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Four Dimensions of Self-Directed Learning: A Fundamental Meta-Competence in a Changing World

Abstract

Self-directed learning is a core theoretical construct of adult learning. Importantly, self-directed learning represents a fundamental meta-competence for living and working in our increasingly complex and unpredictable world. Nonetheless, the construct of self-directed learning has become obfuscated. In order to redress this concern, this theoretical paper presents a model of *Four Dimensions of Self-Directed Learning*. The present paper highlights two original theoretical points (1) that there are four key dimensions of the self-directed learning construct, and (2) responsibility in terms of self-directed learning is not equivocal to that required for teacher-directed learning. Theoretically, the latter point may, in part, explain why practice of years of teacher-directed learning in formal schooling does not prepare persons for competent self-directed learning in adulthood. So, adult education represents a primary opportunity to foster self-directed learning competence in adult learners, but adult education practitioners must be ready to provide support to facilitate the process.

Key words: Self-Directed Learning; Self-Regulation; Teaching and Learning;
Constructivism: Humanism; Pragmatism; Adult Education; Model

Self-directed learning is a core theoretical construct of adult learning and thus a central theoretical framework for understanding adult education research and practice. The construct is a principle component of lifelong learning (Bagnall, & Hodge, 2022; Rock, 2023; Taylor et al., 2023), which is fundamental for adults to meet their personal interests and needs, and to meet the demands of our increasingly uncertain, complex, and unpredictable world (Liu et al., 2022; Morris, 2019a, Ng, 2023; Ponton, 2023). Self-directed learning is defined as “a process in which a learner assumes responsibility to control their learning objectives and means in order to meet their personal goals or the perceived demands of their individual context” (Morris, 2019d, p. 634).

Competence in self-directed learning actually represents a *meta-competence*, as it enables further learner advancement in knowledge, skills, and other competencies (Morris & König, 2021). It can facilitate personal growth, over time, perhaps toward self-actualization (Arnold, 2017; Maslow, 1943). Self-directed learning competence affords the adult learner autonomy that may facilitate emancipation from oppression (Hoggan-Kloubert & Hoggan, 2023; Freire, 1970); it is necessary for avoidance of skill and knowledge obsolescence (Kranzow & Hyland, 2016; Liu et al., 2023; Morrison & Premkumar, 2014); and, it provides the adult a certain protection against long-term unemployment through enabling adaptivity to changing conditions (Morris, 2019a; Saridaki & Papavassiliou-Alexiou, 2021; Wang et al., 2023).

The construct of self-directed learning was popularized in the adult education literature in the 1970s. In particular, studies in this field from Tough (1971) and Knowles (1970, 1975; 1980) were arguably seminal for the field of self-directed learning. Tough (1971) conducted semi-structured in-depth interviews with Canadian adults (n = 66) about one’s own “learning projects”, defined as “major, highly deliberate effort to gain certain knowledge and skill (or to change in some other way)” (Tough, 1971, p. 1). This was perhaps

the first empirical study to make the observation that all adults directed their own learning projects (including means and objectives) to various amounts. Concomitantly, the scholarship from Knowles (1970, 1975, 1980) proposed that adults have a deep psychological need to be self-directed and to take responsibility for their own learning processes. Self-directed learning therefore represents core a construct for adult learning and adult education.

Indeed, early empirical studies identified that self-directed learning is a natural part of being human – *every* adult is doing it, to various amounts. Nonetheless, a key limitation of studies such as Tough’s (1971) was that there was no measurement of whether adults were actually competent in the process. Specifically, if an adult commences a self-directed learning process in order to meet personal goals or the perceived demands of their individual context, we should ask: to what extent can the adult actually assume responsibility to control and direct their learning objectives and means in order to make-meaning that meets their goals and demands?

What we are talking about here is self-directed learning *competence*: the ability to successfully and efficiently undertake self-directed learning (Morris, 2019d). The “big issue” here is that many adult learners are not actually competent self-directed learners. A recent systematic review on self-directed learning in adulthood (Morris & Rohs, 2021) concurs with earlier studies (e.g., Kasworm, 1983; Kicken et al., 2009), which reported that many adults do not have the ability to successfully and efficiently undertake self-directed learning. Actually, many adults are “lost at sea” in a sea of information: the Internet (Morris & Rohs, 2021). This becomes both an individual and societal problem – as the affordances provided by self-directed learning, outlined above, cannot be utilized. And, this is a very important consideration for adult education – as many adult learners will need support with the self-directed learning process.

Moreover, importantly, scholars have positioned a process of fostering competence for self-directed learning as *the* most essential outcome goal of education – adult education represents an important setting to practice self-directed learning and to foster the necessary inquiry skills (e.g., Cranton, 1992; Kranzow & Hyland, 2016; Mncube & Maphalala, 2023). Adult education practitioners should consider the amount of self-directed learning practice their adult learners have had in their formal schooling during their youth; and, on this point, it is a delight to report that the passionate calls from scholars regarding the importance of facilitating self-directed learning in formal schooling of children is being realised at least in *some* contexts worldwide (cf. review from Morris & Rohs, 2023).

Nonetheless, in many contexts adult educators may have to provide much support to and “set the scene” for adult learners with their self-directed learning: as adult educators will, still, receive a set of adult learners that may not be used to practicing the process in formal educational settings (Knowles et al., 2020). For example, in the context from which the author of this present paper is writing – England – there appears to be a movement, back (which is arguably devastating), toward more traditional pedagogies of teacher-directed learning (cf. Ball, 2021). Indeed, worse still, Reay (2017) states that concomitantly in England there is also a trend toward more segregation of disadvantaged students in certain schools, where – in order to close the “attainment gap” – pedagogies in such schools often fall even further toward “teaching to the test”: where the teacher gains an even further grip on control of directing the process of learning in terms of means and objectives. According to this thesis, such realities would be a mechanism of oppression in terms of competency development, including fostering the self-directed learning *meta*-competency. Then, adult educators should be very aware of the preceding learning experiences of their adult learners, in order to adjust their adult education learning environments accordingly.

This introduction has outlined the importance of practicing self-directed learning in adult education: in summary, fostering self-directed learning competence empowers adults to meet the demands of, and thrive in, our rapidly changing world. The purpose of the present paper is to present a simple model of self-directed learning that may support adult educators' understanding of the construct of self-directed learning, and thus how to facilitate it in practice of adult education. The model of self-directed learning presented in the present paper has four dimensions: it is proposed that all dimensions need to be met in order to enable the organizing circumstances in which self-directed learning can flourish. Before this model is presented, the historical foundational positioning of self-directed learning is outlined.

Historical Foundational Positioning of Self-Directed Learning

Self-directed learning has historically been positioned with (a) humanistic philosophy (b) constructivist epistemology, and (c) pragmatic philosophy (Morris, 2019d; Scholtz, 2023). Historical positioning of the construct are important to consider (e.g., for an educator, policy maker, etcetera) when interpreting the self-directed learning model presented in this present paper – especially in respect of considering the barriers that might be in place in terms of enabling self-directed learning conducive environments – that is, if self-directed learning is to be facilitated in formal educational settings, humanism, pragmatism, and constructivism are relevant foundational positions necessary for the adult educator to consider.

Firstly, self-directed learning positions with humanistic philosophy, where learning is regarded as an apparatus for personal growth. Elfert (2023, p. 1) explains that it “refers to the idea that education should contribute to the fulfilment of individual potential and empowerment – and therefore the betterment of human lives”. Humanistic philosophical assumptions include that learners are (1) autonomous and capable of smart decision making (2) are inherently good natured (3) have unique but unlimited potential for growth determined

by the learner's self-concept and individual understanding of the world (4) have a sense of responsibility to themselves and others, and (5) possess an urge towards self-actualization (cf. Elias & Merriam, 1995; Leach, 2018). Empowering learners' growth potential is thus the salient feature of the self-directed learning construct.

In respect of humanistic assumptions, Arnold (2015, p. 7) pointed out that [self-directed] learning is "...*the* single ability which gave humans the advantage in the evolutionary competition of the species". Knowles (1975) stated, "We are talking about a basic human competence—the ability to learn on one's own" (p. 17). On this point, a clarification should be made: self-directed learning can occur with *or* without the help of others (Knowles, 1975). Indeed, it was Garrison (1997) who proposed that self-directed learning in formal educational settings is inevitably a collaborative process; and recent systematic/scoping reviews have confirmed this theoretical assumption (Morris & Rohs, 2021, 2023).

Moreover, self-directed learning is underpinned by constructivist epistemology in which learning is viewed as an individual, interpretive, and active process of meaning-making, where individual meanings are made dependent upon interacting with both historical and present experience (Merriam & Baumgartner, 2020; Morris, 2020). Constructivism is rooted in Vygotsky's context-centered ideas and Piaget's epistemological notions (Seraji & Musavi, 2023). The process involves interpretations of meanings through assimilation and accommodation: implicit reciprocal cognitive processes (Piaget, 1964), which require "judgement" (Dewey, 1916/2013), and therefore critical thinking (refer to Garrison, 1997).

On this, Jonassen (1999) clearly outlined the point that the fundamental difference of constructivist learning environments is that they involve learners solving or resolving real-world based cases, issues, questions, or problems. Taking this further, in respect of self-directed learning theory, competent self-directed learners who have been exposed to a variety

of differential contexts, and learning within those differential contexts, can come to appreciate that meaning-making – especially in terms of generating solutions to problems – is context specific: there is normally not a pre-packaged solution to any ill-structured problem (Meneses et al., 2023; Morris, 2019a, 2020, 2021).

In this respect, studies have also highlighted the point that we should also appreciate how – with exposure over time to a multitude of experiences – our thinking can become more complex (cf. Helsing, 2023; Morris, 2019b). Indeed, cognitive flexibility theory highlights the necessity of learners beginning to view the importance of constructing knowledge that is tailored to the needs of the understanding or the (context) specific problem (Spiro et al., 1988). Spiro and colleagues highlight the point that many life-centered problems are ill-structured in nature, especially in ill-structured work domains. Furthermore, life-centered contexts generally represent uncontrived embodied learning experiences with a high “contextual quality” (cf. Morris, 2021, for further discussion on contextual quality of educational experience).

Also, it is important to make the differentiation that often in its natural uncontrived form self-directed learning is undertaken to solve or resolve problems “in-life” context (Morris, 2019a, 2020). Specifically, it is through the self-directed learning process, in which “tailored” or adapted “contextual-specific” solution(s) are sought. For example, in the context of entrepreneurship it is argued how self-directed learning is a fundamental meta-competence that enables successful entrepreneurship, under conditions of constantly changing environments, because it affords entrepreneurs the adaptivity necessary to be (a) reactive to problems, and (b) proactive to opportunities identified (Morris, 2020). In fact, Tough’s (1971) seminal work found that seventy percent of adult learning projects were self-planned, commonly motivated by curiosity and interest and a life-centered reason to learn. In sum,

adult and self-directed learning often represents a *life-centered process*, where often the learning process is driven by a defined problem in a specified context.

At this point in the paper, it seems important to highlight the point that self-directed learning falls in stark contrast to “traditional” teaching models that are underwritten by a teacher-directed learning process with behaviorist foundational positioning (cf. Bernstein, 1990; Kinuthia, 2023). In such learning forms, learning often rather represents a process of learning knowledge and facts *absent* of contextual details, origins, or applications (Dewey, 1938/1963; Freire, 1970).

Concomitantly, given self-directed learning is a core theoretical construct of adult learning and education and a fundamental competence for living and working in our increasingly complex and unpredictable world, it is somewhat surprising that the self-directed learning construct continues to convey considerable misunderstanding and confusion. The self-directed learning construct has become somewhat obfuscated, within and between academics and practitioners (Beckers et al., 2016; Brockett & Hiemstra, 1991; Candy, 1991; Garrison, 1992, 1997). Some thirty years ago now, Brockett and Hiemstra (1991) made the comment that some educators even envisage that self-directed learning represents “a person cloistered in the corner of a library reading a book or at home using a package of individualized learning materials” (pp. 11-12). Consequently, self-directed learning has been dubbed as an “umbrella term” for various self-controlled goal-directed learning processes (Beckers et al., 2016; Sawatsky et al., 2017; Song & Hill, 2007). In order to redress this concern, this theoretical paper presents a model of self-directed learning, which encompasses four key dimensions of the construct: control of learning process, contextual factors, characteristics of the learner, and responsibility.

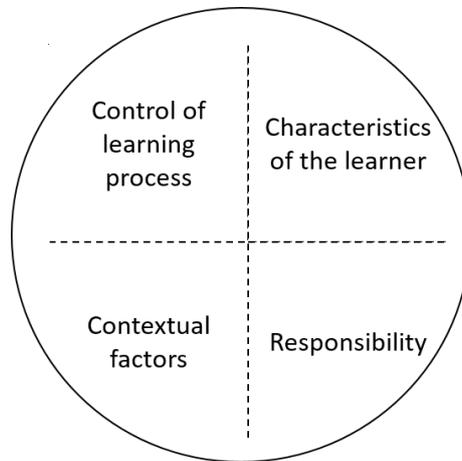
Four Dimensions of Self-Directed Learning

Sawatsky et al. (2017) identified that theoretical conceptualizations or models of self-directed learning commonly emphasise one or more of three dimensions: the learning process; characteristics of the learner; and contextual factors. Indeed, the PPC Model from Hiemstra and Brockett (2012) encompasses these three dimensions. However, some conceptualizations and models have highlighted the importance of *also* considering a fourth dimension – responsibility (e.g., Brockett & Hiemstra, 1991; Garrison 1992, 1997; Long, 1989). In terms of responsibility, Brockett and Hiemstra (1991) have previously highlighted the point that self-directed learning is a proactive process that requires learners to assume responsibility in thinking and acting. Moreover, other authors (e.g., Garrison 1992, 1997; Long, 1989) have highlighted the need to consider responsibility as a cognitive construct.

In this respect, to the knowledge of the present author, a shortcoming in the literature is a model that encompasses all four common aforementioned dimensions of self-directed learning. To redress this concern, the present paper presents a model of *Four Dimensions of Self-Directed Learning* (cf. Figure 1), in which *all* four dimensions are important and part of enabling and/or facilitating self-directed learning. Each of the four dimensions of the model are discussed in the forthcoming sections.

Figure 1

Four Dimensions of Self-Directed Learning



Control of Learning Process

Learner control of directing the learning process represents the externally observable management of learning tasks (cf. Figure 1; also, Brookfield, 1986; Mocker & Spear, 1982; Garrison, 1997). The key question here, in regards to the learning process, is: who controls what? Knowles' (1975) seminal work popularised self-directed learning as a *process* that includes learner *initiative* to plan, conduct, and review their own learning, with or without the help of others. A key part of self-directed learning is that the learner has primary control – i.e., involving learner *choice* – of their (a) learning objectives and (b) learning means (Mncube & Maphalala, 2023; Morris, 2019d).

Thus, self-directed learning involves a process in which a learner has control over directing their learning means and objectives, across planning, undertaking, and reviewing aspects of learning. On this, Knowles (1970, 1975, 1980) proposed a continuum in respect of learning process *control*; the two ends of which being teacher-directed and self-directed learning and summarized “Perhaps the full meaning of self-directed learning can be made

clearer by comparing it with its opposite... let's call it 'teacher-directed learning'" (1975, p. 19). Moreover, Candy (1991) highlighted the need for adult educators to consider the distinction between learner control in formal educational settings (which concerns who control the means and objectives of learning), from the independent pursuit of learning in settings outside of formal education (which implies autodidaxy).

Within formal adult education settings, early empirical studies highlighted the difficulty of "switching" from teacher-directed learning to self-directed learning. For instance, even Knowles' (1975) own personal reflections of his University teaching experience in the USA concluded: "Students entering into these [self-directed leaning] programs without having learned the skills of self-directed inquiry will experience anxiety, frustration, and often failure, and so will their teachers" (p. 15). Likewise, in a similar trial, the empirical study from Kasworm (1983) concluded some positive findings, but about a quarter of students had particular difficulty with the self-directed learning process. These students also reported that they would avoid future formal educational opportunities that demand self-directed learning.

A more recent empirical study arguably depicted the phenomenon as "throwing students into the deep end" by *suddenly* stipulating self-directed learning (Kicken et al., 2009). In this study the author's report examined vocational education in the Netherlands in which the young adult learners were required to fully self-direct learning activities (i.e. set their own learning objectives and learning means) that suited their individual career choice. The authors, in a similar fashion to previous studies, concluded that students "on the whole" did not make sufficient progress – stating that they had become use to a teacher directed model and were not use to self-directed learning in formal educational setting – on this point the authors suggested that these learners would benefit from expert support for nurturing self-directed learning skills.

Here lies a key distinction of the process of facilitating self-directed learning in formal education settings in comparison to *heutagogy* – a heutagogy framing concerns formal education in which an educator “fully relinquishes ownership of the learning path and process to the learner” (Blaschke, 2012, p. 59). Whereas the literature on self-directed learning identifies that self-directed learning in formal education settings inevitably represents a collaborative process (learner with teacher and/or other learner(s); Garrison, 1997; Currie-Knight, 2023); and, that one imperative advantage of a formal adult education setting is learner access to an expert – the educator – who, overtime, can stage activities that practice and foster learner competence to assume control of the learning process (cf. Grow, 1991).

In this regard, a recent review (Morris & Rohs, 2023) identified a variety of differential learning activities in which educators could expose learners to a learning process in which they can control the, or a portion of the, learning process. This “unfinished taxonomy” of learning activities (representing an important area for further research) outlined by the authors included (a) e-portfolio/portfolio-based learning (b) experimental-based learning (c) maker-learning (d) task-based learning (e) interest-based learning (f) inquiry-based learning (g) problem-based learning, and (h) workplace simulations.

Morris and Rohs (2023) made the point that all of the above learning activities might support the facilitation of self-directed learning to various degrees – *when* such processes are underwritten by constructivist epistemology, where learning is set-up to be “situated”: centered on solving or resolving real-world-based questions, issues, cases, problems, or projects. On reading this, teachers, policy-makers and other stakeholders might realise that facilitating self-directed learning in formal educational settings *is* possible. It might be however that the extent to which learners are offered control of the directing the learning process is differential.

For instance, the study from Morris (2018) examined teaching-learning transactions within Further Education colleges (“vocational education”, with young adult learners) in England. In this study it was clear that colleges rated “outstanding” (as rated by the UK Government inspection body) commonly had pedagogy within a classroom in which educators offered learners a share of control of learning process across planning, undertaking, and reviewing learning aspects; whereas colleges rated as “inadequate” were fully teacher-directed. Furthermore, another insight from this study was that this phenomenon appeared to be a “whole college approach” – learners were either enabled (power-sharing together with teacher, and other learner[s]) or not enabled a share of control in terms of directing their learning process.

Indeed, the study from Gibbons et al. (1980) identified that the development of professional expertise in a variety of fields commonly involves a collaborative process in which self-directed learning efforts are made *with*, and within the company of, other experts in one’s field. Then, in formal educational settings educators can encourage learners to be collaborative and resourceful, but concomitantly and ultimately the self-directed learning process involves the learner assuming and maintaining “primary responsibility” for directing their learning process (Caffarella, 1993).

At this point of the paper it is worth revisiting and highlighting an important point: self-directed learning is a fundamental competence – a meta-competence – for living and working in a changing world, especially where conditions are changing rapidly. In addition, this present paper is also a re-call for action in policy and practice – as more than 50 years ago now Moore (1972) pointed out “Most educational theories stipulate the desirability of learners’ acquiring sufficient skill in preparation, execution, and evaluation to conduct their own learning” (p. 80). And in this respect, in reference to learner competency development, Arnold (2015) discussed the concept of an educator providing a relevant framework of

support for students, which could be gradually removed, over time (hours, days, weeks, or even over years) – the concept of enabling didactics. In a similar fashion, Grow’s (1991) model of self-directed learning is perhaps the best-known staged model. Staged in a sense that movement from teacher-directed learning process to self-directed learning can be developmental and transitional over-time. Grow (1991) discussed that, “even a single class meeting could be organised so that the students move from dependency, through the intermediate stages, to more self-directed learning” (p. 144).

Importantly, adult education may be viewed as an opportunity to foster learners’ self-directed learning competence, which includes fostering the skills for the self-directed *inquiry* process (e.g., Knowles, 1975; Rogers, 1969). In this regard, the recent large-scale systematic review from Morris and Rohs (2021) highlights how *still* many adults are not self-directed learners; this includes that they have not developed the necessary information literacy skills in order to navigate a complex sea of information, especially in respect of information found on the internet. The next section of this report will address *contextual factors* as a key dimension of self-directed learning (cf. Figure 1).

Contextual Factors

Contextual factors are very important to consider because they influence the possibility and desirability for self-directed learning in any given situation (cf. Figure 1). Spear and Mocker (1984) refer to the *organizing circumstances* of a learning situation, which acts upon the possibility and desirability for means and objectives of learning (Mocker & Spear, 1982; Spear and Mocker, 1984). Contextual factors operate to either promote or discourage self-directed learning within a particular context.

It is noteworthy to consider the interplay between the differential contextual factors that contribute toward promoting or discouraging self-directed learning. In this regard,

Pilling-Cormick (1996) classified contextual factors as: social constraints (the cultural-political climate); educator characteristics (personal beliefs, forms of control, and skills for sharing authority); and environmental conditions (such as the physical aspects of the institution and classroom, and how the course and institution functions). Comparably, Cross (1981) classified two types of contextual barriers that work alongside dispositional barriers toward self-directed learning. Situational barriers are related to the learner's immediate learning environment. Institutional barriers are barriers created by institutional practices and policies. All of the above are essential considerations for self-directed learning in a particular context.

In a wider perspective, Merriam and Baumgartner (2020) identified that the nature of a society at a particular time may determine to a large extent *who* is permitted to direct the means and objectives of learning. Indeed, academics and others who promote self-directed learning as a “universal” outcome goal of education have been criticised for their lack of concern for external validity issues. For example, in reference to Brockett and Hiemstra's (1991) work on self-directed learning, Flannery (1993) wrote, “the authors extend their humanistic values across the globe by seeking examples of self-directed learning outside North America, suggesting a singular universality to self-directed learning” (p. 110). In another example, Nasri (2019) investigated the perspectives of Malaysian Higher Education teachers (n = 30; all PhD holders) attitudes towards facilitating self-directed learning. In this study the authors concluded that educators in this context were reluctant to move away from teacher-directed learning, including their traditional teacher authority position and role as a knowledge expert.

Furthermore, scholars have highlighted the point that achieving self-directed learning in formal educational settings may be viewed simply as a paradoxical idea. Notably, Brookfield (1988) argued, “if self-direction is held to mean that the learner has complete

control over the choice of the learning content, purpose, evaluative criteria and methods, then the educator ceases to be an educator in any meaningful sense” (p. 35). On this, it has already been highlighted in the previous section of this paper that the possibilities for educators to assume the role of facilitator of several learning activities that support self-directed learning to various degrees, and that inevitably self-directed learning in formal education settings will most likely represent a collaborative process (Garrison, 1997).

Lastly, it should be considered that the learner(s) themselves are the *central* part of the educational context. It is not surprising therefore that models of self-directed learning commonly identify *characteristics of the learner* as one of the important dimensions of the construct (Sawatsky et al., 2017).

Characteristics of the Learner

Characteristics of the learner represent relatively stable factors in propensity, preference, and skill, including general intrinsic motivation and tendency toward pursuing self-directed learning (Alharbi, 2018; Barry & Egan, 2018; Brockett & Hiemstra, 1991). In the adult education literature, *age* was initially positioned as *the* key characteristic of a person that determined the intrinsic drive for self-directed learning (e.g., Knowles, 1970). However, such theoretical assumptions were not empirically grounded. On this, Elias (1979, p. 252) argued, “the education of children and adults will be advanced only if the unity between the two is maintained”. Subsequently, Knowles (1980) updated his perspective to acknowledge that both children and adults can pursue self-directed learning. That said, many of the measurement scales developed and studies undertaken to understand self-directed learning have remained within the field of adult education (cf. Merriam & Baumgartner, 2020).

Indeed, more recent empirical studies that have sought to correlate self-directed learning with personality traits have for instance reported strong correlations between learner

self-directedness and four personality traits: conscientiousness, openness (the first two of the Big Five personality traits), optimism and work drive (two narrow traits; Kirwan et al. 2010, 2014; Lounsbury et al. 2009; Major et al. 2006).

Moreover, qualitative studies have also examined personality characteristics common to the self-directed learner. One notable study was that of Gibbons et al. (1980) who analysed biographies of twenty acknowledged experts who had no formal training beyond high school. The authors concluded that salient characteristics of these individuals included: capacity to maintain a sharp focus on one topic area; robustness in maintaining intrinsic motivation; valuing a vision of accomplishment, recognition, and rewards; having the ability to effectively learn from a wide variety of methods and techniques; and, having drive, independence of thought, but also the capacity to be creative.

Lastly, the fourth dimension of self-directed learning is *responsibility* for directing the learning process and self-regulation of meaning-making. To the knowledge of the author this is the least studied dimension of self-directed learning – but, responsibility may prove to be the most important dimension – because self-directed learning cannot happen without learner responsibility.

Responsibility

Perhaps every adult educator reading this paper will be familiar with a “classic” educational scenario: the educator enters a classroom, students are sitting, perhaps chatting, waiting for your instruction. As you “the educator” arrive at the front of the class, students’ heads begin to turn to face yours; then, their chins elevate, as they anticipate your instruction. When this happens it is possible that you the educator may compare this to a beautiful scene that we probably also have all encountered: Baby birds sitting in their nest waiting for a parent bird to collect and bring back worms, then that lightly pitched “tweet tweet tweet”

baby bird sound, that is so beautiful, when a parent delivers the meal. This paragraph clearly outlines what learning responsibility – within the process of self-directed learning – entails: it is about planning to, then actually going out to, collect your own worms (with or without the help of others); and, when you are fed, evaluating the success of that process.

Responsibility, in terms of self-directed learning, involves a learner being proactive to construct meaning with the intent to meet their learning goals. Previously, self-directedness in terms of meaning-making – the cognitive-aspect – was generally ignored by most conceptualizations of self-directed learning, depicting an incomplete view of the self-directed learning process (Garrison, 1992, 1997; Long, 1989). Meaning-making refers to cognitive representations of understanding – relational to knowledge, skills, and/or competencies (Dewey, 1938/1963; Mezirow 1981, 1991; Morris, 2019c; Piaget, 1964).

Moreover, in terms of learning goals and meaning-making, *self-regulation* represents a construct that describes the process of the learner assuming and maintaining responsibility for making-meaning of experience with the aim to complete their learning goals. Gandomkar and Sandars (2018) identify that self-regulation involves the learner being highly strategic to ensure they achieve “the learning goal(s)” by employing a variety of cognitive and metacognitive processes, within a dynamic feedback loop. That said, it is very important to highlight the point that self-regulation is a concept commonly found in studies of childhood education (cf. Zimmerman, 1990, for review).

The construct of self-regulation notably derived from the psychological literature on school-based “traditional” forms of pedagogy – and an important distinction here is that these learners’ learning goals are commonly formulated by a teacher (or the centralized curricular; Gandomkar & Sandars, 2018; Taylor et al., 2023). In such an educational context, self-regulation has been defined as “the ability to control one’s emotions, body, and attention in order to function and achieve goals and well-being” (Bockmann & Yu, 2023, p. 693).

Importantly, the self-regulation theoretical framework that has been applied to the study of learners within a traditional teacher-directed learning environment does *not* involve the same set of skills as that required for self-directed learning (cf. Garrison, 1997, on “monitoring”). On this point, to the knowledge of the present author, this is not a well-researched area of study and is a key direction for further studies. However, some example differences here between self-regulation for teacher-directed learning and self-regulation for self-directed learning are outlined in the following paragraphs.

In teacher-directed learning, the educator is responsible for setting the learning objectives (planning of the learning goals, the “what”), the possibilities for the learning means (undertaking, the “how”), and then deciding whether the learning objectives have been met (reviewing whether the learning goals have been met). In this respect, Morris (2019a) outlines that a teacher-directed learning process involves going back and forth between two *modes of learning* “instruction” and “performance” – an information inculcation process of pre-defined knowledge or skills (Dewey, 1938/1963; Freire, 1970; Knowles, 1970, 1975, 1980).

Such a process represents “an effort [external to the learner] to assist or to shape growth” (Bruner, 1966, p. 1). In this regard, “success” in self-regulation revolves around the learner being *meek*, in terms of letting the information inculcation process happen to them (cf. Morris, 2019a). This learning form, which relies on educator-responsibility for meaning-making, concurs with behaviorist assumptions – characterized by predictable, measurable, and uniform learning outcomes; the ultimate goal of which being the prediction and control of behavior (Skinner, 1971). In this respect, Rogers (1969) explained, “Such learning...does not involve feelings or personal meanings; it has no relevance for the whole person” (p. 4). In such learning situations, the learner does not assume *primary* responsibility for meaning-making of experience: the student is trying to make-meaning that *copies* – as close as

possible that of the information disseminator – whether that is the teacher or the textbook, etcetera. Such a situation removes all sense of the “real” or “natural”.

Concomitantly, there is a lack of use of the learners’ experience as a resource, and a primary use of extrinsic motivators to promote progression in learning (Knowles, 1970, 1980). Self-monitoring and the process in this regard benefits when learners act submissively (Freire, 1970), rather than judgementally (Dewey, 1916/2013). Then, a premium is placed on – or it could be said that self-regulation in this case is required for – *remembering* absolute answers and *general* “truth” of knowledge and skills (Langer, 2017). Such teacher-directed learning has its importance and place in adult education – it might be termed “training” – however it isn’t self-directed learning.

A key differentiation of the self-directed learning process, in respect of self-regulation, is that self-monitoring must be applied to a learning process in which the learner assumes primary responsibility for making-meaning in order to satisfy his or her self-directed learning goals, in relation to their personal learning needs; and, in which these learning needs may change with regularity, due to their application to a rapidly changing context (cf. Lazarova et al., 2023). In this regard, Garrison (1997) discusses that “self-monitoring addresses cognitive and metacognitive processes: monitoring the repertoire of learning strategies as well as an awareness of and an ability to think about thinking (plan and modify thinking according to the learning task/goal)” (p. 24).

Moreover, a further fundamental dissimilarity of self-regulation within self-directed learning is that the learning process necessitates inquiry, in addition to instruction and performance modes (cf. Morris, 2019a). It is not surprising therefore that self-directed learning has been labelled the “inquiry method” (Knowles, 1975, p. 18). Inquiry is “the process of creating some new synthesis, idea, technique, policy, or strategy of action” (Houle, 1980, p. 31). A salient feature of inquiry is that learning outcomes cannot be predicted and

creative outcomes are possible (Morris, 2020). On this, Dewey (1916/2013) most notably proposed inquiry as the “basic method” of learning: *learning that involves [critical] thinking*.

It is not surprising therefore that recent empirical studies have reported strong correlations between optimism, work drive, conscientiousness, and openness (Kirwan et al., 2010, 2014; Lounsbury et al., 2009; Major et al., 2006). That is, such studies would suggest successful self-directed learning may benefit from the learner self-monitoring and ensuring maintenance of: a careful and conscientious approach to learning; a standpoint of humility and openness to others’ perspectives and new ideas; a positive and optimistic frame of mind; and, work drive.

In this respect, there are some clear overlaps here to the type of self-regulation potentially suited to teacher-directed learning. For instance, it would be difficult to argue against that conscientiousness, optimism, and work drive would assist students to meet learning outcome goals in a teacher-directed traditional learning process. However, on the other hand the importance of an adult learner retaining and self-regulating a standpoint of humility and openness to a variety of others’ perspectives and new ideas falls completely against ideals of teacher-directed learning. Thus, responsibility in terms of self-directed learning is not equivocal to that required for teacher-directed learning.

Theoretically, therefore, the above differentiations between teacher- and self-directed learning processes may, in part, explain why practice of years of teacher-directed learning does not prepare persons for competent self-directed learning in adulthood: An adult education practitioner must be aware and ready for this. In this section responsibility has been discussed as one of the four key dimensions of self-directed learning (cf. Figure 1), but nonetheless, especially in terms of self-regulation, this remains a key direction for further studies.

Conclusion

Self-directed learning is a core theoretical construct of adult learning and adult education. Self-directed learning represents a fundamental meta-competence for humans in order to meet the challenges of our changing world. The construct of self-directed learning has however become obfuscated in the literature. In order to redress this concern, this theoretical paper presents a model of *Four Dimensions of Self-Directed Learning* (cf. Figure 1), in which *all* four dimensions are important and part of enabling and/or facilitating self-directed learning.

First, in terms of learning process, it is outlined in this present paper that many adults worldwide are not competent self-directed learners and leave formal education without having fostered the competence for self-directed learning. In this respect, formal education may be viewed as an opportunity to foster self-directed learning competence, which includes fostering the skills for the self-directed *inquiry* process. Second, we discussed that contextual factors are very important because they influence the possibility and desirability for self-directed learning in any given situation. Third, studies have shown that characteristics of the learner represent relatively stable factors in propensity, preference, skill, general intrinsic motivation, and tendency toward pursuing self-directed learning. And fourth, in respect of task management and monitoring of self-directed learning, the paper identifies responsibility as an important dimension of the self-directed learning construct.

The present paper presents two important theoretical points (1) that there are four key dimensions of the self-directed learning construct, and (2) responsibility in terms of self-directed learning is not equivocal to that required for teacher-directed learning. Theoretically, the latter point may, in part, explain why practice of years of teacher-directed learning in formal schooling does not prepare persons for competent self-directed learning in adulthood.

So, adult education represents a primary opportunity to foster self-directed learning competence in adult learners, but adult education practitioners must be ready to provide support to facilitate the process.

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