associated with what they are experiencing. Therefore, again, all of these are qualities that have arisen throughout their personal histories. It also includes how individuals elect to use their capacities, shaped by the direction, intensity, and intentionality of their thinking and acting.

In contrast, the mediational means of social institutions and social norms and forms, such as educational programs, is found in their social suggestions (Berger & Luckman, 1967; Boden & Zimmerman, 1991; Searle, 1995). This includes language and extends to societally generated processes, such as occupational knowledge and its situated manifestation. These stand as tools through which thinking, acting, and decision-making occur. The ability of the social world to project its suggestions through such tools is the basis of its continuity. Yet, it is accepted by most theorists, including those who emphasize the social contributions to knowing and learning, such as Berger and Luckman (1967), that not only the social world is unable to project its suggestion unequivocally and unambiguously, but also that individuals' engagement with and securing that suggestion will at best be partial. Indeed, the social constructivist Cole has noted that if the social world is able to project its message clearly and unambiguously, there would be little need for communication, because everything would be understood (Newman, Griffin, & Cole, 1989). However, this is not the case. Individuals have to mediate what is suggested by the social world, if only for comprehension, but often for far more.

## Manifestation of paid work

Finally, each of these concepts is aligned with a particular manifestation of work. A key distinction in relation to the learning for work and working life is that between vocations and occupations. Vocations are personal facts to which individuals have to consent. They are what guides and directs their actions and relations with others (Dewey, 1916). That is, it is only they who can elect to identify with the occupation they perform and make it their vocation. Occupations, on the other hand, arise through history, culture, and situation and are a product of those (i.e., institutional) factors. Hence, there are categorical

differences in the objects, processes, bases of engagement, and outcomes that markedly differentiate and sit as irreconcilable conceptual differences between lifelong learning (i.e., something people do) and lifelong education (i.e., the provision of experiences for people) that is directed to working life. Of course, people can engage in occupational practices that are not and may never become their vocations. In addition, the object of vocational and professional education is often for individuals to come to engage in their occupations as their vocations. However, as an ideal, the intention of those provisions is centered on developing occupational capacities, and lifelong learning is more aligned with developing individuals' vocations.

In many ways, this final point of delineation – vocations versus occupations – emphasizes the personal within a set of arrangements that is often institutional. The manifestation of education and lifelong education is no exception, arising as it does from institutional facts. As noted, the conception of lifelong education changes according to societal and governmental imperatives. Most recently, that change has been about lifelong education – about cultural betterment through to having key economic emphases. Yet, ultimately, adults' learning and development is a profoundly personally mediated process, that is, how their moment-by-moment learning arises and contributes to their development. However, it is shaped by their ontogenetic development, which is person-dependent, and includes how they form their intentions and direct their energies and exercise their cognitive, sensory, and sensory resources. Each individual has had particular kinds of experiences throughout their lives, experiences that are in some ways personally unique. Hence, how they come to experience and learn is shaped in ways that are persondependent. Therefore, both learning and development are premised upon personal factors. Of course, this is not to deny the powerful and sometimes potent ways that the social world shapes experiences and opportunities. That world distributes opportunities, sustains inequities, and has the power to overcome both inequity and inequality. Indeed, understanding how this broader set of factors that come to shape opportunities for learning and development is essential and, in particular, emphasizes that factors beyond the provision of education alone are essential for individuals to be able to exercise their full capacities and realize their full potential. A consideration of lifelong learning in the context of learning across working life needs to go beyond a consideration of educational experiences. Hence, rather than aligning support for, and guidance of, individuals' lifelong learning being premised upon educational provisions (i.e., lifelong education), it is important to more broadly consider the range of contributions and experiences that shape the learning, and in ways associated with securing effective learning within and across working lives.

# LIFELONG LEARNING IN CONTEMPORARY WORKING LIFE

Any framework for promoting lifelong learning for contemporary working life needs to be inclusive of the entire scope

of purposes and experiences that shape the personal intentions and processes of ongoing learning. In particular, it needs to consider the range of experiences the adults are able to access, which can support their continuing employability. Many of those experiences are likely to be found within the working life of these adults, although engagement in educational programs can provide particular experiences and outcomes that cannot be secured or within a working life. What is proposed here is that it is essential for lifelong learning to be understood as a process that goes beyond that arises through lifelong education. It is enacted as adults engage in everyday working life, it generates outcomes in the form of changes in what individuals know, can do, and value and is largely mediated by individuals themselves, even in the relatively rare situations they are participating in intentional educational programs. Importantly, in consideration of what promotes and directs lifelong learning is the concept of individuals' vocations, rather than the abstract concept of occupations. It is the former that directs and energizes learning and development in, or through, the latter.

#### REFERENCES

- Australian Bureau of Statistics. (2013). Programme for the international assessment of adult competencies (Australia 2011–2012). In Australian Bureau of Statistics (Ed.), *Cat 42280.0*. Canberra, Australia: Australian Bureau of Statistics.
- Baldwin, J. M. (1894). Personality-suggestion. Psychological Review, 1(3), 274–279. doi:10.1037/h0067089
- Barsalou, L. W. (2009). Simulation, situated conceptualisation, and prediction. *Philosophical Transcactions of the Royal Society B*, 364, 1281–1289. doi:10.1098/rstb.2008.0319
- Berger, P. L., & Luckman, T. (1967). *The social construction of reality*. Harmondsworth, Middlesex: Penguin Books.
- Billett, S. (2003). Sociogeneses, activity and ontogeny. *Culture and Psychology*, *9*(2), 133–169. doi:10.1177/1354067X0392003
- Billett, S. (2009a). Conceptualising learning experiences: Contributions and mediations of the social, personal and brute. *Mind, Culture and Activity, 16*(1), 32–47. doi:10.1080/10749030802 477317
- Billett, S. (2009b). Personal epistemologies, work and learning. *Educational Research Review*, 4(3), 210–219. doi:10.1016/j. edurev.2009.06.001
- Billett, S. (2010). The perils of confusing lifelong learning with lifelong education. *International Journal of Lifelong Education*, 29(4), 401–413. doi:10.1080/02601370.2010. 488803
- Billett, S. (2014a). Conceptualising lifelong learning in contemporary times. In T. Halttunen, M. Koivisto, & S. Billett (Eds.), *Promoting, assessing, recognizing and certifying Lifelong Learning: International perspectives and practices* (pp. 19–36). Dordrecht, The Netherlands: Springer.
- Billett, S. (2014b). *Mimetic learning at work: Learning in the circumstances of practice*. Dordrecht, The Netherlands: Springer.
- Billett, S. (2015). Readiness and learning in healthcare education. *Clinical Teacher*, 12(6), 367–372. doi:10.1111/tct.12477
- Boden, D., & Zimmerman, D. H. (Eds.). (1991). Talk and social structure. Berkeley, CA: University of California Press.

- Dewey, J. (1916). *Democracy and education*. New York, NY: The Free Press
- Donald, M. (1991). Origins of the modern mind: Three stages in the evolution of culture and cognition. Cambridge, MA: Harvard University Press.
- Edwards, R. (2002). Mobilizing lifelong learning: Governmentality in educational practices. *Journal of Educational Policy*, 17(3), 353–365. doi:10.1080/02680930210127603
- Malle, B. F., Moses, L. J., & Baldwin, D. A. (2001). Introduction:
  The significance of intentionality. In B. F. Malle, L. J. Moses,
  & D. A. Baldwin (Eds.), *Intentions and intentionality: Foundations of social cognition* (pp. 1–26). Cambridge, MA: The MIT Press.
- Newman, D., Griffin, P., & Cole, M. (1989). *The construction zone: Working for cognitive change in schools*. Cambridge, UK: Cambridge University Press.
- Organisation of Economic and Cultural Development. (1996). Lifelong learning for all. Paris, France: Organisation of Economic and Cultural Development.
- Organisation for Economic Co-operation and Development. (1996). *Lifelong learning for all*. Paris, France: Organisation for Economic Co-operation and Development.

- Organisation for Economic Co-operation and Development. (1998). *Lifelong learning: A monitoring framework and trends in participation*. Paris, France: Organisation for Economic Co-operation and Development.
- Organisation for Economic Co-operation and Development. (2000). *Economics and finance of lifelong learning*. Paris, France: Organisation for Economic Co-operation and Development.
- Organisation for Economic Co-operation and Development. (2010). *Learning for jobs*. Paris, France: Organisation for Economic Co-operation and Development.
- Schuller, T., & Watson, D. (2009). Learning through life: Inquiry into the future of lifelong learning. Leicester, UK: IFLL.
- Scribner, S. (1985). Vygostky's use of history. In J. V. Wertsch (Ed.), Culture, communication and cognition: Vygotskian perspectives (pp. 119–145). Cambridge, UK: Cambridge University Press.
- Searle, J. R. (1995). *The construction of social reality*. London, UK: Penguin Books.
- Valsiner, J., & van der Veer, R. (2000). The social mind: The construction of an idea. Cambridge, UK: Cambridge University Press.