



International Journal of Self-Directed Learning[®]



**Volume 18, Number 1
Spring 2021**

The *International Journal of Self-Directed Learning* (ISSN 1934-3701) is published biannually by the International Society for Self-Directed Learning. It is a refereed, electronic journal founded to disseminate scholarly papers that document research, theory, or innovative or exemplary practice in self-directed learning. Submission guidelines can be found at www.sdlglobal.com.

SUBSCRIPTION or BACK COPY ORDERS: Contact:

International Journal of Self-Directed Learning

501 SW 11th Place, #301A, Boca Raton, FL 33432

issdl.sdlglobal@gmail.com

© 2021, International Society for Self-Directed Learning. All rights reserved. No portion of this journal may be reproduced without written consent. Exceptions are limited to copying as permitted by Sections 107 (“fair use”) and 108 (“libraries and archives”) of the U. S. Copyright Law. To obtain permission for article reproduction, contact the editors at:

International Journal of Self-Directed Learning

issdl.sdlglobal@gmail.com

Cover design by Gabrielle Consulting

International Journal of Self-Directed Learning

Volume 18, Number 1, Spring 2021

EDITOR

Michael K. Ponton, *Texas A&M University-Commerce*

ASSOCIATE EDITORS

Kelly E. McCarthy, *University of South Florida*

Janet F. Piskurich, *Texas Tech University*

FOUNDING EDITORS

Lucy Madsen Guglielmino, *Florida Atlantic University (Emeritus)*

Huey B. Long, *University of Oklahoma (Emeritus)*

EDITORIAL BOARD

Naomi R. Boyer, *Education Design Lab*

Ralph G. Brockett, *University of Tennessee (Emeritus)*

Valerie C. Bryan, *Florida Atlantic University*

Robert J. Bulik, *University of Texas Academy of Health Science Education (Emeritus)*

Paul B. Carr, *Regent University*

Philippe Carré, *Université Paris Ouest Nanterre La Défense, France*

Robert C. Donaghy, *Bradley County Schools (Retired)*

Brian W. Findley, *Palm Beach State College*

Lucy Madsen Guglielmino, *Florida Atlantic University (Emeritus)*

Joan H. Hanor, *California State University San Marcos (Emeritus)*

Wayne B. James, *University of South Florida*

Carol E. Kasworm, *North Carolina State University (Emeritus)*

William J. Kops, *University of Manitoba, Canada*

Theresa N. Liddell, *Education Consultant (Retired)*

Patricia A. Maher, *University of South Florida (Retired)*

Elsa Mentz, *North-West University, South Africa*

Sharan B. Merriam, *University of Georgia (Emeritus)*

Magdalena Mo Ching Mok, *The Education University of Hong Kong*

Albertina L. Oliveira, *University of Coimbra, Portugal*

EunMi Park, *Charles Drew University*

Shelley Payne, *Otterbein University*

Thomas G. Reio, Jr., *Florida International University*

Karen Wilson Scott, *Idaho State University (Retired)*

Susan Stockdale, *Kennesaw State University (Retired)*

Peter L. Zsiga, *Florida Atlantic University*

Website Managers: Lila Holt and Peter Zsiga

Preface

In the first article of this issue, Payne discusses in a research brief how an e-portfolio can be used to support self-directed learning via goal setting and other self-regulatory processes. Using theoretical and pragmatic perspectives, Payne offers several recommendations to educators interested in using this instructional tool to promote self-directed learning.

In the next article, Collier proposes that the COVID-19 pandemic provides an opportunity—perhaps an imperative—to reexamine the structure of education by first reexamining its purpose (i.e., “the why of education,” p. 10). After presenting countering philosophies from Knowles and Biesta, Collier uses Freire to argue for a rehumanization of students and teachers so that both groups teach and learn and, thus, support not only individual achievement but also a broader democratic purpose.

Acknowledgement

Professor Roger Heimstra has been a member of the *IJSDL* editorial board since the journal’s inception in 2004, also serving as coeditor during the 2009-2010 period. This past fall, he decided to resign from the editorial board in order to further his transition to a full-time nonprofessional life. Since earning the Ph.D. in Adult Community Education from the University of Michigan in 1970, Prof. Hiemstra has had faculty appointments at many universities (emeritus status at Syracuse University), served as editor/consulting editor/senior editor for several publications, and published extensively receiving many recognitions that include induction into the International Adult and Continuing Education Hall of Fame (2000) and receipt of the Malcolm Knowles Memorial Self-Directed Learning Award (2005). I could write a tome regarding his myriad appointments, manuscripts, and awards; thus, suffice to assert that our society will miss his invaluable service and insights that has shaped and furthered the conceptual frameworks of SDL for the five decades. I know his work will continue to provide a solid foundation upon which future scholarship will be built for decades to come.

Thank you Rog!

Michael K. Ponton, Editor

International Journal of Self-Directed Learning

Volume 18, Number 1, Spring 2021

CONTENTS

Preface ii

Research Brief:

Using an E-Portfolio System to Evaluate Student Learning Outcomes and to Foster More Self-Direction Within the Curricula

Shelley Payne 1

Toward a Rehumanizing Education: Teaching and Learning in a Postpandemic Society

Caleb P. Collier 10

USING AN E-PORTFOLIO SYSTEM TO EVALUATE STUDENT LEARNING OUTCOMES AND TO FOSTER MORE SELF- DIRECTION WITHIN THE CURRICULA

Shelley Payne

Scholars of self-directed learning look to define best practices in teaching and learning that promote an improvement in self-directed learning. In order to do this, learners need more awareness of the student learning outcomes that exist as part of their programs of study. Could the use of an e-portfolio system allow students to see their learning goals, determine how to meet those learning goals, and evaluate their own learning outcomes as a means to foster increased self-directed learning?

Keywords: self-directed learning, e-portfolio, adult learning, higher education

Self-directed learning (SDL) is the means by which learners evaluate their own learning needs, construct learning goals to meet those needs, evaluate their learning resources, and evaluate their achievement of their learning goals (Knowles, 1975). Manning (2007) outlined the work done by Knowles (1975) and later Tough (1971) as being foundational in identifying SDL as a key component of adult learning theory. It is no longer sufficient to consider the sole purpose of education to be the transmission of knowledge. Learners need to become very self-directed just to cope with the enormity of information available to them (Hiemstra, 1994). Changing or evolving fields require that learners gain not only knowledge but also an understanding of how to continue to learn. Most medical schools now have as an institutional goal that students must demonstrate skills necessary for lifelong learning, and their curricula now incorporate learning strategies that depart from traditional lecture-based approaches to attempt to meet this end (Piskurich, 2011). Francom (2010) suggested that fostering the development of SDL leads to career mobility and for ongoing learning in posteducation settings. It is becoming increasingly important to develop SDL skills because they are essential for lifelong learning (Bolhuis, 2003). But what is it about the experience of higher education that leads to the achievement of such goals? Attendance in courses, matriculation through a degree program, and participation in cocurricular and extracurricular events are all part of the experience, but what do we know about the development of SDL?

The question at hand, therefore, is the following: Given that the development of SDL should extend beyond individual classes and should be incorporated across a curriculum, could a tool like an e-portfolio be used to foster self-direction in learning? The purpose of article is to (a) discuss the evidence that supports SDL as a learner

characteristic that can be developed, (b) discuss the literature surrounding e-portfolios and their use as a means to support SDL, and (c) summarize the key concepts that should be considered in the use of e-portfolios to support SDL development.

The Development of SDL: In the Classroom and Beyond

It is important to distinguish SDL as a method of organizing instruction versus a characteristic intrinsic to learners (Manning, 2007). Specifically, scholars within the field are looking to define best practices that seem to promote an improvement in SDL. In fact, Dewey (1938/1997) wrote that it is the teacher's responsibility to structure and organize a series of experiences that positively influence each individual's potential future experiences. The principles of SDL seem to be closely tied to tenets supportive of lifelong learning, but college faculty members are often left to determine how to develop and strengthen SDL propensities and abilities within their classrooms. Hiemstra (2013) noted this disconnect:

However, I have been disappointed over the intervening years since my initial efforts and the research reports by many others to note that numerous teachers, including instructors of adults, still rely primarily on teacher-directed approaches and fail to tap into that SDL potential among their students (and I suggest to the long-term detriment of such learners). I also believe that many teachers do not understand how their own teaching philosophy inhibits what they might do to adopt more "learner friendly" approaches. (p. 23)

If institutions of higher learning are committed to the idealism of lifelong, self-directed learners, we must examine how that takes place.

In order to promote the development of SDL in students, it is imperative that learners' take ownership of their own learning. For some students and learners this may come rather naturally; however, students who have problems in developing self-direction on their own must be supported in order to help them acquire learning skills, attitudes, and knowledge that allows self-direction in learning to occur (Beckers et al., 2019). In fact, Hiemstra (2013) stated that there are a number of limiting factors within individual courses that may present challenges for individual instructors to employ SDL strategies. In addition, learners need to be made more aware of the learning outcomes that exist as part of their program of study. Providing learners with more opportunity to see their learning outcomes and determine how to be intentional in their learning to meet those outcomes is really the essence of SDL.

What is an E-Portfolio?

There are many types of e-portfolios, and each type of e-portfolio has a slightly different purpose. Beckers et al. (2016) conducted a systematic review aimed at identifying and understanding influences on the development of SDL with an e-portfolio. In their review, they highlighted four different types of e-portfolios: dossier, reflective, training, and personal development e-portfolios.

The e-portfolio classifications examine whether the e-portfolio is mandated or voluntary and if the e-portfolio is meant as a showcase of work or for learning purposes. A dossier e-portfolio is mandated and is a detailed record of achievement typically used for promotion purposes. A reflective e-portfolio is a detailed record of achievement, and is typically used in higher education for promotion and tenure reviews. A training e-portfolio is mandated, used for learning purposes, is often found as part of a curriculum, and are required of students to document their learning throughout the year. This is the type of e-portfolio that many in higher education are familiar with and is typically associated with assessment. The last type of e-portfolio is the personal development e-portfolio. This type of e-portfolio is not mandated, is used for learning purposes, and is not an official part of the curriculum but can be used to assist in learning (Beckers et al., 2016). To promote reflection and SDL, a training or a personal development e-portfolio seems most appropriate. It is important that an e-portfolio meant to develop SDL and student metacognition remains as a protected space where students can share and reflect upon not just their successes but also their failures. If students feel the portfolio is a showcase space that will be judged by others for, as examples, a grade or employment, they will be unlikely to document anything other than success, which will interfere with metacognition (Barrett, 2007). However, even with a more public, mandated training portfolio, students or advisors could choose to protect certain elements of the e-portfolio from public view and thus create a more protected or private space within the university e-portfolio.

E-Portfolio to Support SDL Development

An examination of the literature surrounding the use of e-portfolios to support SDL reveals two important points. The first point is that despite SDL being a concept articulated formally by Knowles (1975), SDL lacks a consistent definition as applied within research. The second point is that studies that directly examine the impact of e-portfolios as a means to support SDL are lacking.

In February 2020 at the annual International Self-Directed Learning Symposium, the Board of Directors addressed the issue of the SDL definition. The Board acknowledged that the Knowles (1975) definition is the basis of SDL, but they adopted the following definition as an effort to further understand SDL: “**Self-directed learning is an intentional learning process that is created and evaluated by the learner**” (Ponton et al., 2020, para. 3). Given this definition, it therefore becomes important to examine the extent to which an e-portfolio supports the learner’s ability to be intentional about his or her learning process and provides a means to evaluate such learning. Again, in this context we must ask how an e-portfolio can support the learner’s aptitudes towards SDL.

Current trends in the area of educational technology support a shift in pedagogy and technologies that support active involvement of the learner and SDL in a constructivist environment (Sharifi et al., 2017). Lorenzo and Itelson (2005) postulated that e-portfolios allow learners to demonstrate their own growth in learning and also growth in collaborative learning environments. In fact, Sharifi et al. (2017) were able to show that learners who used an e-portfolio to document and reflect on their learning in

an intermediate English language course outperformed learners who did not use an e-portfolio on the language postassessment. These authors felt that the e-portfolio requirement forced the learners to be more reflective about the learning processes that were proving to be successful in their language learning and this reflection on their learning processes supported more engagement within the learning. Similarly, Baturay and Daloglu (2010) found that English language learners who used an e-portfolio not only improved more in their language proficiency over the group not using e-portfolios but also reported that students who used the e-portfolio were more able to identify their own strengths and weaknesses in their language learning. The aforementioned studies certainly provide evidence that an e-portfolio is a technology that can promote more active learning, and in these cases, the e-portfolio has been helpful specifically in the skill acquisition of language learning. The studies discussed the ability of the learner to evaluate his or her learning through means of documentation of learning artifacts and reflection. Evaluation is certainly a key aspect of SDL, but do these studies speak enough to the definition of SDL that one can comfortably assert that e-portfolios support the development of SDL?

Beckers et al. (2019) attempted to employ an e-portfolio that was specifically designed with the intention of supporting SDL. In the design of the e-portfolio they sought to use a personal development e-portfolio to safeguard the integrity of the portfolio contents and focus the value of the e-portfolio on reflection for the learner. They believed that the purpose of portfolio development is to optimize student development of certain skills and believed that SDL is a skill that can be developed through the use of an e-portfolio. In their study, they employed an e-portfolio system for use with 22 vocational students. Specifically, their e-portfolio system was designed to support three “iterative phases of SDL: self-assessment, formulation of learning goals, and selection of future learning tasks” (Beckers et al., 2019, p. 425). The students were asked to use the e-portfolio over a period of 3 weeks to self-assess their performance on learning tasks, and the students completed a questionnaire at the end of the study that probed 4 areas: (a) perceived usability and utility of the e-portfolio, (b) perceived ability of the e-portfolio to support self-assessment, (c) perceived ability to support formulation of points for improvement, and (d) perceived ability to support future task selection. Given the small sample size of this study and the use of a 10-item Likert scale to determine results, one must be cautious in generalizing the study’s findings; however, the study found students to hold positive perceptions of the e-portfolio’s ability to help them self-assess their performance on learning tasks and formulate points for improvement. Students also believed strongly that the e-portfolio helped them to think about what they should pay attention to with new learning tasks. Although this study was the only study to specifically address the use of e-portfolios and SDL, it is not clear that the students were intentional in their learning as it was still primarily teacher-directed. The self-assessment or evaluation piece of their e-portfolio design does appear strong and importantly led students to perform a thorough self-assessment about their performance on learning tasks and prompted them to think about how that might guide the selection of future learning activities.

Although e-portfolios are being used to support learner engagement and learner reflection, no studies were found that specifically measured SDL development within

students with any of the scales identified within the SDL literature (e.g., Guglielmino, 1977; Stockdale & Brockett, 2011). Additionally, the inconsistent use of a SDL definition hampers the study of the construct in an applied manner.

Key Concepts in the Use of E-Portfolios to Support SDL

In a systematic review, Beckers et al. (2016) identified influencing factors of e-portfolios to enhance students' SDL. These authors stated that SDL is an “umbrella term for various learning processes related to goal-directedness, self-controlled learning behavior” (p. 1). They did, however, support the Knowles (1975) definition in the context of their paper. In their systematic review, they identified five factors that influence the facilitation of SDL skills development with an e-portfolio.

The first factor identified included institutional factors. It must be made clear to students that metacognition is a goal of the process so that students do not simply engage in the task of the e-portfolio without engaging in their own learning (cf. Tanner, 2012). The development of SDL is indeed a learning process. Use of an advisor and mentor to truly support the development of adult learners is a critical link between e-portfolio use and the development of SDL. Conversely, a lack of mentorship or lack of appropriate technology support or facilities can negatively impact the use of e-portfolio and SDL growth.

The second factor related to the curriculum overall and consideration of when and how the portfolio is used by students throughout their program. E-portfolios allow for many mentors and peers to view a student's work and reflection pieces. This collaboration seems to promote revision of work and also seems to spur high level comments from peers regarding metacognition and skills associated with higher level thinking such as synthesis and evaluation. For e-portfolios to be effective in the promotion of SDL within a curriculum, the e-portfolios must be required elements of the curriculum and should be well implemented to allow students to set their own process goals, revise their process goals, and use teacher feedback to facilitate the process. Similarly, the systematic review also highlighted that summative assessment and reflective elements of the e-portfolio are keys to promotion of SDL. The e-portfolio should also contain a mix of mastery and performance goals as prompts to the reflective pieces. This mix should promote deeper reflection and greater metacognition.

As it is commonly found in the SDL literature, there are personal factors that are related to SDL development. Student factors associated with a negative impact on the development of SDL include low level of motivation, perceived lack of time for portfolio use, a low level of technological competence, awareness of the need for self-improvement, and multiple goal orientations. Self-determination theory supports the notion that students can increase their motivation for a task if the task itself seems relevant and if the use of the e-portfolio is scaffolded in such a manner that students feel competent in their use of the technology. Allowing time for students to complete the e-portfolio task and having that time to include mentored sessions could also alleviate some of the personal barriers related to SDL.

A learning portfolio as described in the systematic review should be structured in such a way that it can ultimately promote SDL. This requires that students be able to

see their learning goals. Finally, Beckers et al. (2016) recommended that in order for an e-portfolio to promote SDL, the e-portfolio should “at least possess functionalities to support the basic elements present in most SDL theories: goal-setting, task-analysis, implementation of a constructed plan and self-evaluation” (p. 42). Reflective thinking promotes metacognition as students are asked to consider their learning style and thought processes that were involved in producing the work that demonstrates achievement of their learning goals. Reflective thinking and understanding how they learn are all critical skills for the development of SDL in the adult learner (cf. Girash, 2014; Rodgers, 2002).

Summary and Recommendations

The original question posed for this article was the following: Given that the development of SDL should extend beyond individual classes and should be incorporated across a curriculum, could a tool like an e-portfolio be used to foster self-direction in learning? Limited studies have directly examined the impact of e-portfolios on SDL development and no studies were found that attempted to quantify the growth in SDL using any of the previously developed scales for SDL. The studies are also hampered due to an inconsistent application of a definition for SDL. Therefore, it is difficult to determine the degree to which e-portfolios support the development of key attributes of SDL.

If lifelong learning and SDL are indeed desired learning outcomes, the e-portfolio process or structure should fall in line with the theoretical foundations of SDL. The e-portfolio must demonstrate that the learning is *intentional*. Learners should have freedom to select learning outcomes and should have some choice in the evidence they provide for assessment (Davis et al., 2001). Previous research has shown that the development of SDL skills can be facilitated with an e-portfolio (Kicken et al., 2009). However, little is known about the exact conditions under which e-portfolios effectively facilitate the development of SDL skills.

In order for the e-portfolio to support SDL, the e-portfolio must require a student to reflect upon or *evaluate* their learning process. Chen and Light (2010) demonstrated increased metacognition among learners who were required to collect evidence of their learning and reflect. Reflection upon the learning process has also been shown to promote the transfer of learning to new situations (Tanner, 2012). Portfolios can also promote higher learning by asking students to analyze, synthesize, and evaluate their learning and learning process (Herteis & Simmons, 2010).

A summary of recommendations for the use of an e-portfolio system that would support the development of SDL are both theoretical and practical in nature. From a theoretical perspective the e-portfolio should do the following:

1. Assure that overall program learning outcomes are made transparent to students. Within those learning outcomes students should be able to add learning outcomes to the e-portfolio that are more personalized, and they should have a choice regarding the evidence used to demonstrate achievement of the learning outcomes. This supports the notion of intentional learning.

2. Students must be required to reflect within the e-portfolio on their learning process, on their learning outcomes, and upon goal achievement. Reflection is a critical element of metacognition and supports learner self-evaluation that is critical to SDL.
3. Feedback is essential to the development of metacognition and SDL. The e-portfolio process must require summative feedback from peers or mentors so that the learners feel supported in the development of the skills related to SDL. The e-portfolio should thus be a personal development e-portfolio in which student privacy of reflections and feedback is maintained.

From a pragmatic perspective, e-portfolios are often faulted as an educational technology from a design and application standpoint. To combat common problems with the use of e-portfolio the following suggestions should be considered:

4. Students and faculty must be given support on how to use the e-portfolio. Fear and feelings of incompetence are a major barrier to e-portfolio implementation. Support for the use of e-portfolio also helps to promote feelings of value by faculty and students alike for the importance of the e-portfolio as a part of the learning process. Additionally, training in the e-portfolio system should be scaffolded so that users feel an increasing competence in the use of the technology without feeling overwhelmed.
5. Students must be given time to work on the e-portfolio. This supports students feeling that the e-portfolio is important and relevant. It may also allow students to feel an increased sense of mentorship and remove barriers that might exist related to a lack of competence with technology.

The e-portfolio should also put students in touch with their learning goals, provide them experience in setting and evaluating their learning goals, and allow them to individualize the ways in which they choose to learn in relation to these goals. E-portfolios can be a powerful learning tool that could be used to support SDL within learners when careful consideration is given to goal setting, intentionality, task analysis, plan implementation, and self-evaluation. The use of e-portfolio as a means to have learners evaluate themselves and their achievement of programmatic learning outcomes may seem lofty and cumbersome but could be worth it in the long run if our goal as educators is to help students become more effective, successful, and responsible for their own learning.

References

- Baturay, M. H., & Daloglu A. (2010). E-portfolio assessment in an online English language course. *Computer Assisted Language Learning*, 23(5), 413–428.

- Beckers, J., Dolmans, D. H. J. M., & Van Merriënboer, J. J. G. (2016). E-portfolios enhancing students' self-directed learning: A systematic review of influencing factors. *Australasian Journal of Educational Technology*, 32(2), 32–46.
- Beckers, J., Dolmans, D. H. J. M., & Van Merriënboer, J. J. G. (2019). PERFLECT: Design and evaluation of an electronic development portfolio aimed at supporting self-directed learning. *Tech Trends*, 63, 420–427.
- Barrett, H. C. (2007). Researching electronic portfolios and learner engagement: The REFLECT Initiative. *Journal of Adolescent & Adult Literacy*, 50(6), 436–449.
- Bolhuis, S. (2003). Towards process-oriented teaching for self-directed lifelong learning: A multidimensional perspective. *Learning and Instruction*, 13, 327–347.
- Chen, H. L., & Light, T. P. (2010). *Electronic portfolios and student success: Effectiveness, efficiency, and learning*. American Association of College and Universities.
- Davis, M. H., Friedman, M., Harden, R. M., Ker, P. H., McGhee, C., Pippard, M. J., & Snadden, D. (2001). Portfolio assessment in medical students' final examinations. *Medical Teacher*, 23, 357–366.
- Dewey, J. (1938/1997). *Experience and education*. Touchstone.
- Francom, G. (2010). Teach me how to learn: Principles for fostering students' self-directed learning skills. *International Journal of Self-Directed Learning*, 7(1), 29–44.
- Girash, J. (2014). Metacognition and instruction. In V. A. Benassi, C. E. Overson, & C. M. Hakala (Eds.). *Applying science of learning in education: Infusing psychological science into the curriculum* (pp. 152–168). Society for the Teaching of Psychology. <http://teachpsych.org/ebooks/asle2014/index.php>
- Guglielmino, L. M. (1977). *Development of the Self-Directed Learning Readiness Scale* (Publication No. 302856217) [Doctoral dissertation, University of Georgia]. ProQuest Dissertations and Theses Global.
- Herteis, E. M., & Simmons, N. (2010). *GG#10: The portfolio process*. Society for Teaching and Learning in Higher Education. <https://www.stlhe.ca/publications/green-guides/>
- Hiemstra, R. (1994). Self-directed learning. In T. Husen & T. N. Postlethwaite (Eds.), *The international encyclopedia of education* (2nd ed.). Pergamon Press. <https://ccnmtl.columbia.edu/projects/pl3p/Self-Directed%20Learning.pdf>
- Hiemstra, R. (2013). SDL: Why do most instructors still do it wrong? *International Journal for Self-Directed Learning*, 10(1), 23–34.
- Kicken, W., Brand-Gruwel, S., Van Merriënboer, J., & Slot, W. (2009). Design and evaluation of a development portfolio: How to improve students' self-directed learning skills. *Instructional Science*, 37(5), 453–473.
- Knowles, M. S. (1975). *Self-directed learning*. Association Press.
- Lorenzo, G., & Itelson, J. (2005). *An overview of e-portfolios*. <https://library.educause.edu/-/media/files/library/2005/1/eli3001-pdf.pdf>
- Manning, G. (2007). Self-directed learning: A key component of adult learning theory. *Journal of the Washington Institute of China Studies*, 2(2), 104–115.

- Piskurich, J. (2011). Fostering SDL in medical school. *International Journal of Self-Directed Learning*, 8(2), 44-52.
- Ponton, M., Boyer, N., & McCarthy, K. (2020, February 16). ISSDL adopts a definition of SDL. *International Society for Self-Directed Learning*. <https://www.sdlglobal.com/single-post/2020/02/16/ISSDL-adopts-a-definition-of-SDL>
- Rodgers, C. (2002). Defining reflection: Another look at John Dewey and reflective thinking. *Teachers College Record*, 104(4), 842–866.
- Sharifi, M., Soleimani, H., & Jafarigohar, M. (2017). E-portfolio evaluation and vocabulary learning: Moving from pedagogy to andragogy. *British Journal of Educational Technology*, 48(6), 1441–1450.
- Stockdale, S. L., & Brockett, R. G. (2011). Development of the PRO-SDLS: A measure of self-direction in learning based on the personal responsibility orientation model. *Adult Education Quarterly*, 61(2), 161–180. <https://doi.org/10.1177/0741713610380447>
- Tanner, K. D. (2012). Promoting student metacognition. *CBE-Life Sciences Education*, 11(2), 113–120.
- Tough, A. M. (1971). *The adult's learning projects*. Ontario Institute for Studies in Education.

Shelley Payne (spayne@otterbein.edu) is a professor at Otterbein University in the Department of Health and Sport Sciences.

TOWARD A REHUMANIZING EDUCATION: TEACHING AND LEARNING IN A POSTPANDEMIC SOCIETY

Caleb P. Collier

The COVID-19 pandemic has highlighted weaknesses in our education system and has prompted renewed conversation about the structure of education. This article argues that the conversation should be more geared to the why of education (i.e., the purpose of schools) rather than the how (i.e., the multiple ways of delivering education both for in-person and remote settings). This article examines two conflicting philosophies of education. First, the model of self-directed learning put forward by Knowles in 1975 is presented and why it may be useful in our present circumstances. In contrast, Biesta's critique of the rise of learning (and removal of teaching) in education will be presented, showing the political power at work in this discourse. Finally, a type of synthesis is reached between these two polarized positions with the help of Freire, arguing for a why of education that has rehumanization at its center.

Keywords: self-directed learning, COVID-19, Malcolm Knowles, Gert Biesta, philosophy of education, purpose of school

Research has shown that self-directed learning (SDL) increases a learner's self-esteem, personal responsibility, self-efficacy, and emotional intelligence (Guglielmino et al., 2009; Hoban & Hoban, 2004; Muller, 2008; Ponton et al., 2010; Ponton et al., 2014). The focus on agency and responsibility in SDL learning spaces contrasts greatly with the traditional school design that focuses on accountability and compliance (Kenner et al., 2020). The discourse of accountability has seeped into education from the business world and is a vestige of the industrial view of education that argued that school should function using the same efficiency logic of the factory floor (Thorndike, 1917). This focus on accountability, which limits the autonomy of learners and teachers, has been tied to a spike in anxiety, educator burnout, and disengagement from students and teachers alike (Ingersoll et al., 2014; Simon & Johnson, 2015). Likewise, the focus on compliance is aimed at negating freedoms in the classroom. In its landscape analysis, The Institute for Self-Directed Learning argued the following:

Compliance-driven cultures can also damage and stagnate executive function skills in children in other ways because compliance can be understood as the ways in which adults are often viewed as the keepers and disseminators of

knowledge, and creators of the rules, and students as the passive recipients who must “comply” by their standards and rules and therefore do not prepare learners to think critically, plan intentionally and make good choices. (Kenner et al., 2020, p. 10)

This approach to schooling has led to an epidemic of dependent learners. Hammond (2014) argued that dependent learners “struggle because we don’t offer them sufficient opportunities in the classroom to develop the cognitive skills and habits of mind that would prepare them to take on the more advanced academic tasks” (p. 13). Schools designed with accountability and compliance as their guiding principles do not foster independence; instead they crush it.

This overreliance on accountability and compliance was laid bare by COVID-19. The pandemic caused a seismic shift in education at all levels. Schools experienced prolonged closures of physical spaces and moved learning to virtual experiences, moving from a place governed by a bell schedule where students, under the watchful gaze of teachers, worked through common curricula in preparation for standardized testing to an unpredictable, hard-to-track, work-from-home scenario in a matter of days. Teachers, administrators, policymakers, students, and parents are still trying to determine what school will look like for the near future. This crisis has caused a renewed conversation about what education is and how it should work. What happens when an education is no longer something that you go somewhere to get from someone else?

Never before has the global community, collectively and simultaneously, had to rethink the why, what, and how of education. Though this conversation certainly is timely and unprecedented at this scale, it is far from novel. There have been many, many voices raising these very questions for a long time. Ever since Meno approached Socrates and asked “whether virtue was acquired by teaching or by practice” (Plato, 1984, p. 1), there has been a lively debate about what education is. Do people learn by being taught by others, by practicing for ourselves, or are some things just innate?

The absence of in-person classrooms amplified this conversation, particularly in relation to the focus on accountability and compliance that has come to prominence in recent decades. Without a bell to govern time, how would students schedule their work? Without the authority of a teacher’s gaze, what would motivate students to complete assignments? Without standardized curricula, what would students even work on? Without test results, how would learning be measured? At the end of the day, who is ultimately responsible for a student’s learning in the first place?

There is definitely a spectrum of possibilities that can serve as a rejoinder to these questions. This article will seek to put two positions into conversation with one another. The first is a call, issued 45 years ago by Knowles (1975), for education to shift toward SDL, not as part of a passing fad but for the “survival of the human race” (p. 16). The second position, represented by Biesta (2016), will be the rebuttal, a stinging rebuke to the learnification of education and an active call for people “to refuse the learner identity” (p. 70). These contrasting visions of education are presented here not as a faux debate but rather as an embrace of the tensions and contradictions present in education that have been brought to the surface by the predicament of the pandemic.

By smashing together these two dueling philosophies of education, maybe space will be made for new thoughts and ideas, which is my hope.

The concepts of teaching and learning are presented here as proxies to discussing education as a whole. How an individual conceptualizes the role of a teacher and the responsibility of a learner reveals much about their overall philosophy of education. In fact, the argument of this essay is predicated on this assumption: if you want to know how any learning environment frames the purpose of education, simply look to what is expected of the educator (or the adult in the room) and the student (or learner) in that space. As such, this article is a conversation on the macrolevel purpose of education, but it centers its focus on the microlevel interaction between those who hold the label teacher and those seen as learners. It is in that interaction between human beings that all of our philosophies of education become real.

Malcolm Knowles and the Why of SDL

In the 1960s and 1970s, a few North American researchers in the field of adult education became the first to popularize the phrase “self-directed learning” (Knowles, 1970, 1975; Rogers, 1969; Tough, 1971). Though writing a half-century ago, their conceptualizations of SDL may offer guidance to researchers, teachers, and students trying to make sense of education in the current pandemic.

Knowles (1975) perhaps offered the clearest definition of what is meant by SDL:

In its broadest meaning, “self-directed learning” describes a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes. (p. 18)

For Knowles, it was incumbent on the individual to take responsibility for the process of their learning from assessing their own learning needs to evaluating their own work. Education conceptualized from this SDL perspective is the opposite of teacher-directed learning in which the learner is “essentially a dependent personality and ... the teacher has the responsibility of deciding what and how the learner should be taught” (Knowles, 1975, p. 20).

Knowles (1975) further highlighted this difference between teacher-directed learning and SDL, stating that “it is a tragic fact that most of us only know how to be taught; we haven’t learned how to learn” (p. 14). What makes this such a tragedy? For Knowles, this went beyond a new or innovative model of education. There were four main reasons for his why of SDL with each increasing in urgency.

The first is that people who know how to learn enjoy learning more. He argued that “they enter into learning more purposefully and with greater motivation. They also tend to retain and make use of what they learn better and longer” (Knowles, 1975, p. 14). Morris (2019), in a review of empirical studies of SDL, claimed that self-directed learners tend to “enjoy learning; exhibit initiative, independence, and persistence in

learning; accept learning responsibility; view problems as challenges; and are capable of self-discipline” (p. 642). Thus, Knowles’s first point is that self-directed learners tend to be happier in their educational journeys.

The second reason why Knowles (1975) thought it was such a tragedy is because he believed that self-direction was more “in tune” with what he referred to as human’s “natural processes of psychological development” (p. 14). As babies, humans need someone to take care of all of their needs and to make decisions for them. As bodies and minds grow, people do more tasks for themselves. “An essential aspect of maturing,” he argued, “is developing the ability to take increased responsibility for our lives—to become increasingly self-directed” (Knowles, 1975, p. 15). Humans are made to be self-directed learners, Knowles argued. As a species, humans have only recently equated education as teacher-driven, and this dependence has led to a sort of arrested development.

A third reason (and one highlighted by educational shifts brought on by the COVID-19 pandemic) is that “new developments in education ... put a heavy responsibility on the learners to take a good deal of initiative in their own learning” (Knowles, 1975, p. 15). Knowles saw a world in 1975 that was just on the precipice of the computer age. The political winds were blowing the sails of higher education into neoliberal waters. Curriculum and instruction were undergoing great changes due to these political, economic, and technological upheavals. It was incumbent on the student, then, to navigate the changing landscape of education and Knowles (1975) believed that “students entering these programs without learning the skills of self-directed inquiry will experience anxiety, frustration, and often failure” (p. 15).

Not only was education changing, but Knowles (1975) believed it to be a “simple truth ... that we are entering a strange new world in which rapid change will be the only stable characteristic” (p. 15). In this world of rapid change, transmitting knowledge with an ever-shrinking half-life becomes pointless, and if education is not about the transmission of facts, then what is it? For Knowles (1975), “the main purpose of education now must be to develop the skills of inquiry” (p. 15). If developing skills of inquiry is now the purpose of education, people must rethink the structure of schools. Knowles (1975) argued that “we must come to think of learning as being the same as living. We must learn from everything we do; we must exploit every experience as a ‘learning experience’” (p. 16). In this conceptualization of learning, schools lose their hold on defining knowledge and measuring learning. Also, schooling can no longer be thought of as time bound (i.e., something finished in a set number of years and culminating in a degree). Instead, Knowles (1975) argued, “education—or, even better, learning—must now be defined as a lifelong process” (p. 16). Many of today’s most popular jobs did not exist a decade ago. Knowles made these arguments 45 years ago, seeing the rapidly changing world of work on the horizon. An education is not something one gets but rather something one does; that is, experiences one has and skills one sharpens over and over again.

For Knowles, becoming a self-directed learner was not just a better or more innovative way to do education. Instead, he considered it to be an existential need:

To sum up: the “why” of self-directed learning is survival—your own survival as an individual, and also the survival of the human race. Clearly, we are not talking here about something that would be nice or desirable; neither are we talking about some new educational fad. We are talking about a basic human competence—the ability to learn on one’s own—that has suddenly become a prerequisite for living in this new world. (Knowles, 1975, pp. 16–17)

So, to Knowles, the “tragic fact” that most people only know how to be taught instead of to learn on their own is a threat to human existence. His call, issued in 1975, was a call for survival. Humans must learn to learn or face the consequences.

Gert Biesta and the Threat of Learnification

While Knowles raised the alarm for the need for individuals to take the reins of their own learning 45 years ago, Biesta (2016) raised a counter alarm. To him, the threat is not that people will fail to take up the mantle of learner but that people will in fact succeed:

Claims like these—which almost sound like threats: You will not be able to meet life challenges unless you are a lifelong learner! Society will not be sustainable unless it is a learning society!—have become all too familiar in recent times, so that it may well be argued that we live in a “learning age.” (Biesta, 2016, p. 61)

Biesta critiqued the removal of teaching from education and the rise of learning. “The main ‘target’ for my critique,” he argued, “is the suggestion that learning is something natural, something we cannot *not* do” (Biesta, 2016, p. 59).

The first step in his critique was to question the “discourse of ‘learning’” or what he called the “‘learnification’ of the discourse of education” (Biesta, 2016, p. 62). In Biesta’s estimation, there has been a sharp rise in the verbiage learn, learner, and learning among education circles. Students are learners, schools are places of learning, and even education is dubbed the field of teaching and learning. To Biesta, this discourse of learnification is political. The word learn is problematic because, though the word itself is neutral (one can learn how to solve an algebra equation or how to build a bomb), it presents itself as being positive in the sense that all learning is good. This is an issue, he argued, “as the notion of education ... is never just that students learn, but that they learn *something* and that they learn this for particular *reasons*” (Biesta, 2016, p. 63). According to Biesta, learning devoid of purpose and content is a threat to real education, which is intentional and purposeful.

Another critique of the discourse of learnification is its focus on the individual. Learning is something that one can only do for oneself; that is, one cannot learn for another person. The rise of learning, then, has “shifted attention away from the importance of relationships in educational processes and practices” (Biesta, 2016, p. 63). For the learner, what is the role of the teacher and peers? Where does responsibility

begin and end in a classroom? For Biesta, the individualization of learning comes at a great cost.

There are more political considerations to the language of learning. Biesta (2016) believed that the discourse was driven by economic forces and that in learnification there is an “emphasis on the need for individuals to adapt and adjust to the demands of the global economy” (p. 66). This is a calculated move, in Biesta’s eyes, away from a purpose of education that had as its aim social and democratic betterment and towards one that was squarely market driven. It is on the individual—the learner—to maintain their employability while society at large can wash its hands of responsibility.

To Biesta (2016), perhaps the most incendiary piece of the discourse of learning is the claim that it is a natural process, “a tendency to see learning as an entirely natural phenomenon—on the same par as breathing and digestion” (p. 68). Again, Biesta found fault with this reasoning for many of the same reasons already listed, mainly that it positions learning as an always positive experience and that the responsibility of this learning is entirely on the individual. The logic is this: a person naturally learns, so if a person does not learn, something is wrong with them. They lack drive, responsibility, motivation, adaptability, resourcefulness; that is, they are somehow deficient in something, so there is no need to question systems, structures, society, teachers, schools, and curriculum. If learning is like breathing, who ultimately is responsible for it?

What was Biesta’s solution to learnification? He encouraged people to resist the label of learner, refuse to be a cog in the machine, and push back on claims that the individual is solely responsible for their education. “To refuse the learner identity,” he argued, “is not to denounce the importance of learning, but to denaturalize and hence politicize learning so that choices, politics, and power become visible” (Biesta, 2016, p. 70). This refusal “exposes and opposes the politics of learning at work” and is but one small way to resist the assumptions of learnification (Biesta, 2016, p. 70).

Teaching and Learning in a Postpandemic World

Where does one go from here? Knowles, writing over four decades ago, raised the alarm that people must become self-directed learners for the human race to survive. Biesta questioned both the alarmism in this claim as well as the rise of learnification in education, a discourse he argued is politically-laden. So what’s next? Declare a winner in the debate and move on? Is education more about taking the shackles off of individual learners and turning them loose with their own learning thereby following the paths of their own inquiry and taking responsibility for their own futures? Or is education a socially and democratically guided institution that has as its purpose and responsibility the collective betterment of society for which there is a sharing of a collective responsibility?

This is a false dichotomy. I believe that by bringing these two opposing ideas together, their collision opens up new spaces to think about education with respect to teaching and learning. In similar ways that tectonic plates push into each other to create

mountain ranges, new heights may be glimpsed in the meeting and conflicting of the spaces represented by Knowles and Biesta.

The first new space could be called emancipation in the Freirean sense (Freire, 1996). Thorsteinson (2018), for example, used SDL to embrace what she saw as “anarchy” in the classroom in the months following the election of Donald Trump and to bolster her use of critical whiteness pedagogy in her courses (p. 40). She, as a White woman, felt that explicitly handing over authority and responsibility to the learners was a way to create emancipatory spaces. This was all the more relevant because her courses were on topics of race. She argued the following:

Rather than taking a top-down approach through lectures and readings, I decided to infuse course design with the diversity already populating my class. I thus embraced models of self-directed learning (SDL) to extend agency and responsibility among my students. (Thorsteinson, 2018, p. 40)

Research suggests that people who are engaged in their own racial education are more likely to spot their own bias, privilege, and internalized oppression whereas they may be more likely to get defensive if the education is other-directed (Weber, 2010). Thorsteinson thusly invited her learners to share in the construction of assignments, the choice of weekly readings, and the evaluation of work. She concluded, “there are reasons to believe that SDL is a useful tool for decentering authority, which may be appropriate when white teachers lead courses on race topics” (Thorsteinson, 2018, p. 55).

Note that though there were self-directed elements of this coursework, this class was administered by a teacher and taken along with peers. The work was as diverse as the students present, but it still served as a sort of mosaic and had a groundedness in community. This speaks to Biesta’s (2016) concern about the individualization assumed in SDL. Thorsteinson’s (2018) course also had intention behind it: Students could not go through the course without exploring race, encountering certain themes, texts, and media, and presenting their projects to the group. This provided a boundedness in which SDL functioned within a larger whole, respecting the need for people to both learn from and be taught by.

Biesta (2016) built off of the framework of Freire (1996) in putting forth his own idea of emancipation. Rather than the teacher-as-emancipator dynamic, which has “colonial” (Andreotti, 2011, p. 135) tendencies, Biesta viewed emancipation as a “process of the collective discovery of oppressive structures, processes, and practices” (p. 71). Freire (1996) saw oppression as a break between the individual and the world, a type of “dehumanization” in which the oppressed lost their subjectiveness by becoming mere objects to the oppressor (p. 135). Thus, emancipation is a collective, generative effort. The teacher is not the emancipator, coming from a place of authority and superiority to deliver people out of oppression. “The role of the teacher in this process,” Biesta argued, “is to reinstate dialogical and reflective practices that in turn ... reconnect people back to the world” (p. 72). SDL is a way to create spaces for this work to happen; as Freire argued, “while no one liberates himself by his own efforts, neither

is he liberated by others” (p. 48). For this work to happen, society needs both teachers and learners.

After this phase of emancipation comes a phase I refer to as rehumanization. Biesta’s (2016) critique of what he viewed as an overemphasis on the concept of learning in education and a devaluing of teaching is based on this idea that humans lose their subjectivity; that is, they become nameless learners, driven to and fro by the winds of ever-changing market demands. As argued above, SDL can in fact be part of an emancipatory project. Knowles (1975) found a great deal of freedom in reimagining his classrooms as SDL spaces:

It required that I divest myself of the protective shield of an authority figure and expose myself as *me*—an authentic human being, with feelings, hopes, aspirations, insecurities, worries, strengths, and weaknesses. It required that I be clear about what resources I did and did not have that might be useful to the learners, and that I make the resources I did have available to them on their terms. (p. 34)

For Knowles, this shift in his role from teacher to facilitator of learning was a way to rehumanize himself in the classroom. Just as Knowles felt the need to loosen his grasp on authority, Biesta felt the need for it to be reclaimed. “The educational question,” he argued, “is about what it is that we want to give authority to; it is about deciding what it is that we want to have authority in our lives” (Biesta, 2016, p. 55). Teachers, in Biesta’s view, are not “disposable and dispensable resources for learning” but should venture to provoke, interrupt, and draw forth the thinking of students in their tutelage (p. 57).

So, as Knowles sought to divest authority and Biesta sought to reinstate it, a space is made in between. What if people rid themselves of the teacher and learner binary? In the ideological tug of war between whether there is more value in being taught or learning from, perhaps there is a way to smash the ideas together. Biesta (2016) would decry such a move and would probably point out that that is currently the problem in his mind: a false equivalency between learning and education. What I propose is not so much a joining of the terms so that teaching and learning lose their distinctions but rather to dialectically fuse them in such a way that, though inseparable, they keep all of their peculiarities.

For guidance here, I turn to Foucault (1978, 1980, 1995) and his concept of power/knowledge, the idea that you cannot separate power and what counts as knowledge and the idea of truth (Foucault, 1995, pp. 27–28). Power and knowledge are inseparable: always connected and always present. “Power is everywhere,” he argued, “not because it embraces everything, but because it comes from everywhere” (Foucault, 1978, p. 93). Power is dynamic and relational, not something that is “acquired, seized, or shared” (Foucault, 1978, p. 94). With this framework in mind—that power exists in relationships and cannot be claimed or given away—the authority that should be divested by the teacher in Knowles’s view of SDL and that should be reclaimed in Biesta’s philosophy of education loses its substance.

Perhaps a space can be created to “decenter authority” as Thorsteinson (2018, p. 40) sought to do in her classroom. Knowles (1975) wrote that giving up the mantle of teacher offered new ways to be “an authentic human being” in the classroom (p. 34). Perhaps, though, this relief was not at the giving up the title of teacher per se but rather was a particular way of being and performing the role of teacher. Freire (1996) referred to this as the “banking concept of education” where “knowledge is a gift bestowed by those who consider himself [*sic*] knowledgeable upon those whom they consider to know nothing” (p. 53). Freire has already argued for a collapse of the learner and teacher binary. He argued that “education must begin with the solution to the teacher-student contradiction, by reconciling the poles of the contradiction so that both are simultaneously teachers *and* students” (p. 53). He further stated,

Through dialogue, the teacher-of-the-students and the students-of-the-teacher cease to exist and a new term emerges: teacher-student with student-teachers. The teacher is no longer merely the-one-who-teaches, but one who is himself [*sic*] taught in the dialogue with the students, who in turn while being taught also teach. They become jointly responsible for a process in which they all grow. In this process, arguments based on “authority” are no longer valid. ... Here no one teaches another, nor is anyone self-taught. People teach each other, mediated by the world. (Freire, 1996, p. 61)

This is perhaps the clearest articulation of the new spaces opened up by bringing together Knowles’s (1975) call for SDL and Biesta’s (2016) objection to the rise of learning and loss of teaching in current education discourse. How might one imagine this type of space where “no one teaches another” nor themselves, but instead people grow—people rehumanize—together?

It is in this space where people can move beyond the dialectic that views education as either a means for individual growth or as a means of social responsibility. Is school for an individual or for society? It has to be both. Education should cultivate in the individual a sense of agency, a deep knowledge of one’s own identity, and the skills and abilities to learn for oneself. It also must provide individuals with the opportunity to learn from each other. A democratic society requires that learners learn not only how to learn but also how to live together. SDL spaces where authority is decentralized and the line is blurred between teachers and learners provide individuals the opportunities to build skills of collaboration, empathy, trust, and cross-cultural competence. Our world is in desperate need of people who have mastered such skills.

Conclusion

The COVID-19 pandemic brought the world to a halt. The weaknesses in the education system exposed by the pandemic could be easy to mischaracterize. Many will say that the cracks in the system were primarily due to a lack of resources, that there was not the capacity or technological access to serve all students in a remote format. I am not asserting that this is not a worthy issue to discuss or problem to solve. However, this line of inquiry (i.e., How can people better prepare schools to function in remote

environments?) misses the point. The brokenness of the American education system has very little to do with the how of education and everything to do with the why.

It is not the case that students who were engaged in deep learning in school were unable to continue this learning at home as the pandemic shuttered schools. It is more likely that students who were not engaged in deep learning at school continued to not engage in this type of learning at home. School has been exposed as a place devoid of a clear educational purpose beyond tracking and surveilling students. The time is ripe to renew the conversation about why society needs education in the first place. Knowles (1975) thought it was for developing individual skills and knowledge sets in a rapidly changing world. Biesta (2016) thought it was for collectively preparing citizens for the work of democracy. In the contradiction between these two places—education as learning versus education as being taught—Paolo Freire (1996) offered a compromised view of education in which “no one teaches another, nor is anyone self-taught. People teach each other, mediated by the world” (p. 61). Perhaps people can create conversations about school and schooling that prioritize the need for a type of education that is rehumanizing. What if it was understood that the function of education in society is to cocreate the humanity of each other? What if it was the basic assumption that students enter into these spaces not only to learn but also to teach and that teachers become the most eager learners of all? How might SDL approaches create a space for the diversity of those who exist within our schools? How might teachers discover their own humanity and sense of agency in the classroom?

Those questions (and others like them) should become the basis for how people think about teaching and learning in a postpandemic society. Unfortunately, the conversation is much more likely to center on how to increase tracking and surveillance for learning outside of school, ways to create even more standardization rather than customization in education, and how to implement more effective e-learning technologies. Where are those who are willing to think about education as a collaborative project of rehumanization?

References

- Andreotti, V. (2011). *Actionable postcolonial theory in education*. Palgrave Macmillan.
- Biesta, G. (2016). *The beautiful risk of education*. Routledge.
- Freire, P. (1996). *Pedagogy of the oppressed*. Penguin Books.
- Foucault, M. (1978). *History of sexuality: Volume 1*. Pantheon Books.
- Foucault, M. (1980). *Power/knowledge: Selected interview and other writings, 1972–1977*. Vintage Books.
- Foucault, M. (1995). *Discipline and punish: The birth of the prison*. Vintage Books.
- Guglielmino, L., Gray, E., Arvary, K., Asen, J., Goldstein, D., Kamin, F., Nicoll, M., Patrick, N., Shellabarger, K., & Snowberger, D. (2009). Self-directed learners change our world: SDL as a force for innovation, discovery, and social change. *International Journal of Self-Directed Learning*, 6(1), 11–30.
- Hammond, Z. (2014). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Corwin Press.

- Ingersoll, R., Merrill, L., & Stuckey, D. (2014). *Seven trends: The transformation of the teaching force*. Consortium for Policy Research in Education. <http://eric.ed.gov/?id=ED566879>
- Hoban, S., & Hoban, G. (2004). Self-esteem, self-efficacy, and self-directed learning: Separate, but interrelated. *International Journal of Self-Directed Learning*, 1(2), 7–25.
- Kenner, B., Carlson, R., Raab, E., & Smith, A. (2020). *Self-directed learning: A landscape analysis and recommendations for transforming educational practice*. Choice Filled Lives Network. <https://static1.squarespace.com/static/5e386db54376d45a8a76e551/t/5ff48bdb392438636260503e/1609862108655/Self+Directed+Learning+-+A+Landscape+Analysis+-+Final.pdf>
- Knowles, M. S. (1970). *The modern practice of adult education: Andragogy versus pedagogy*. Association Press.
- Knowles, M. (1975). *Self-directed learning*. Cambridge University Press.
- Morris, T. (2019). Self-directed learning: A fundamental competence in a rapidly changing world. *International Review of Education*, 65(4), 633–653.
- Muller, K. E. (2008). Self-directed learning and emotional intelligence: Interrelationships between the two constructs, change, and problem solving. *International Journal of Self-Directed Learning*, 5(2), 11–22.
- Plato. (1984). *Meno in the dialogues of Plato volume I*. (R. Allen, Trans.). Yale University Press.
- Ponton, M. K., Carr, P. B., Schuette, C. T., & Confessore, G. J. (2010). Self-efficacy and the Learner Autonomy Profile. *International Journal of Self-Directed Learning*, 7(2), 54–63.
- Ponton, M. K., Carr, P., B., & Wiggers, N. R. (2014). Self-efficacy to do or self-efficacy to learn to do: A study related to perseverance. *International Journal of Self-Directed Learning*, 11(1), 29–40.
- Rogers, C. R. (1969). *Freedom to learn*. Charles Merrill.
- Simon, N. S., & Johnson, S. M. (2015). Teacher turnover in high-poverty schools: What we know and can do. *Teachers College Record*, 117(3), 1–36.
- Thorndike, E. (1917). Reading as reasoning: A study of mistakes in paragraph reading. *Journal of Educational Psychology*, 8(6), 323–333.
- Thorsteinson, K. (2018). Anarchy in the classroom: The efficacy of self-directed learning for critical whiteness pedagogy. *Transformations: The Journal of Inclusive Scholarship and Pedagogy*, 28(1), 38–60.
- Tough, A. M. (1971). *The adults' learning projects: A fresh approach to theory and practice in adult education*. The Ontario Institute for Studies in Education.
- Weber, L. (2010). *Understanding race, class, gender, and sexuality: A conceptual framework* (2nd ed.). Oxford University Press.

Caleb P. Collier (calebpattoncollier@gmail.com) is cofounder of The Forest School, a K-12 self-directed learning environment in Fayetteville, GA, as well as The Institute for Self-Directed Learning, a hub of research and collaboration on learner-driven school

design. He is pursuing a PhD in Teaching and Learning at Georgia State University with a research focus in self-directed learning.