International Journal of Self-Directed Learning®

Volume 20, Number 1
Spring 2023

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

© 2023, 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 20, Number 1, Spring 2023

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

ASSOCIATE EDITOR
Kelly E. McCarthy, *University of South Florida*

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 (Emeritus), France*
Kevin Currie-Knight, *East Carolina University*
Robert C. Donaghy, *Bradley County Schools (Retired)*
David Ginnings, *Harvard University*
Lucy Madsen Guglielmino, *Florida Atlantic University (Emeritus)*
Joan H. Hanor, *California State University San Marcos (Emeritus)*
Waynne 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)*
Anitia Lubbe, *North-West University, South Africa*
Patricia A. Maher, *University of South Florida (Retired)*
Elsa Mentz, *North-West University, South Africa*
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

International Journal of Self-Directed Learning

Volume 20, Number 1, Spring 2023

CONTENTS

LONG TO CONFESSORE TO PONTON: A LINE OF SELF-DIRECTED LEARNING THEORIZING

Michael K. Ponton

The development of theory is often built upon the foundational views of others. Ponton has developed an agentic view of self-directed learning that he believes has built upon the particular views of Confessore who worked with Long; thus, the purpose of this article is to discuss this line of theorizing. (Note: This article was delivered at the 36th International Self-Directed Learning Symposium as the keynote address.)

Keywords: self-directed learning, autonomous learning, agentic learning, human agency, social cognitive theory

> It has been suggested that the starting point for most of the work on SDL [self-directed learning] over the past four decades can be traced to Cyril Houle … and his role as professor to Malcolm Knowles and Allen Tough. … I believe that a large percentage of today's scholarship on SDL can be traced directly to the influence of … Huey Long and Roger Hiemstra. … [T]here are actually several "generations" of scholars whose influences can be traced back through one of these two scholars. … Gary Confessore worked closely with Long at the University of Oklahoma and several of his students … could be thought of as "third-generation" scholars from the "Huey Long line." (Brockett, 2009, pp. 44–45)

As a member of this third generation of scholars from the Huey Long line, the passing of Huey Long in 2022 and Albert Bandura in 2021 coupled with my 25th anniversary of attending the International Self-Directed Learning Symposium (ISDLS) recently prompted my reflection regarding their influence on my scholarship. Of course my interest in self-directed learning (SDL)—more specifically, autonomous and agentic learning—as well as my initial thinking was greatly shaped at a very early stage while I was Gary Confessore's doctoral student via many hours of conversation accompanied by our colleague and friend Paul Carr; we continued this dialogue for years not only at the ISDLS but also at the Autonomous Learning World Caucus that Carr organized annually at the University of Oxford (see Figure 1). As Confessore worked with Long for years, I am sure each influenced the other to some degree and, thus, the direction I pursued based upon Confessore's influence was also influenced by Long consistent with Brockett's third generation characterization of my placement in SDL scholarship.

Figure 1

Carr, Confessore, and Ponton (left-to-right) at the 2015 Autonomous Learning World Caucus

As Bandura (1986) wrote, "what theorists believe people to be influences which determinants and mechanisms of human functioning they explore most thoroughly and which they leave unexamined" (p. 1). What I believe people to be or more specifically self-directed learners to be was greatly shaped initially by Confessore (i.e., the importance of intentionality) and Long (i.e., the importance of the psychological dimension) that led to my study of Bandura's work. The purpose of this article is not to offer (a) a straight line of detailed theorizing that might suggest a total congruence of Long's, Confessore's, and my ideas; (b) a restatement of over two decades of my own theorizing; or (c) a comparison of Long's, Confessore's, or my ideas with others. Instead, the purpose is to offer a line that represents a connection between what I first learned over the years from Confessore and Long and how my own thinking developed particularly informed by Bandura (who I did not know personally).

Confessore and Long as Colleagues at the University of Oklahoma

Long founded and directed the University of Oklahoma's Research Center for Continuing Professional and Higher Education; for four years, Confessore was a W. K. Kellogg postdoctoral fellow under Long and served as the center's associate director (International Adult and Continuing Education Hall of Fame, 2018a, 2018b). Long founded the International Self-Directed Learning Symposium in 1986 (Reimler, n.d.) and its proceedings were first published by this center in 1989 (Long & Associates,

1989). In 1992, Long and Confessore produced two compendiums of a total of 383 SDL-related abstracts from the literature spanning the years 1966 to 1982 (Long & Confessore, 1992) and 1983 to 1991 (Confessore & Long, 1992). Because of this close, multiyear collaborative relationship as well as the high regard that Confessore shared with respect to Long during our many conversations, I am quite sure that Confessore and Long discussed SDL extensively; presumably this influenced Confessore's thinking who, in turn, inarguably influenced my own.

Confessore and Ponton at The George Washington University

From 1996 to 1999, I was a doctoral student at The George Washington University majoring in higher education administration. Confessore had served as the chief academic officer of several universities during an administrative career before pursuing a faculty career; thus, his professional background was quite suited to the major's curriculum.

However, what initially captured my attention was the manner in which Professor Confessore facilitated his courses. My previous formal education was as an undergraduate student in engineering and physics and a graduate student in engineering; both experiences involved predominantly direct instruction from the faculty with very few exceptions. Confessore conducted his courses as opportunities to learn in which students were expected to guide the direction and extent of the learning environment with him typically beginning a course's session by asking, "what do you want to talk about?" Admittedly, in the beginning I thought I must be wasting my money as I believed I was paying a tuition fee to be taught, a feeling shared by my student colleagues who in the beginning of our program would come to class wholly unprepared to introduce or develop a topic for discussion. Suffice to assert that in time and with lots of discussion with Confessore, I began to realize that I was not paying to be taught but rather paying for the opportunity to learn as well as for his guidance in so doing, and my learning was dependent upon my effort to do so (i.e., not his effort but my own); thus, I came to view formal education as about students working diligently to develop in meaningful ways (e.g., developing as autonomous learners!) and the role of the faculty is to create environments that facilitate this process.

As a facilitator of student-directed learning, Confessore desired to reduce to as great an extent as possible the differences in authority between himself as the professor and his students (he insisted upon being called "Gary" by his students) particularly since students should have authority over the direction of their own learning intended to satisfy their personally-valued goals. He also, though, wanted to extend his own learning by making the classroom a collaborative activity in which both faculty and students learn from each other; as he often asserted, "I have plenty of students; I am looking for colleagues." This instilled in me two very important notions: (a) faculty and students should learn together in courses, and (b) students as learners have the opportunity to create new knowledge for themselves, faculty and student colleagues, and those outside of the walls of education. For this particular experience of mine, doctoral students should be scholars who create personally-chosen learning activities

and share resultant knowledge with others in order to fill voids in extant understandings and become academic doctors who continue to live such a life.

When developing potential directions for my dissertation work, I was attracted to Confessore's scholarship related to SDL rather than topics more typically associated with higher education administration. Confessore (1992) wrote the following:

> Self-directed learning manifests itself in people who feel a need to learn something. In order to reduce this need or "drive," we need only set about assessing, however inexpertly, our internal resources (the ability to reason, read, or cypher) and assessing, however naively, the availability of external resources (human and material) that might be useful to our effort. Once that is done, self-directed learning, as with any other human endeavor, becomes a matter of drive, initiative, resourcefulness, and persistence to see ourselves through to some level of learning that is personally satisfying. It doesn't matter whether the learner utilizes informal or formal support structures. It doesn't matter whether the learner works alone or with others who have a common interest. (p. 3)

For our respective dissertations, my closest colleagues and I decided to each take on the task of developing theoretical frameworks and associated instruments for the four factors of drive (cf. Meyer, 2001), initiative (Ponton, 1999), resourcefulness (Carr, 1999), and persistence (Derrick, 2001). Due to too much perceived ambiguity in the field associated with defining SDL, Confessore instead changed his scholarly focus to learner autonomy with these four factors being essential constructs. With little scholarship in the SDL literature to inform our work on these constructs, my colleagues and I ventured into different fields (e.g., psychology and business) for theoretical insights.

Long's Views That Shaped Ponton's Thinking

Long (1989) asserted that SDL can be conceptualized in three different dimensions: sociological (addressing learner isolation), pedagogical (addressing the diagnosis of learning need followed by the creation and evaluation of a learning activity), and psychological (addressing the learner's cognition). Although discussing the sociological dimension, Long introduced "interpersonal power" as part of this dimension and described an "autonomous learner" as one who personally establishes "the parameters and learning activities" and often is a "solitary learner" who can consult with an "expert" to inform the desired learning while remaining "free of any coercion to accept the information" from the expert (p. 2). Long further asserted the following:

> The critical dimension in <u>self-directed</u> learning is not the sociological variable, nor it is [*sic*] the pedagogical factor. The main distinction is the psychological variable, that is the degree to which the learner, or self, maintains active control of the learning process. Kasworm (1988) expresses the idea as follows: "…the learner has consciously accepted the responsibility to make decisions, to be one's own learning change agent, rather than abrogating the responsibility to

> external sources or authorities." … Therefore, psychological self-directedness, or psychological control is the necessary and sufficient cause for self-directed learning. (pp. 3–4)

Long (2009) later contrasted two views of the learner as reflected by two views of human agency:

> (a) the view of the human as an apathetic and biologically determined being whose choices and behaviors are consequences of forces beyond control and (b) the view of the human as a being possessed of free will and the capacity to exert forces for change over the environment and social conditions. (pp. 20–21)

Long offered the following: "self-directed learning is defined here as the process and actions by which individuals assume and discharge personal choice, responsibility, and control of what, when, where, why, and how they develop mastery over selected knowledge and skills" (p. 19). It is clear from this definition that Long adopted the second view of human agency in describing SDL.

Major Directions Derived From Confessore and Long

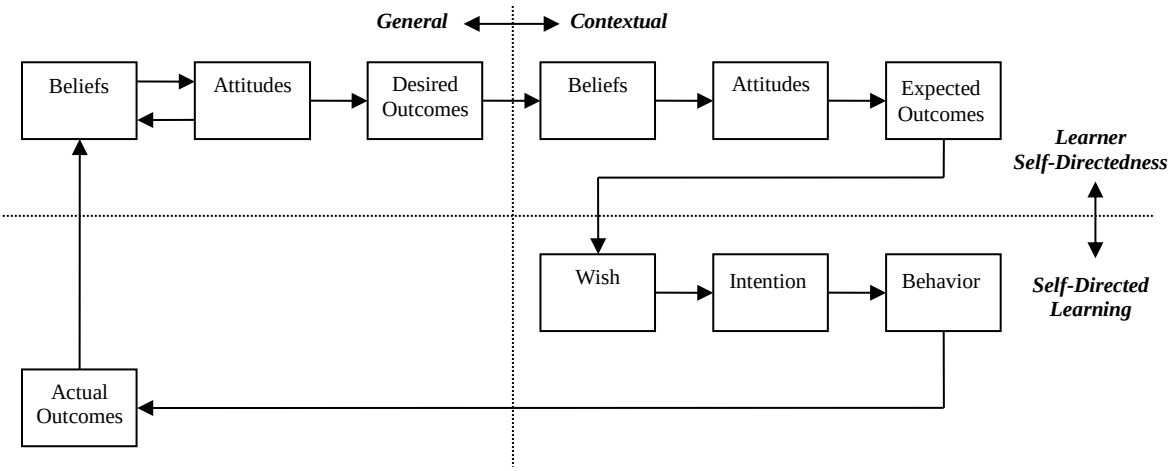
These early experiences from Confessore and Long motivated me to engage in a study of psychology, which was completely absent from my previous educational work. I knew that I needed to develop an understanding of (a) intentionality in light of learner self-directedness versus SDL, (b) a model that differentiates SDL with autonomous learning, and (c) suggestions on how to facilitate the development of learner autonomy. (Of course I also needed to complete my research on personal initiative in adult autonomous learning, but while a personal priority, this work is not a priority to this article's discussion as I consider my dissertation work to be minor when compared to these three major directions.)

Intentionality and a Model of Learner Self-Directedness Versus SDL

My initial foray into the study of intentionality was the work of Fishbein and Ajzen (1975) and their work relating cognition, affection, conation (conation refers to intentionality), and behaviors, which was followed by a study of Bandura's (1997) work on self-efficacy and its relationship to cognitive motivation that included other related theorists. Based upon this study, I proposed an initial model that differentiates learner self-directedness with SDL at the 1998 ISDLS—my first symposium—that was later more fully described and published (see Figure 2; Ponton & Carr, 1999). At this point, I did not have a well-developed position regarding the difference between self-directed and autonomous learning; however, while such a position came 10 years later, this model is still applicable to my later theorizing.

Figure 2

Quasilinear Behavioral Model (Ponton & Carr, 1999)



Guided by Long's (1989) professed importance of the psychological conceptualization to SDL and Confessore's (1992) conative factors of resourcefulness, initiative, and persistence to learner autonomy, I began further study and discussion of the importance of numerous psychological constructs that could differentiate the student in Figure 3 with the student in Figure 4 who seemingly is engaged in the same activity but is actually engaged in a very different activity if viewed through the lens of learner autonomy (Ponton & Carr, 2000). Again due to not having a clear conceptual distinction between self-directed and autonomous learning, I discussed learner autonomy as a collection of various psychological constructs relevant to SDL as I believed that such constructs supported the importance of such factors as proposed by Confessore and Long. As I continued my study of Bandura's (1986) social cognitive theory, I continued this discussion in my writing (e.g., Ponton & Rhea, 2006).

Figure 3

Procrastinating College Student Preparing an Assignment at the Last Minute

Figure 4

College Student Engaged in Learning to Satisfy a Personal Interest

Contrasting SDL With Autonomous Learning

As I continued my study of Bandura's social cognitive theory and, in particular, his work on human agency (Bandura, 1989, 2006), I began to think further about Long's (1989) psychological conceptualization, how Confessore's (1992) notion of learner autonomy falls under this conceptualization, and my model that differentiated cognitive and affective domains with conative and behavioral domains. From this thinking, I developed a model of agentic learning that differentiated SDL from autonomous learning (Ponton, 2009). In contrast to Long's (1998) assertion that "the *psychological conceptualization* is both necessary and sufficient to explain SDL" (p. 10), I proposed that the psychological conceptualization is a necessary but insufficient explanation for SDL as I discussed the roles of both the sociological and pedagogical dimensions via agency theory to develop the following definition of SDL: personal agency exercised through the individual mode to create learning activities. However, I do believe that my

definition does comport with Long's (1989) position that "psychological self-directedness, or psychological control is the necessary and sufficient cause for self-directed learning" (p. 4); that is, the learner's psychological factors exert a causal influence on engaging in SDL. SDL as a phenomenon is a particular conative and behavioral manifestation of learning caused by the learner's cognition and affection; indeed, "psychological control" causes SDL as per Long (1989, p. 4), but the psychological conceptualization does not fully "explain SDL" as per Long (1998, p. 10) as I believe an explanation for SDL must also include sociological and pedagogical factors as per my proposed use of agency theory. This explanation must also include an understanding of how the learner's cognitive and affective characteristics interact with environmental and behavioral factors consistent with Bandura's (1986) triadic reciprocal causation model of emergent interactive agency, which was discussed in Ponton and Carr (2012).

I subsumed SDL under the larger category of autonomous learning—which I also refer to as agentic learning due to the use of Bandura's (2006) agency theory—the latter being learning that "can be manifest in imposed, selected, or created learning environments and exercised via collective, proxy, or individual agency" (Ponton, 2009, p. 70; see Figure 5). I feel this definition of SDL comports well with that offered by the International Society for Self-Directed Learning: "self-directed learning is an intentional learning process that is created and evaluated by the learner" (International Society for Self-Directed Learning, 2021, Self-Directed Learning section, para. 2).

Figure 5

Opportunities for Autonomous Learning (AL) With SDL as One Manifest Type

		LEARNING ENVIRONMENT		
		Created	Selected	Imposed
MODE OF AGENCY	Collective	AL	AL	AL
	Proxy	AL	AL	AL
	Individual	SDL	AL	AL

Facilitating the Development of Learner Autonomy

Bandura (1997) wrote the following:

> Development of capabilities for self-directedness enables individuals not only to continue their intellectual growth beyond their formal education but to advance

> the nature and quality of their life pursuits. Changing realities are placing a premium on the capability for self-directed learning throughout the life span. The rapid pace of technological change and the accelerated growth of knowledge require continual upgrading of competencies if people are to survive and prosper. … Self-development with age partly determines whether the expanded life span is lived self-fulfillingly or apathetically. (p. 227)

The purpose of education is to prepare students for a life outside of education, and the goal of educational theorizing is to inform educational practice. As my ideas progressed, I incorporated them into facilitative strategies used to promote learner autonomy (Ponton & Carr, 2000), self-directedness in children (Ponton et al., 2009), and agentic learning (Ponton, 2021a). In Ponton and Carr (2000), the focus was to offer educators suggestions on developing resourcefulness (Carr, 1999), initiative (Ponton, 1999), and persistence (Derrick, 2001); that is, the conative factors highlighted by Confessore (1992).

In Ponton et al. (2009), the focus was to use the model presented in Ponton (2009) based upon Bandura's (2001, 2006) agency theory to offer parents and educators ways that learner autonomy can be developed in children in progressively greater degrees of agency up to learner self-directedness. In Ponton (2021a), the focus was again to use Ponton's (2009) model of agentic learning to offer educators a suggested teaching strategy that developmentally scaffolds instruction from autonomous learning to SDL; in 2021, I was invited to share these ideas at the 4th International Self-Directed Learning Conference (Ponton, 2021b).

Discussion

The placement of SDL in my model of autonomous learning (see Figure 5) delimits it to the specific phenomenon of personal agency exercised through the individual mode in the creation (which includes evaluation and revision) of learning activities. In my view, self-direction is not merely an exhibition of individual choice in what learning to pursue (i.e., an initial steering) but rather individual control regarding all facets of such learning (i.e., a continual steering). I also view descriptions of learner autonomy and learner self-directedness to be on a continuum; however, I view their manifestations (i.e., autonomous learning and SDL as one type) to be categorical based upon the mode of personal agency used (e.g., individual mode with respect to SDL) and how it is used (e.g., creation of a learning activity with respect to SDL).

If the college student in Figure 4 represents a self-directed learner, the student has identified a personal interest or need, chosen the topic to pursue, chosen the learning materials to use, will evaluate the learning (i.e., whether or not the interest or need is satisfied), and will continue with the current activity or modify it in light of progress toward a satisfying end. The student in either Figures 3 or 4 can show varying degrees of resourcefulness, initiative, and persistence predicated upon self-concepts of agency, motivation, and efficacy and, thus, exhibit learner autonomy and engage in autonomous learning (i.e., even the student in Figure 3 is still agentically engaged in the course and completing the assignment); however, if representing a self-directed learner,

only the student in Figure 4 can individually control all aspects of the learning activity as the student in Figure 3 is still satisfying someone else's assignment. Note, though, that SDL is viewed by me as an episodic phenomenon; thus, the student in Figure 3 can engage in episodes of SDL when pursuing answers via individually-created learning activities to questions spawned while completing the assignment.

As another conceptual clarification for my model, the individual control I ascribe to SDL does not necessitate that learning must occur in isolation "but rather merely emphasizes that the individual self-directed learner is the one who exerts total control over the learning activity" (Ponton & Dondlinger, 2022). After creating a learning activity, a self-directed learner can certainly invite others to engage in the activity; however, in my view, the activity remains self-directed as long as the self-directed learner controls all aspects of the activity (i.e., topic, resources, evaluation, and revision). My application of Long's (1989) sociological dimension to SDL is that the learner is separated from others in matters of control but not necessarily in participation in the self-created learning activity.

In my model of autonomous learning, SDL represents one way to learn intentionally but it is not always the most effective or efficient way. Exerting human agency in learning can be manifest in working with others to varying degrees in order to make use of others' expertise. As Bandura (2006) asserted, "everyday functioning requires an agentic blend" (p. 165) of the collective, proxy, and individual modes through which personal agency is exercised; and Confessore (2016) stated, "*functional learner autonomy* is a range and willingness to participate in selecting and shaping learning experiences in which the learner may function independently or in concert with others" (p. 78).

Advantages of SDL

Long's (1989) sociological, pedagogical, and psychological dimensions provide a useful conceptual framework to discuss several advantageous aspects of SDL. Though I have not published this discussion, I would like to offer these thoughts for consideration. Note that by including this framework for a discussion regarding the advantages of SDL, I further the notion that all three dimensions are necessary to explain SDL.

Sociological Dimension

In the absence of others, SDL becomes the only choice to learn autonomously. Such an absence may be due to physical isolation that necessitates fending for oneself; that is, sometimes another person with an understanding of one's desired learning is not physically accessible to provide learning support, so the learner must create their own learning activity as best they can.

From another perspective, however, sometimes another person with an understanding of one's desired learning does not exist! In this regard, SDL is the only pathway to achieve an understanding of a novel topic. To a very great extent, this describes my own work regarding the three major directions presented in this article:

my development of (a) an understanding of intentionality in light of learner self-directedness versus SDL, (b) a model that differentiates SDL with autonomous learning, and (c) suggestions on how to facilitate the development of learner autonomy. This work was driven by questions associated with these themes for which I did not perceive another person could provide me with personally satisfying answers or advice to craft my own learning journey; thus, I had to engage in SDL. I invited others (i.e., coauthors to published works) to join me on my journey, but it was always my journey to create, shape, and evaluate. Regardless of whether expert others are accessible or exist, in the absence of others, an advantage of SDL is that it allows learning to proceed.

Pedagogical Dimension

Learners often have various preferred ways of learning. Such learning preferences (often referred to as styles) can include learning by watching videos, reading books, reading websites, listening to podcasts, or other learning activities that involve the individual learner. When a learner creates their own learning activity, they are free to create it in a manner that suits individual preferences; that is, the learner is able to customize their learning to match their learning style.

I certainly chose journal articles and books written by specific scholars to read as the foundation for my theorizing, but different individuals interested in my same questions could have chosen different SDL activities (e.g., different resources and scholars) or other autonomous learning activities to pursue (e.g., working with expert others to shape learning activities), which may have led to different conceptual models. As Bandura (1986) stated, "what theorists believe people to be influences which determinants and mechanisms of human functioning they explore most thoroughly and which they leave unexamined" (p. 1). Learning is the result of a learning activity; thus, it should be unsurprising when different activities lead to different conclusions. However, as an aspect of SDL, the individual learner evaluates the learning and whether or not it satisfies individual needs. The advantage of SDL is that the learner is able to create a learning activity that suits their individual preferences and, thus, is better able to facilitate personal learning.

Psychological Dimension

When a learner has a strong sense of efficacy (i.e., perceived ability to be successful) to engage in SDL, this person is able to exert maximum control over their personal development and, thus, the trajectory of their life. As Bandura (1997) stated, the "development of capabilities for self-directedness enables individuals not only to continue their intellectual growth beyond their formal education but to advance the nature and quality of their life pursuits" (p. 227). SDL eliminates the bonds of dependency upon others for learning and empowers the learner—as a human agent—to intentionally decide how to shape their life to satisfy personal aspirations and interests. It is only via SDL that I was able to create the learning activities that led to the work presented in this article; thus, these mastery experiences strengthened my self-efficacy

to engage in additional learning, which I have done in other areas both professionally and personally. An advantage of SDL is, thus, the empowerment it affords to affect one's life trajectory.

Concluding Remarks

For the past 25 years, many of my published works were initially presented at the ISDLS. These opportunities to receive a vetting from colleagues in a nonthreatening environment has always helped me to refine my ideas before engaging in a formal publication process. I will always remain grateful that this symposium and its ethos of sharing and discussing nascent ideas were created by Long and that Confessore introduced me not only to this symposium but also to Long who became a friend and annual confidant for my thoughts (see Figure 6). I could always ask Huey to sit with me on the bench outside our hotel in Cocoa Beach and discuss my ideas regarding SDL, and he never refused me. I am proud to consider myself in the Huey Long line as per Brockett (2009), and I have tried to model Huey's generosity of time and interest with others attending the symposium; hopefully by so doing, I will help continue the Huey Long line or, perhaps, the Long-Confessore-Ponton line.

Figure 6

Mike and Huey at the 2016 ISDLS

References

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.

Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist, 44*(9), 1175–1184. https://doi.org/10.1037/0003-066X.44.9.1175

Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman and Company.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*, 1–26. https://doi.org/10.1146/annurev.psych.52.1.1

Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science, 1*(2), 164–180. https://doi.org/10.1111/j.1745-6916.2006.00011.x

Brockett, R. (2009). Moving forward: An agenda for future research on self-directed learning. In M. G. Derrick & M. K. Ponton (Eds.), *Emerging directions in self-directed learning* (pp. 37–50). Discovery Association Publishing House.

Carr, P. B. (1999). *The measurement of resourcefulness intentions in the adult autonomous learner* (Publication No. 9949341) [Doctoral dissertation, The George Washington University]. ProQuest Dissertations and Theses Global.

Confessore, G. J. (1992). An introduction to the study of self-directed learning. In G. J. Confessore & S. J. Confessore (Eds.), *Guideposts to self-directed learning: Expert commentary on essential concepts* (pp. 1–6). Organization Design and Development.

Confessore, G. J. (2016). The role of learner autonomy in the reconciliation of cognitive dissonance. In M. G. Derrick & M. K. Ponton (Eds.), *Emerging directions in self-directed learning* (pp. 77–96). Discovery Association Publishing House.

Confessore, G. J., & Long, H. B. (1992). *Abstracts of literature in self-directed learning 1983–1991*. Oklahoma Research Center for Continuing Professional and Higher Education of the University of Oklahoma.

Derrick, M. G. (2001). *The measurement of an adult's intention to exhibit persistence in autonomous learning* (Publication No. 3006915) [Doctoral dissertation, The George Washington University]. ProQuest Dissertations and Theses Global.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Addison-Wesley.

International Adult and Continuing Education Hall of Fame. (2018a). *Gary J. Confessore. Hall of fame class of 2016*. https://halloffame.outreach.ou.edu/inductions/hof-2016/gary-confessore

International Adult and Continuing Education Hall of Fame. (2018b). *Huey Long. Hall of fame class of 1996*. https://halloffame.outreach.ou.edu/inductions/hof-1996/long

International Society for Self-Directed Learning. (2021). *About us*. https://www.sdlglobal.com/about-us

Long, H. B. (1989). Self-directed learning: Emerging theory and practice. In H. B. Long & Associates (Eds.), *Self-directed learning: Emerging theory & practice*

(pp. 1–11). Oklahoma Research Center for Continuing Professional and Higher Education of the University of Oklahoma.

Long, H. B. (1998). Theoretical and practical implications of selected paradigms of self-directed learning. In H. B. Long & Associates (Eds.), *Developing paradigms for self-directed learning* (pp. 1–14). Public Managers Center, College of Education, University of Oklahoma.

Long, H. B. (2009). Trends in self-directed learning research paradigms. In M. G. Derrick & M. K. Ponton (Eds.), *Emerging directions in self-directed learning* (pp. 19–36). Discovery Association Publishing House.

Long, H. B., & Associates (Eds.). (1989). *Self-directed learning: Emerging theory & practice*. Oklahoma Research Center for Continuing Professional and Higher Education of the University of Oklahoma.

Long, H. B., & Confessore, G. J. (1992). *Abstracts of literature in self-directed learning 1966–1982*. Oklahoma Research Center for Continuing Professional and Higher Education of the University of Oklahoma.

Meyer, D. T. (2001). *The measurement of intentional behavior as a prerequisite to autonomous learning* (Publication No. 9999882) [Doctoral dissertation, The George Washington University]. ProQuest Dissertations and Theses Global.

Ponton, M. K. (1999). *The measurement of an adult's intention to exhibit personal initiative in autonomous learning* (Publication No. 9949350) [Doctoral dissertation, The George Washington University]. ProQuest Dissertations and Theses Global.

*Ponton, M. K. (2009). An agentic perspective contrasting autonomous learning with self-directed learning. In M. G. Derrick & M. K. Ponton (Eds.), *Emerging directions in self-directed learning* (pp. 65–76). Discovery Association Publishing House.

Ponton, M. K. (2021a). A teaching strategy based upon a model of agentic learning. *Journal of Studies in Education, 11*(1), 1–11. https://doi.org/10.5296/jse.v11i1.18125

Ponton, M. K. (2021b, November 3–5). *An agentic perspective of learning and suggestions for teaching* [Keynote address]. 4th International Self-Directed Learning Conference: A Virtual Conference.

*Ponton, M. K., & Carr, P. B. (1999). *A quasi-linear behavioral model and an application to self-directed learning* (NASA Technical Memorandum 209094). NASA Langley Research Center. https://ntrs.nasa.gov/api/citations/19990018653/downloads/19990018653.pdf

*Ponton, M. K., & Carr, P. B. (2000). Understanding and promoting autonomy in self-directed learning. *Current Research in Social Psychology, 5*(19), 271–284. https://crisp.org.uiowa.edu/sites/crisp.org.uiowa.edu/files/2020-04/5.19.pdf

*Ponton, M. K., & Carr, P. B. (2012). Autonomous learning and triadic reciprocal causation: A theoretical discussion. *International Journal of Self-Directed Learning, 9*(1), 1–10. https://www.sdlglobal.com/journals

Ponton, M. K., & Dondlinger, M. J. (2022). A sociocognitive discussion of learning resource selection in self-directed learning. *International Journal of Learning and Development, 12*(2), 46–56. https://doi.org/10.5296/ijld.v12i2.19924

*Ponton, M. K., & Rhea, N. E. (2006). Autonomous learning from a social cognitive perspective. *New Horizons in Adult Education & Human Resource Development, 20*(2), 38–49. https://doi.org/10.1002/nha3.10250

*Ponton, M. K., Schuette, C. S., & Confessore, G. J. (2009). An agentic perspective of self-directed learning as applied to children. *International Journal of Self-Directed Learning, 6*(1), 46–58. https://www.sdlglobal.com/journals

Reimler, C. (n.d.). *Huey B. Long*. https://6c02e432-3b93-4c90-8218-8b8267d6b37b.filesusr.com/ugd/dfdeaf_c35ad8900ef748fc83e66b0e9f340f24.pdf

*Also available in Ponton, M. K., & Carr, P. B. (Eds.). (2016). *Autonomous and self-directed learning: Agentic perspectives*. Watertree Press.

Michael K. Ponton (Michael.Ponton@tamuc.edu) is a professor in the Department of Higher Education & Learning Technology at Texas A&M University-Commerce. He has published extensively in the field of self-directed learning where his interests include human agency, autonomous learning, and self-efficacy and currently serves as the editor for the *International Journal of Self-Directed Learning* and *Literature Reviews in Education and Human Services*. In 2015, Prof. Ponton received the Malcolm Knowles Memorial Self-Directed Learning Award.

AN APPLICATION OF SELF-DIRECTED LEARNING IN HOME AND COMMUNITY SERVICES FOR OLDER ADULTS

Amy E. Rock

This case study describes the rationale, development, and functioning of the Elders Learning Community, a nonprofit home and community service program that served older adults in Richmond, California. The program applied a blend of self-directed learning, learner-centered and significant learning approaches, and features of a member-driven Lifelong Learning Institute to address barriers to social and cognitive engagement and personal growth experienced by many older adults. The program implemented cognitive health recommendations and changing views of aging and developmental potential supported by neuroscientific and aging research and related ideas found in philosophical and educational literature. Practical approaches are needed to promote cognitive health and develop potential with aging. Participants' successes in pursuing learning and creative interests and accompanying opportunities for social engagement, sense of control and self-efficacy, and personal growth suggest the program model may hold promise for these purposes in home and community services and merits additional trial and study.

Keywords: self-directed learning, lifelong learning, cognitive health, potential with aging, home and community services for older adults

The finding by neuroscientists that the brain is dynamic and reorganizes and grows in response to stimulation and learning throughout the lifespan, called neural plasticity, has contributed to changing views of aging, development, and human potential and to the possibility that the brain could be shaped toward health (Cohen, 2005; Nussbaum, 2011). Many policy experts have recommended lifelong learning as one strategy to reduce the risk of cognitive decline and to promote brain health (Baumgart et al., 2015; Global Council on Brain Health, 2017) as well as developmental potential (Cohen, 2004, 2005). Meanwhile, self-directed learning (SDL) has been advocated as an essential ability that can provide the basis for lifelong learning and enable individuals to advance personal growth and development and increase life satisfaction (Guglielmino, 2008; Knowles, 1975).

Even as recommendations emerge to promote brain health and reduce the risk of cognitive decline and dementia, incidence is expected to increase and is linked to a high cost of care (Alzheimer's Association & Centers for Disease Control and Prevention,

2018). This case study describes the Elders Learning Community (ELC), a nonprofit home and community service program for older adults in Richmond, California. In operation from 2005 until July 2017, the ELC used SDL and related approaches in its design to promote cognitive and social engagement, learning, and personal growth and to reduce expressions of loneliness and depression and the risks and costs of functional decline.

The ELC put into practice recommendations and perspectives on cognitive health, aging, development, and human potential publicized by the American Society on Aging (ASA) and the ASA-MetLife MindAlert program. These included Nussbaum's (2001a, 2001b) learning vaccine, specific conclusions of the MacArthur Studies of Successful Aging (Rowe & Kahn, 1998) on causes and prevention of cognitive decline, Cohen's (2005, 2006) potential view of aging, and the research and theoretical background of the Creativity and Aging Study (Cohen, 2006; Cohen et al., 2006) and the resulting program recommendations for older adults (Cohen, 2005). Notions of potential for lifelong learning and development can be found in philosophical (Plato, ca. 380 B.C.E./1947), educational (Dewey, 1916/1966), and adult education literature (Knowles, 1975; Lindeman, 1926/1989), which provided inspiration and supporting background for the ELC. The ELC applied recommendations and perspectives from these sources in a program that combined person- or learner-centered and significant learning approaches (Rogers & Freiberg, 1994), SDL (Knowles, 1975), and features of a member-driven Lifelong Learning Institute (ElderLearning Institute at the University of Minnesota, 1995).

This case study describes the period from 2001 through 2012 when I worked to develop the ELC and was its director. It includes a brief review of key findings in neuroscience related to neural plasticity, brain health, and aging (Cohen, 2005; Nussbaum, 2011) and a description of the support service problems addressed by the ELC. A summary follows of the perspectives on cognitive health and aging mentioned above and the process of their application by the ELC using a blend of learning approaches. The article moves next to program highlights, general outcomes, and a program vignette. It concludes with a discussion of the ELC and SDL and the promotion of cognitive health, lifelong learning, and potential with aging in home and community services for older adults.

Neuroscientific Research and Opportunities for Program Innovation

Building on studies showing that environmental enrichment led to improved learning in rats, research led by Diamond found that rats in more stimulating and enriched environments had a thicker cerebral cortex and more dendritic branching of neurons (Diamond & Hopson, 1998). These findings held regardless of age (Diamond, 1993; Diamond & Scheibel, 2001). Evidence of environment-related changes in the brain, or plasticity, was later found in adult humans (Maguire et al., 2000). Environmental stimulation in the form of higher levels of formal education and cognitively challenging occupations was associated with a lower risk or delayed onset of Alzheimer's disease, hypothesized to be linked to cognitive reserve (Stern et al., 1994; Whalley et al., 2004). More recent research (Fitfield, 2019; Wilson et al., 2019) suggests that learning and

challenge may need to be ongoing and in later life to impact reserve, not solely in early life. In 1998, evidence of neurogenesis—the generation of new neurons—was found in adult humans (Eriksson et al., 1998). Such evidence challenged traditional thinking that the human brain is a rigid system with a finite period of early life development, fixed capacity, and disease inevitable with advanced age and helped open the possibility that the brain could be shaped toward health and development across the lifespan (Cohen, 2005; Nussbaum, 2010).

Recognizing the implications of neural plasticity for application, the ASA, in conversation with Diamond, began the MindAlert program in 2001 to bring lectures to members on neuroscience, cognitive health, and related subjects and to encourage the application of new ideas in innovative programming for older adults (Ceridwyn, 2011). Diamond and Scheibel (2001) gave the first MindAlert lecture, translating their animal studies to the potential for human growth and learning. The reception was noteworthy: "Audience members later recounted being freed from long-held beliefs … that aging dooms elders to reduced brain capacity" (Ceridwyn, 2011, p. 111).

The Support Service Problems and an Emerging Solution

Development of the ELC began during this time of conceptual change in the context of my experience as the district care manager at a nonprofit agency serving older adults. Care management provided a comprehensive, in-home assessment of the client's strengths and needs. In partnership with the client and support network, if available, care management next involved the development, coordination, and advocacy of a care plan of services and resources to promote aging in place, improve quality of life, and help prevent unnecessary institutionalization.

The care management program, and later the ELC, were located in and focused on Richmond, California and the surrounding cities of San Pablo, El Sobrante, and El Cerrito in West Contra Costa County in the San Francisco Bay Area. Communities in the service area rank among the highest regionally and countywide in poverty rates (Metropolitan Transportation Commission, 2019). Living with chronic medical or functional challenges, individuals served by the program and later the ELC usually lived alone in the community, and over 75% were living on a low or very low income in terms of Medi-Cal eligibility or Community Development Block Grant guidelines. All needed supports to stay in their homes, a criterion for care management. Over half of clients were African American older adults, followed by European Americans and smaller numbers of Latino, Asian, and Native American older adults. Their ages ranged from 65 to 110 years with a majority between 75 and 85 years of age and approximately 20% over the age of 85 years. Levels of formal education were not specifically assessed here or in the ELC; however, a range of formal educational backgrounds emerged during conversations with clients, from those who had completed some schooling to those who had graduated from high school to those with a vocational, college, or graduate degree.

Client circumstances often included social isolation and a lack of cognitive stimulation. The majority of clients spent most of the day alone, watching or listening to television. Outings were typically for medical appointments. Clients often expressed

feeling lonely, left behind, without purpose, depressed, and sometimes without a reason to live. Multifaceted care management (Gavin, 2021) efforts to link them to resources to address these concerns, including medical and counseling referrals, made clear that in the domain of social engagement and education resources, existing options were not in practice and for a variety of recurrent reasons accessible, appropriate, or adequate for many older adults.

Direct observations of social and cognitive isolation were later supported by a local survey of older adults (Contra Costa for Every Generation, 2005). It found that nearly 25% of adults over 65 countywide did not socialize with friends or neighbors over the course of a week. Fifty-one percent of older adults in West Contra Costa did not leave home each day. The potential for social and cognitive isolation rose with age such that 77% of adults over the age of 85 did not leave home each day. Generally, isolation and loneliness are prevalent among older adults and pose significant health and functional risks (Holt-Lunstad, 2017).

While frequently encountering and contemplating troubling social and cognitive isolation among clients, the memorable description of a program of lifelong education in the Republic of Plato (ca. 380 B.C.E./1945) came to mind. Intellectual and ethical abilities were portrayed as requiring many decades to develop and not being fully developed until the age of 50. Plato described these abilities as continuing at their highest level to the end of life, accompanied by social and political activity and study. This view contrasted with contemporary "widely considered popular wisdom or 'common sense'" discussed by Cohen (2000, p. 105) that creative and intellectual achievement peaks in early adulthood and then declines (pp. 105−111). Common sense paralleled traditional thinking about brain trajectory described above (Nussbaum, 2010, 2011), and both seemed to coincide with my observations of the low priority of the social and cognitive needs of older adults.

Enter the Learning Vaccine and MacArthur Studies of Successful Aging

Publication by the ASA of two articles on "The Learning Vaccine" (Nussbaum, 2001a, 2001b) and the MindAlert (MetLife Foundation & American Society on Aging, 2001) challenge to develop new programming supporting cognitive health were decisive in initiating the ELC. Reminiscent of Plato's portrayal of lifelong education and social participation, Nussbaum framed lifelong learning and social integration as a learning vaccine promoting brain health: "The brain requires enrichment at any age. Approached from a health and wellness perspective, increased social integration of elders is indicated. … Learning is a significant life practice for overall health and brain wellness" (Nussbaum, 2001a, p. 17).

To guide the development of new programming, MindAlert (ASA, 2002) directed attention to Nussbaum's perspective and to the conclusions of the MacArthur Studies of Successful Aging (Rowe & Kahn, 1998, pp. 134–139) related to maintenance of cognitive functioning. The conclusions included the following: (a) environmental influences that promote self-direction, use of initiative, and independent judgment tend to boost intellectual flexibility; complex environments provide a variety of stimuli, choices, and opportunities that exercise and sustain mental function; (b) a sense of self-

efficacy leads to improved performance in many kinds of cognitive functioning and can be developed through gradual success experiences; (c) social support has a positive effect on mental performance in older adults.

During this period, opportunities for intellectual challenge and social connection were becoming more available for older adults at the growing number of university-based Lifelong Learning Institutes (Brady et al., 2003). Care management experience, however, made clear that choice, complex environments, social integration, and learning as a significant life practice were neither accessible nor seriously encouraged for all older adults.

Discussion and Collaboration

Discussion and collaboration began with other providers regarding the practical implications of the neuroscience research for local support services. The primary collaborator was Linda Schaefer, Program Director of Contra Costa Senior Peer Counseling (SPC), who became the clinical consultant for the ELC. SPC deploys volunteers as peer counselors, trained and supervised by mental health professionals (Contra Costa Health Services, n.d.). Peer counselors meet with older adults usually in-home, weekly, for an hour. SPC included program components later adapted for use in the ELC.

A conclusion of these discussions was that older adults and their support needs were often viewed from the perspective that development and learning were neither essential nor possible. Butler (1975/2002), founding director of the National Institute on Aging, had described this view years earlier as one of the myths and stereotypes about the old: "An older person … is bound to himself [*sic*] and to his past and can no longer change and grow. He can learn neither well nor swiftly and, even if he could, he would not wish to" (pp. 6–7). Butler's (1975/2002) analysis apparently had not, over the years, easily diffused throughout support services already impacted by chronic underfunding. The audience reaction to the Diamond and Scheibel (2001) lecture indicated the continuing burden of these beliefs. Further, growing research indicated that internalized negative self-perceptions of aging were a factor in reduced function and longevity (Levy, 1996; Levy et al., 2002). New programming was needed based on new research and perspectives and the challenge posed by MindAlert.

The Potential View of Aging and the Creativity and Aging Study

Cohen's (2005, 2006) potential view of aging also challenged long held beliefs and greatly influenced the development and goals of the ELC. Cohen, a later National Institute on Aging director, presented this view within a history of how aging has been understood in the United States. Before the mid-1970s, aging was equated with a series of decremental changes. Dementing disorders termed senility were seen as the natural course of growing old. Significant decline was inevitable with advancing years. Reviewing early developmental theorists' views on later life, Cohen (2005) highlighted a passage by Freud written in 1907: "About the age of fifty, the elasticity of the mental processes on which treatment depends is, as a rule, lacking. Old people are no longer educable" (p. xvi). Aging was generally neglected as worthy of scientific study.

An early challenge to decline views of aging came from a National Institute of Mental Health study of healthy, community-resident older adults conducted from 1955 to 1966 (Butler, 1975/2002, 2005). The study concluded that much of what was attributed to aging, including senility, was a function of disease, social adversity, or individual personality traits. Butler, who was involved in the study, coined the term "ageism" in 1968 and defined it as "a process of systematic stereotyping of and discrimination against people because they are old" (Butler, 1975/2002, p. 12).

By 1975, a conceptual change was underway, an outcome of cumulative research on aging (Cohen, 2005). Decrements began to be hypothesized as "age-associated problems that were modifiable disorders" (Cohen, 2006, p. 7) rather than normal or inevitable. This conceptual change brought increased attention and funding for scientific research on aging. Cohen (2006) called this idea the problem focus or view of aging that culminated in the notion of successful aging or aging with "a minimum number of 'usual aging' problems and a minimum degree of decline" (pp. 7–8).

Cohen (2005, 2006) identified and advocated for the next major change in the understanding of aging, which began in the late 1990s, referencing developing findings in neuroscientific and aging research. Cohen cited, for example, the potential for lifelong learning and growing brain complexity involved in neural plasticity, the decreased reactive processing of negative information and emotions with age, a positive interpretation of hemispheric asymmetry reduction in older adults (the HAROLD Model), and the cognitive styles characteristic of postformal thinking. Cohen held that a confluence of cumulative learning, experience, emotional and psychological development, and neurobiological factors made later life a period of distinctive growth, integration, creativity, and potential. This view, focusing on the potential of aging, involved not just the minimization of problems and decline but the cultivation of growth and recognition that potential continued "independent of and, at times, as a consequence of aging" (Cohen et al., 2006, p. 727). Cohen (2006) advised that to be most effective, health promotion and disease prevention efforts should go beyond targeting problems associated with aging to engage and develop potential with aging. Developing a real-world method to implement this recommendation in home and community services became a goal of the ELC.

Cohen (2000) held that creativity was a significant aspect of potential to be tapped in later life. He led the Creativity and Aging Study (Cohen 2006; Cohen et al., 2006), the first that included a control group to explore the social and physical and mental health impacts of professionally conducted creative and cultural activities for adults aged 65 and older. The study was designed to draw on mechanisms shown to influence positive health outcomes in older adults; specifically, sense of control and mastery and meaningful social engagement, and on the benefits of sustained, repeated involvement in a health promoting activity. Participants who were engaged in community based arts and cultural programs had better physical, mental, and emotional health and wellbeing than those in the control group, thus reducing the risk factors driving the need for long term care (Cohen, 2005).

As theoretical background, Cohen et al. (2006) highlighted research that found that older adults who engaged in activities in which they experienced a sense of control

had positive health outcomes, and this influence was believed to increase with age (Rodin, 1986, 1989). These studies specified how:

> different aspects of control—for example, either perceived or actual control, the sense of self-efficacy or of competence, the controllability or predictability of the environment—relate primarily to physical or psychological health but also to a variety of other outcomes. … These data show that opportunities for control can be reinstated through small interventions. … Many specific examples illustrate how aspects of control can be manipulated in particular situations by varying older people's perceived freedom of choice. (Rodin, 1989, pp. 30, 42)

Many forms of art and cultural programming can provide significant opportunities for the experience of sense of control and meaningful social engagement, combining both mechanisms in one activity (Cohen 2005, 2006). The third mechanism cited was repeated exposure to or sustained involvement in a health promoting activity; participatory arts and cultural programs were presumed to be inherently engaging and likely to be sustained. Thus, creative endeavors combined all three factors. Notably, being "'busy'. … [or] simply being involved in many transient activities with limited potential for fostering mastery or building relationships did not translate into improvement in health" (Cohen, 2005, p. 181). Cohen (2005) recommended that opportunities to experience sense of control and mastery, social engagement, and sustained involvement be part of any health promotion program for older adults. All three factors and the related MacArthur Studies (Rowe & Kahn, 1998) conclusions were focuses of the ELC design. As will be described, participants in the ELC were facilitated to pursue any chosen interest and were not restricted to creative endeavors.

Precedents in Educational Theory

In contrast to decline views of aging described by Cohen, Nussbaum, and Butler, discussions in educational and adult education literature aligned with the lifelong potential for learning and growth supported by neuroscientific and aging research and provided supporting background for the ELC. Dewey's (1916/1966) early 20th century view was as follows:

> Since life means growth, a living creature lives as truly and positively at one stage as at another, with the same intrinsic fullness and the same absolute claims. Hence education means the enterprise of supplying the conditions which insure growth, or adequacy of life, irrespective of age. (p. 51)

Lindeman (1926/1989) linked education for youth with patterns of later life mental functioning: "Education conceived as preparation for life … [teaches youth] to think of learning as a process which ends when real life begins. ... Indeed, become elderly-minded before their time" (p. 3). Lindeman's answer was adult education: "Consequently, all static concepts of education which relegate the learning process to

the period of youth are abandoned. The whole of life is learning, therefore education can have no endings" (pp. 4–5).

Gardner (as cited in Knowles, 1975) described the self-renewing individual who pursues their own education as someone who explores personal potentialities not by chance but "systematically, or at least avidly, to the end of his days" (p. 69). Knowles wrote of SDL, "it is no longer appropriate to equate education with youth. … Education—or even better, learning—must now be defined as a lifelong process" (p. 16). An affirmation of learning and growth as lifelong can be seen in these descriptions of education, and SDL is presented as a means of lifelong personal development and learning.

Program Development, Approaches, and Components

The following vignette portrays the development of the ELC program components in context and the implementation of the recommendations on cognitive health and potential with aging using a blend of learning approaches.

Mr. Smith left high school and moved from Texas to the Bay Area, settling in Richmond. He worked for decades as a machinist in a food processing plant. His wife passed away years ago, and his daughter lived out of state. In his mid-80s, Mr. Smith was referred to care management with multiple medical and support challenges. He lived alone on a low income. A homecare provider, his primary social contact, came for a few hours 5 days a week, but Mr. Smith spent most of his day alone watching television. I learned in conversation with Mr. Smith that he liked art as a child and occasionally pursued various art projects as an adult. Though he had already tried and quit adult day health care and the senior center, he said that with extra support he would be interested in trying the painting class at the senior center. Mr. Smith's care provider was enlisted to help prepare for an extra weekly outing. Other supports included preparations days before class, encouragement, and praise for his efforts. Mr. Smith traveled by paratransit a few times to the class. He said he enjoyed the class and liked the teacher. Mr. Smith was provided with art supplies, but he did not use them between classes. After a few months, he decided to stop attending and continued to spend most of his day alone watching television. Yet, Mr. Smith maintained that he was interested in painting and art.

This paradox led me to consider other education approaches, such as learning contracts and person- or learner-centered methods described by Rogers and Freiburg (1994) as a possible solution. These methods offered an individualized approach that might engage Mr. Smith in his art interest. In discussion with Linda Schaefer of SPC and Richmond Art Center staff, a plan came together to try an adaptation of these approaches.

A program model sometimes used in older adult services involves a volunteer providing a regular, in-home service, such as in-home counseling provided by SPC. This model was modified to the volunteer providing an in-home, learner-centered education experience. The Richmond Art Center provided an interested artist intern to meet with Mr. Smith for about an hour in his home on a schedule they negotiated, offering Mr. Smith choice, flexibility, and control in his foray into art. The intern was

asked not to be a teacher, or to instruct, but to act as a facilitator of learning (Roger & Freiburg, 1994). Supporting self-direction and a sense of efficacy and control, Mr. Smith would be provided ongoing opportunities for freedom of choice, use of initiative and independent judgment, and gradual success experiences that were centered in his interests, choices, and abilities. Rogers and Freiburg described the learner-centered procedure of a facilitator of learning:

> What do you want to learn? What things puzzle you? What are you curious about? … [When you have the answers, further questions follow.] Now how can I help … find the resources—the people, the experiences, the learning facilities, the books, the knowledge in myself—that will help [learners] … learn in ways that will provide answers to the things that concern them, the things they are eager to learn? [And then later,] How can I help them evaluate their own progress and set future learning goals based on this self-evaluation? (p. 170)

The volunteer assisted as Mr. Smith chose an area for a table easel, pencils, paints, and paper, provided by the fledgling program, adding complexity to his home environment. The volunteer visited regularly over several months. She brought a selection of art books, which they browsed together and left with Mr. Smith to peruse later if he wished. They painted together, following his interests and pace, with the volunteer sharing techniques and media as desired. Mr. Smith and the volunteer confirmed that they enjoyed learning from and with each other. Opportunities for experience of choice, sense of control, and meaningful social engagement were combined in their meetings.

Mr. Smith created a series of drawings and watercolors with improving skill, indicating success experiences and potentially enhanced sense of self-efficacy, control, and mastery. He chose favorites for the volunteer to frame and hang in his home. He browsed art books and began to draw and paint when alone as an alternative to television. More than transient meetings or activities that kept Mr. Smith busy for their duration, a person- or learner-centered approach helped to facilitate a self-sustained pursuit.

Trials with other individuals with varied interests were similarly promising, and the program was built around a volunteer facilitating each participant's pursuit of a chosen interest or interests. Interests were augmented by discussion of life experiences and reflections, adding depth and areas of exchange with volunteers. With participants' interests leading the way, volunteer facilitators of learning were called learning partners.

Volunteers were knowledgeable and skilled in many areas; however, they were not recruited to teach. The emphasis instead was on facilitating participants' interests and willingness to learn alongside them. Volunteers' past formal educational experiences were typically not learner-centered, and it was important to familiarize them with the approach central to the program. Materials created for the volunteer orientation highlighted a shift away from teacher-centered approaches. Along with Rogers and Freiburg's (1994) procedure for the facilitator of learning, Knowles' (1975) definition

of SDL was used as a working methodology in assisting individuals to develop projects of interest and choice:

> A process in which individuals take the initiative, with or without the help from others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluation of learning outcomes. (p. 18)

The program focused on participants who lived in the community with complex challenges described above, including isolation, a lack of cognitive stimulation, and expressions of loneliness, depression, and a lack of purpose. Rogers and Freiberg's significant learning and humanistic perspective encompassed "the whole person, both in feeling and cognitive aspects" (p. 36), providing an approach that could include such challenges while also including growth and phases of SDL:

> One element is the quality of personal involvement: The whole person, both in feeling and in cognitive aspects, is part of the learning event. Self-initiated involvement is another element. Even when the impetus or stimulus comes from the outside, the sense of discovery, of reaching out, of grasping and comprehending comes from within. Another element is pervasiveness. It makes a difference in the behavior, the attitudes, perhaps even the personality of the learner. Yet another element relates to the learner's evaluation of the event. She [*sic*] knows whether it is meeting her need, whether it leads toward what she wants to know. … The locus of evaluation we might say, resides in the learner. (p. 36)

Significant learning was also used to help implement the holistic outlook of Cohen's potential view of aging, which envisioned later life as a period of growth, creativity, and potential. While framing learning as self-directed, significant learning embraced intellectual and creative interests as well as emotional and psychological dimensions and the exploration and potential for integration of life experience and personal meaning that occurred in the program. To help volunteers facilitate noncognitive aspects of significant learning, discussion of psychosocial context was included in their orientation, matching with participants, ongoing consultations with staff, and in monthly volunteer meetings. If desired, a participant was supported by their volunteer as they engaged in self-exploration or life reflection before identifying interests and projects. Along with pursuit of a chosen interest or project, ongoing meetings with volunteers frequently included discussion of related life experiences and consideration of meaning that provided opportunities for cognitive and emotional integration, reflection, and personal growth.

At this point in the program's development, participants were meeting with volunteers in their homes on negotiated schedules and pursuing interests of their choice. Social and cognitive stimulation had increased, and expressions of purposelessness had declined. To further enhance social engagement, it remained to provide participants

with opportunities for wider social connections and to get out of the house more frequently for nonmedical reasons. The next step was to bring interested participants together in a group.

The first trial group met twice monthly. More frequent attendance at programs in the community had been tried but had not worked for many participants. The format was a participant-directed group in which members chose an interest to explore together that could and did evolve over time. A volunteer, a counselor from SPC, gathered desired resources and facilitated 2-hour meetings. The group continued for 2 years with a core of four to six participants exploring politics, Richmond history, poetry, jazz, art, and art history. Group members continued with their individual projects in-home with learning partners and had the opportunity to share them with the group.

A second group soon started. **This** eclectic monthly group provided an opportunity for participants to share and discuss individual interests and projects. Their learning partners were also invited to attend. The group continued for 8 years with a varying core of four to eight participants and learning partners. Many participants, volunteers, as well as the facilitator had an interest in writing, and the group also featured reading of personal writings by participants and volunteers and the ensuing discussion.

The Influence of Lifelong Learning Institutes

As the program expanded to include groups, the movement of college and university sponsored Lifelong Learning Institutes was also growing (Brady et al, 2003). Specifically, the ElderLearning Institute at the University of Minnesota, now an Osher Lifelong Learning Institute, provided a volunteer, member-driven model of participant-directed curriculum and peer teaching. The example of this institute's statement of purpose, "a self-directed, participatory organization … that reflected the interests of its members" (ElderLearning Institute at the University of Minnesota, 1995), led to the insight that the learning groups described above could be seen as small-scale, self-directed, participatory organizations that reflected the interests of participants and volunteers. This insight broadened the model and concept of the program to include the development of an interconnected community of self-directed learners.

The ElderLearning Institute model suggested that learning partners could be thought of as part of the participatory organization of learners and provided with opportunities to connect with each other. This was accomplished by adapting the SPC program component in which peer counselors are able to form collegial relationships with one another in trainings and supervision meetings with staff (Contra Costa Health Services, n.d.). The new program would provide learning partners with analogous opportunities during the initial orientation and monthly volunteer meetings facilitated by the clinical consultant and ELC staff. The meetings included discussion of topics such as approaches and resources related to projects, participant learning experiences, psychosocial contexts and challenges, ways to support personal growth, and the monthly, one-page "Perspective" that contained information on ELC program background and approaches.

The relationships between participants and learning partners, the social connections that developed in small groups between participants as well as with volunteers—all

animated by learning interests—and finally the links between learning partners completed the community of learners. While language evolves and a term other than "elders" (Sweetland et al., 2017, p. 11) would now be chosen, the new model was named "The Elders Learning Community."

Program Summary and Highlights

The ELC emerged from development in 2005, focusing on individuals experiencing barriers to social and cognitive engagement and personal growth opportunities. Using a blend of learning approaches to implement the cognitive health recommendations and aging perspectives described, individuals were facilitated by volunteers to pursue interests and learning projects of choice. While pursuing an interest, participants were supported by volunteers to evaluate learning choices, resources, and goals; they could continue, refine their focus, or change learning directions. Schedules were chosen by participants and volunteers. Participants could choose to create a group related to their interests or attend groups developed by others with typically three or four ongoing groups. Materials, transportation, and coordination were provided by the ELC. Volunteers were of varying ages over 21, providing an "age diversified" (Carstensen & Stern, 2021, 7:19) dimension. Participants were encouraged to become learning partners, which they sometimes did. There was a quarterly ELC newsletter featuring participants, volunteers, and their projects.

By facilitating participants to determine, implement, and evaluate interests and projects, the ELC created an environment of choice and success experiences intended to enhance sense of control, mastery, and efficacy. The ELC might be seen in terms of Brockett and Hiemstra's (1991) personal responsibility orientation or person-process-context (Hiemstra & Brockett, 2012) models of SDL as providing the process orientation to enhance factors internal to participants (the personal orientation). The program aimed to facilitate learning as a significant life practice and to develop sustained involvement arising from interests, skills, and potential—not simply to provide transient activities or to keep participants busy—whether in meetings with volunteers or participant groups. Person- or learner-centered and SDL approaches were used to identify and facilitate interests and skills that could be pursued independently over time and when home alone thereby adding choice, an ongoing alternative to television, and complexity to the home environment.

Providing opportunities for social engagement was a focus of the ELC. Volunteer facilitation and discussion and peer-to-peer sharing of interests fostered meaningful, dynamic relationships. As an adaptation of a member-driven Lifelong Learning Institute, the interests of participants both led the ELC and animated community building. In groups, participants shared self-directed pursuits, and volunteers also shared their interests and vocations. This sharing added a modality of cognitive complexity and novelty through regular exposure to new subjects and perspectives in a setting of peer learning engagement. Participants observed peers pursuing learning and creative interests. Described by Bandura (1997), seeing others "similar to oneself perform successfully typically raises efficacy beliefs that they themselves possess the capabilities to master comparable activities" (p. 87). This contact consistently led participants to consider and approach new areas and topics.

The implementation of Cohen's (2006) recommendation to engage and develop potential with aging called for a methodology with an expansive view of the person. Rogers and Freiberg's (1994) significant learning, with its inclusion of learning and the growth of the whole person, and SDL, with its focus on individuals directing their own learning paths and lifelong learning, provided mutually supporting methodologies to implement the potential view of aging in the real world of home and community services for older adults.

The ELC was developed in collaboration with SPC, a public mental health program serving older adults in the community. The relationship was relevant to several shared program concerns, such as loneliness, social isolation, and community integration as well as loss and client expressions of depression and purposelessness. The mutually enhancing program components included facilitation of chosen, self-sustained interests, pursued independently and with others. This ELC element made possible an increased frequency of pleasant events, which has been linked to decreased depression for older adults (Moss & Scogin, 2008). The collaboration also brought SPC psychological and clinical expertise to significant learning; that is, learning in both feeling and cognitive aspects and to the facilitation of potential with aging. The ELC's potential to support mental health led to funding from 2009 to July 2017 by the California Mental Health Services Act Prevention and Early Intervention program in collaboration with Contra Costa Mental Health and Lifelong Medical Care, a federally qualified community health center based in Berkeley, California.

The ELC could not accept individuals with moderate to severe dementia as new participants. However, when feasible, participants whose cognitive functioning declined over time continued to meet with volunteers and attend groups. With extra support, interest and forward motion in projects as well as sharing and relationships often continued.

Accessibility and strategies for accommodation were an ongoing and important aspect of facilitation for most participants. Several participants wished to learn to use a computer and, when feasible, were supported with various strategies to do so. While the opportunity for in-person engagement is perhaps optimal, with much easier access to technology now available, a videoconferencing component could be integrated into the in-person ELC model to enhance accessibility for some.

The ELC served 25–30 participants annually and over 90 unique participants from its opening in 2005 through 2012. Many participants were in the ELC for several years (some for 5 years or more). Over 90% of participants engaged in at least one interest or learning project for multiple months, and approximately 75% were continuously engaged over the course of the year in an interest, project, or series of projects, with most in groups learning about and from the interests of others. Increases in sense of self-efficacy, control, mastery, and purpose were assumed to accompany the sustained involvement indicated by a chosen, multiple-month pursuit. Annual surveys showed improvements in social connections, morale, and high program satisfaction for nearly all participants.

The Elders Learning Community in Motion

Over the course of the program, participants pursued a wide range of interests, including Richmond, African American, Native American, Indonesian, Polish, and Jewish history; astronomy, archaeology, autobiography, poetry and fiction writing; journaling, biography, and the history of jazz and opera; arts and crafts in many media; literature, literacy, politics, Spanish, foreign affairs, communication, computer, and more. One participant helped create an SPC volunteer training on Latino culture. The vignette below focuses on two participants, illustrating the moving, adapting, and interconnected parts of the ELC.

After graduating from high school, Mrs. Harris married, raised her children, and worked for over 25 years at a local factory. She had a lifelong interest in various arts and also liked to read, but she had not pursued these interests in recent years. In her mid-70s, Mrs. Harris had been unable to access or was uninterested in the available social and education options. After her doctor recommended that she get out of the house more often, she was invited to the ELC and Richmond Art Center studio day before introduction to a volunteer. Most of the participants in the studio day were pursuing art at-home with a volunteer while the others pursued interests that were not art centered with volunteers. The group of five to eight met in the Richmond Art Center painting studio, **f**acilitated by an artist learning partner and staff. Participants worked on and shared creative projects and toured the galleries. Mrs. Harris attended, viewed exhibits, made art, and socialized.

Mrs. Harris was also invited to attend the recently formed literary group composed of participants who had chosen to pursue reading, writing, and discussion. The group met monthly at the ELC office, facilitated by a learning partner. The format gave participants the opportunity to share the projects they were pursuing at home with their volunteers, such as a passage from personal writing or the book they were reading, followed by discussion. One member was reading a book on his Native American heritage; another was maintaining her lifelong practice of reading on many topics while learning to use a computer with her volunteer. Another participant and his learning partner were working on an autobiography as well as practicing on a keyboard supplied by the program. All group members were also invited to the studio day. Mrs. Harris and another participant chose to attend both groups. This diffusion of interests exemplified the ELC approach of facilitating individual interests while providing opportunities to share and be exposed to unfamiliar ideas and interests in learning community settings.

On her first day in the group, Mrs. Harris met Mrs. Jones who loved literature and in the past had been a great reader. She graduated second in her high school class. After her husband passed, she moved to California with her children and worked in an office for many years. In her early 70s and retired, available social and educational options did not hold her interest and were difficult to access. Mrs. Jones chose as her learning project to listen to a literature lecture series from the Great Courses and read a selection of the books described in the lectures. When her learning partner left the program unexpectedly due to health problems, Mrs. Jones continued her project with staff support. She listened to all 24 lectures, many twice, and read or reread several of

the books discussed. Mrs. Jones brought the DVDs and her current book to the group. Mrs. Harris borrowed the book and, by the next meeting, had read half of it.

Exemplifying the ELC approach that encouraged participants to engage as learning partners when possible, Mrs. Harris and Mrs. Jones chose to meet regularly at the ELC office to listen to lectures and discuss books and Mrs. Harris's art. They chose to continue with another literature lecture series. The role of the staff was, if needed, to help identify options for developing their learning projects, provide logistical support, and purchase DVDs and books. Meetings, specific books, discussion topics, and pace were determined by the two participants. The ELC purchased several books of choice for each participant's library. Mrs. Harris remarked, "I had not sat down and read a book in a long, long while. It has been exhilarating for me. I find our meetings so interesting and important." Mrs. Jones commented, "Mrs. Harris shares her artwork and background. We talk about books, the lectures, and it sparks discussion about our past and just about everything else. I have learned so much from her."

Mrs. Harris continued to attend the studio day, saying, "It helps me tap into my creativity." Both attended the larger literary group to share their reading and learning experiences with the other members who also shared theirs. Members of the group developed relationships and spoke on the phone between meetings. Mrs. Harris commented, "Our group discussions are enlightening, rewarding, and meaningful. We share experiences from our lives, from our different walks of life. The books trigger memories and comparisons, and you realize you are not the only one. There is companionship, and I am recognized as a person." Mrs. Jones said, "There is always something to learn from them. I am not the only one who has had trials, but each of us has been able to rise above them. When we get together we wish it could last longer … we learn from one another, and how to meet it head on with your head up."

The facilitation of learning interests for Mrs. Harris and Mrs. Jones provided opportunities for choice and control, promoted success experiences and a sense of efficacy. Their self-direction involved the continuous use of initiative and judgment in planning, pursuing, and evaluating their learning. Their interests became self-sustaining and were pursued when home alone, adding environmental complexity and an alternative to television. Learning and social activities were pleasant experiences with a potential positive impact on mood. Mrs. Harris, Mrs. Jones, and members of the literature group and studio day experienced social engagement and an expanded network based on sharing interests and exposure to others' self-directed interests. Their comments suggested both experienced significant learning and personal growth: "The whole person, both in feeling and in cognitive aspects, is part of the learning event. … The element of meaning to the learner is built into the whole experience" (Rogers & Freiburg, 1994, p. 36).

Discussion

In terms of the outcome measures used in this applied, community context, there were high levels of participant success in pursuing interests and learning projects as well as high satisfaction and long durations in the program. Preselection factors may have influenced success. The ELC was a small program with referrals exceeding capacity,

and there was preselection by referral sources of individuals who might be appropriate for the ELC and its approach. Also, the cognitive health rationale and the learner-centered, SDL approach were discussed with potential participants during initial meetings with staff. Interest in the program—possibly related to factors measured by Guglielmino's (1977) Self-Directed Learning Readiness Scale (see also Brockett & Hiemstra, 1991; Merriam & Baumgartner, 2020)—almost always followed and was a prerequisite. With these factors in mind, the relative ease with which participants engaged in interests and pursued learning projects when provided appropriate, individualized support and facilitation is consistent with research showing the prevalence among adults of self-planned learning (Tough, 1979) and SDL (Merriam & Baumgartner, 2020) and with studies confirming older adults' involvement in self-planned learning or SDL (Brockett & Hiemstra, 1991; Hiemstra, 1976).

Hiemstra (2013) observed that in his years implementing an "instructional approach that assumes that adult learners are capable of SDL and the associated choice-making … most learners rapidly accepted taking on responsibility for their own learning decisions if given the opportunity to do so" (p. 24). This observation also characterized participants in the ELC, notable as well in view of medical and psychosocial challenges. Like Mrs. Harris and Mrs. Jones, many had ceased to pursue interests apparently due to such challenges. Interestingly, a small number of participants were pursuing learning projects or interests before joining the ELC, consistent with research establishing the existence of SDL in the lives of adults. An example was mentioned in the vignette above. Participants who wished to pursue a past or current interest were provided resources to reestablish, continue, or expand it and brought into contact with others to share their interests and learn about and from others' pursuits.

A primary goal of the program was the facilitation of individual interests that could be pursued independently and when home alone. At the same time, the development and sharing of individual interests with volunteers and other participants animated the learning community and promoted meaningful social engagement, another program goal. In terms of the context element of the person-process-context (Hiemstra & Brockett, 2012) and personal responsibility orientation (Brockett & Hiemstra, 1991) models, the ELC specifically considered each participant's psychosocial milieu and facilitated the creation of a supportive context and community conducive to learning and SDL. Additionally, individual interests often involved exploration, discussion, and creative expression related to sociopolitical context, including oppressive and discriminatory contexts and personal experiences of them. In these ways, a social dimension and context were involved in both individual projects and the learning community. The pursuit of individual interests and creative endeavors, sharing and synergistically expanding one another's horizons and learning, and the meaningful, often profound discussions on far-ranging topics were an expression of the potential of participants within a community of learners. In this process, the ELC moved programmatically beyond targeting problems and supported change away from decline and problem views of aging.

Conclusion

The ELC provided cognitive and social engagement as well as learning, creative, and personal growth opportunities as an option to help address the range of strengths, preferences, and challenges of older adults living in the community. Cohen (2005) wrote, "denying or trivializing the positive potential of aging prevents people from realizing the full spectrum of their talents, intelligence, and emotions. But when we come instead to *expect* positive growth with age, such growth can be nurtured" (p. xiv). Practical approaches are needed to develop potential with aging and to promote cognitive health and lifelong learning (Global Council on Brain Health, 2017). The successes of the ELC suggest that the program model may hold promise for these purposes in home and community services for older adults and merits additional trial and study.

References

Alzheimer's Association & Centers for Disease Control and Prevention. (2018). *Healthy brain initiative, state and local public health partnerships to address dementia: The 2018–2023 road map*. https://www.cdc.gov/aging/pdf/2018-2023-Road-Map-508.pdf

American Society on Aging. (2002). *MindAlert: Mental fitness research*. https://web.archive.org/web/20020215080818/http://www.asaging.org/mindalert/fitness.html

Bandura, A. (1997). *Self-efficacy: The exercise of control.* W. H. Freeman and Company.

Baumgart, M., Snyder, H. M., Carrillo, M. C., Fazio, S., Kim, H., & Johns, H. (2015). Summary of the evidence on modifiable risk factors for cognitive decline and dementia: A population-based perspective. *Alzheimer's & Dementia: The Journal of the Alzheimer's Association, 11(6), 718–726.* https://doi.org/10.1016/j.jalz.2015.05.016

Brady, E. M., Holt, S. R., & Welt, B. (2003). Peer teaching in lifelong learning Institutes. *Educational Gerontology*, *29*(19), 851–868. https://doi.org/10.1080/716100364

Brockett, R. G., & Hiemstra, R. (1991). *Self-direction in adult learning: Perspectives on theory, research, and practice.* Routledge, Chapman and Hall.

Butler, R. N. (2002). *Why survive? Being old in America*. The Johns Hopkins University Press. (Original work published 1975)

Butler, R. N. (2005). Ageism: Looking back over my shoulder. *Generations: Journal of the American Society on Aging*, *29*(3), 84–86. https://www.ingentaconnect.com/contentone/asag/gen/2005/00000029/00000003/art00016

Carstensen, L. L., & Stern, K. (2021, December 7-9). *Care and the new map of life* [Daily conference conversation]. 2021 Century Summit. https://www.longevity-project.com/century-summit-december-2021

Ceridwyn, N. (2011). The MindAlert program, ten years on. *Generations: Journal of the American Society on Aging*, *35*(2), 110–113. https://www.ingentaconnect.com/contentone/asag/gen/2011/00000035/00000002/art00016

Cohen, G. D. (2000). *The creative age: Awakening human potential in the second half of life.* Avon Books.

Cohen, G. D. (2004). *Uniting heart and mind: Human development in the second half of life*. American Society on Aging. https://www.asaging.org/sites/default/files/files/booklet_2004.pdf

Cohen, G. D. (2005). *The mature mind: The positive power of the aging brain.* Basic Books.

Cohen, G. D. (2006). Research on creativity and aging: The positive impact of the arts on health and illness. *Generations: Journal of the American Society on Aging*, *30*(1), 7–15. https://www.ingentaconnect.com/contentone/asag/gen/2006/00000030/00000001/art00003

Cohen, G. D., Perlstein, S., Chapline, J., Kelly, J., Firth, K. M., & Simmens, S. (2006). The impact of professionally conducted cultural programs on the physical health, mental health, and social functioning of older adults. *The Gerontologist*, *46*(6), 726–734. https://doi.org/10.1093/geront/46.6.726

Contra Costa for Every Generation. (2005). *Identifying pathways to an aging-friendly community: Report from the survey of seniors in contra Costa County age 65 and older*. John Muir/Mt. Diablo Community Health Fund & Y. & H. Soda Foundation Healthy Aging Initiative.

Contra Costa Health Services. (n.d.). *Become a senior peer counselor*. https://cchealth.org/volunteer/senior-counselor.php#howWork

Dewey, J. (1966). *Democracy and education: An introduction to the philosophy of education.* The Free Press. (Original work published 1916)

Diamond, M. C. (1993). An optimistic view of the aging brain. In M. A. Smyer (Ed.), *Mental health & aging: Progress & prospects* (pp. 59–63). Springer Publishing.

Diamond, M., & Hopson, J. (1998). *Magic trees of the mind: How to nurture your child's intelligence, creativity and healthy emotions from birth through adolescence*. Penguin Putnam.

Diamond, M. C., & Scheibel, A. (2001). *Good news about the aging brain!* MetLife Foundation & America Society on Aging. https://www.asaging.org/sites/default/files/files/booklet_2001.pdf

ElderLearning Institute at the University of Minnesota. (1995). *The ElderLearning Institute bylaws*. https://wayback.archive-it.org/763/19991006103529/http://www.cee.umn.edu:80/eli/BYLAWS.html

Eriksson, P. S., Perfilieva, E., Bjork-Erikkson, T., Alborn, A., Nordborg, C., Peterson, D. A., & Gage, F. H. (1998). Neurogenesis in the adult human hippocampus. *Nature Medicine 4*, 1313–1317. https://doi.org/10.1038/3305

Fitfield, K. (2019, February 6). *College education doesn't protect against Alzheimer's: What advanced degrees mean–or don't mean–when it comes to dementia*.

AARP. https://www.aarp.org/health/dementia/info-2019/college-degree-dementia-prevention.html

Gavin, M. R. (2021). The core elements of care management. *Generations: Journal of the American Society on Aging*, *45*(1). https://generations.asaging.org/core-elements-care-management

Global Council on Brain Health. (2017). *Engage your brain: GCBH recommendations on cognitively stimulating activities*. AARP. https://www.aarp.org/content/dam/aarp/health/brain_health/2017/07/gcbh-cognitively-stimulating-activities-report-english-aarp.doi.10.26419%252Fpia.00001.001.pdf

Guglielmino, L. M. (1977). *Development of the Self-Directed Learning Readiness Scale* (Publication No. 7806004) [Doctoral dissertation, University of Georgia]. ProQuest Dissertations and Theses Global.

Guglielmino, L. M. (2008). Why self-directed learning? *International Journal of Self-Directed Learning*, *5*(1), 1–14. https://6c02e432-3b93-4c90-8218-8b8267d6b37b.filesusr.com/ugd/dfdeaf_d98e41d57bfe4b159fa98e60bcf5c4d2.pdf

Hiemstra, R. (1976). The older adult's learning projects. *Educational Gerontology*, *1*(4), 331–341. https://doi.org/10.1080/0360127760010402

Hiemstra, R., & Brockett, R. (2012). *Reframing the meaning of self-directed learning: An updated model*. Adult Education Research Conference. https://newprairiepress.org/cgi/viewcontent.cgi?article=3070&context=aerc

Hiemstra, R. (2013). Self-directed learning: Why do most instructors still do it wrong? *International Journal of Self-Directed Learning*, *10*(1), 23–34. https://6c02e432-3b93-4c90-8218-8b8267d6b37b.filesusr.com/ugd/dfdeaf_e996f035b2094c38a1492317121bacf1.pdf

Holt-Lunstad, J. (2017). The potential public health relevance of social isolation and loneliness: Prevalence, epidemiology, and risk factors. *Public Policy & Aging Report*, *27*(4), 127–130. https://doi.org/10.1093/ppar/prx030

Knowles, M. (1975). *Self-directed learning.* Cambridge, The Adult Education Company.

Levy, B. (1996). Improving memory in old age through implicit self-stereotyping. *Journal of Personality and Social Psychology*, *71*(6), 1092–1107. https://doi.org/10.1037/0022-3514.71.6.1092

Levy, B. R., Slade, M. D., Kunkel, S. R., & Kasl, S. V. (2002). Longevity increased by positive self-perceptions of aging. *Journal of Personality and Social Psychology*, *83*(2), 261–270. https://doi.org/10.1037/0022-3514.83.2.261

Lindeman, E. C. (1989). *The meaning of adult education*. Harvest House. (Original work published 1926)

Maguire, E. A., Gadian, D. G., Johnsrude, I. S., Good, C. D., Ashburner, J., Frackowiak, R. S., & Firth, C. D. (2000). Navigation-related structural change in the hippocampi of taxi drivers. *Proceedings of the National Academy of Sciences of the United States of America*, *97*(8), 4398–4403. https://doi.org/10.1073/pnas.070039597

Merriam, S. B., & Baumgartner, L. M. (2020). *Learning in adulthood: A comprehensive guide* (4th ed.). Jossey-Bass.

MetLife Foundation & American Society on Aging. (2001). *About the MindAlert awards*. (MetLife Foundation MindAlert Lecture Series). MetLife Foundation & American Society on Aging. https://www.asaging.org/sites/default/files/files/booklet_2001.pdf

Metropolitan Transportation Commission. (2019, February). *Vital signs: Poverty: Regional performance: Richmond; San Pablo. Poverty: Local focus.* https://www.vitalsigns.mtc.ca.gov/poverty

Moss, K. S., & Scogin, F. R. (2008). Behavioral and cognitive treatments for geriatric depression: An evidence-based perspective. In D. Gallagher-Thompson, A. M. Steffen, & L. W. Thompson (Eds.), *Handbook of behavioral and cognitive therapies with older adults* (pp. 1–15). Springer Science+Business Media.

Nussbaum, P. D. (2001a, November-December). Do brain studies point the way to a 'learning vaccine'? *Aging Today: The Bi-Monthly Newspaper of the American Society on Aging*, 1.

Nussbaum, P. D. (2001b, November-December). Ingredients of the learning vaccine. *Aging Today: The Bi-Monthly Newspaper of the American Society on Aging*, 17.

Nussbaum, P. D. (2010). *Save your brain: 5 things you must do to keep your mind young and sharp.* McGraw-Hill.

Nussbaum, P. D. (2011). Brain health: Bridging neuroscience to consumer application. *Generations: Journal of the American Society on Aging*, *35*(2), 6–12. https://www.ingentaconnect.com/contentone/asag/gen/2011/00000035/00000002/art00002

Plato. (1947). *The republic of Plato* (F. M. Cornford, Trans.). Oxford University Press. (Original work published ca. 380 B.C.E.)

Rodin, J. (1986). Aging and health: Effects of the sense of control. *Science*, *233* (4770), 1271–1276. https://doi: 10.1126/science.3749877

Rodin, J. (1989). Sense of control: Potentials for intervention. *Annals of the American Academy of Policy and Social Science*, *503*(1), 29–42. https://doi.org/10.1177/0002716289503001003

Rogers, C. R., & Freiberg, H. J. (1994). *Freedom to learn* (3rd ed.). Prentice Hall.

Rowe, J. W., & Kahn, R. L. (1998). *Successful aging.* Dell Publishing.

Stern, Y., Gurland, B., Tatemichi, T. K., Tang, M. X., Wilder, D., & Mayeux, R. (1994). Influence of education and occupation on the incidence of Alzheimer's disease. *Journal of the American Medical Association*, *271*(13), 1004–1010.

Sweetland, J., Volmert, A., & O'Neil, M. (2017). *Finding the frame: An empirical approach to reframing aging and ageism.* FrameWorks Institute. https://www.frameworksinstitute.org/wp-content/uploads/2020/05/aging_research_report_final_2017.pdf

Tough, A. (1979). *The adult's learning projects: A fresh approach to theory and practice in adult learning* (2nd ed.). Learning Concepts.

Whalley, L. J., Deary, I. J., Appleton, C. L., & Starr, J. M. (2004). Cognitive reserve and the neurobiology of cognitive aging. *Ageing Research Reviews*, *3*(4), 369–382. https://doi.org/10.1016/j.arr.2004.05.001

Wilson, R. S., Yu, L, Lamar, M, Schneider, J. A., Boyle, P. A., & Bennett, D. A. (2019). Education and cognitive reserve in old age. *Neurology*, *92*(10), 1041–1050. https://doi.org/10.1212/WNL.0000000000007036

Amy E. Rock (rock.amy.cm@gmail.com) was founding director of the Elders Learning Community. She is an aging life care manager and advanced professional member of the Aging Life Care Association. Amy is care manager certified by the National Association of Certified Care Managers and a member of the American Society on Aging.

UNCLOGGING STRUCTURAL HOLES IN A SELF-DIRECTED CLASSROOM: THE THEORY AND PRACTICE OF NETWORKED KNOWLEDGE

Kevin Currie-Knight

What roles should the teacher play in a classroom reliant on self-directed learning (SDL)? [1] When teachers give students the freedom and responsibility to take charge of their own learning, teachers obviously lose any role that directs student learning, such as telling the student what to work on, dictating the materials to be used, transmitting information to the student by obligatory lecture, and assessing student learning.

Many roles beyond these remain for the teacher, however. This practice brief details my experience with one such role, a role I did not anticipate when designing a college course based on SDL principles (Currie-Knight, 2019): the role of helping students network their diverse knowledge together. In other words, when students have control of their learning, the teacher becomes one of many possible information sources, as do resources like textbooks and internet sources. Another valuable source of information, however, is the other students in the classroom, resources that teachers and students can easily overlook for various reasons. One job for teachers in SDL (and other) classrooms—what this practice brief is about—is to help students network their knowledge together; that is, making it so that students can find out how they and their knowledge can be effectively networked to help each other with their separate projects.

In what follows, I will (a) use structural holes theory (SHT; Burt, 1995) to give an account of the challenges involved in helping students network their knowledge together and the way teachers can surmount those challenges; (b) give practical illustrations—again in the language of SHT—of how the networking of student knowledge has worked in my

[1] I use the term "self-directed learning" to indicate learning where learners themselves have significant control over (some or all) aspects of their learning that could have been directed onto the learner by a teacher: deciding what is to be learned, how and with what resources it is to be learned, how the learning is to be assessed, etc. Classrooms reliant on self-directed learning are classrooms where learners direct such aspects of their learning and where the teacher's role is to empower, facilitate, and assist more than to direct.

own SDL classes, and (c) offer concluding thoughts on how teachers use SHT to best facilitate student networking of knowledge.

Before proceeding, a note of clarification. SHT as described below is a tool teachers and learners can use to help students network their knowledge together. While SHT is not *necessary* for the practice of SDL (and SDL does not necessarily follow from the practice of SHT), I will frame SHT as a way to add a helpful support to the practice of SDL.

Keywords: structural holes theory, networked knowledge, knowledge sharing

The Theory: It Isn't All Redundant

Alana has information that might help Brandon on his project. However, Alana and Brandon either do not know each other beyond sharing a classroom, or are mutually unaware that one of them has information the other can use. This is both a problem of knowledge and of coordination. It is a knowledge problem because Brandon has a gap in his knowledge that Alana can fill. But before that can happen, there is a coordination problem: Alana and Brandon need to become aware that Brandon has a knowledge gap that Alana can fill, so that they might coordinate. The problem is not just to get Brandon the knowledge he needs, but to give both of them the knowledge that one of them has the knowledge the other needs.

There is a growing amount of literature depicting human knowledge less in individual terms and more in socially networked terms. Some literature describes the socially networked nature of all human knowledge as socially distributed, or extended, cognition (Carter et al., 2018; Gallagher, 2009; Salomon, 2003). Other literature describes the type of networking we naturally do in communities of practice (Lave & Wenger, 2020; Wenger, 2018). Still other literature—usually appealing to the effect of social media on our ability to further network our knowledge—calls this networking "mindsharing" or a theory of participatory knowledge (Shirky, 2011; Zoref, 2015). Either way, this literature describes processes by which we all socially transmit and receive information and ways this can best be facilitated.

Alana and Brandon's problem, however, runs deeper than reminding them to transmit and receive information from peers. The problem is that they have no idea that one of them—a particular peer—has anything worth sharing to the other particular peer. One set of literature that is useful for analyzing precisely this coordination problem is structural holes theory (SHT; Burt, 1995). SHT focuses on the quality of relationships between people in social networks and these relationships' effect on whether or not information is likely to be shared.

According to SHT, people can have either redundant or nonredundant relationships with others. Redundant relationships are tight relationships we have with people, usually with whom we share significant commonalities (redundancies, such as having the same skill sets and knowledge bases). Redundant relationships are tight enough that we know what we can call on members of our network for. Nonredundant relationships, by contrast, are relationships to acquaintances or peers who we barely know and probably share little in common with. (The irony is that the less we have in

common, the more we can likely help each other owing to our diverse, nonredundant knowledge sets, but the less reason we have to connect.) Nonredundant relationships occur between people who do not know each other enough to have any idea of when we could call on each other for targeted help.

In social networks, structural holes exist between people with nonredundant relationships. Therefore, structural holes are barriers to the effective sharing of knowledge. In this case, SHT suggests that Alana and Brandon are unlikely to share information because of their nonredundant relationship. Were their relationship a redundant one, Brandon might realize he has a gap in his knowledge and suspect that Alana could help fill it. Since their relationship is nonredundant, even if Brandon knows he has a gap in his knowledge, he has no reason to think about contacting Alana for help.

SHT was largely developed in order to help brokers identify their value. Since brokers add value only in markets where they can make connections between people, it is to their advantage to identify and exploit structural holes—situations where one party is looking for what another party can offer—where both parties are networked with the same broker rather than directly to each other. In the case of a teacher in a classroom—especially one where the teacher is not the primary source of information the way a broker wants to be—students gain the more we network them together in ways that help them plug structural holes.

How is that done? Going back to Alana and Brandon, the goal is for Brandon to become more aware of what Alana knows and for Alana to hear Brandon ask a question that might cue her awareness that she can help him. That means that (a) both must send some signal that (b) is likely to cue and invite a response by the other. The problem within (a) is that neither party knows who to send a signal to, so the best course might be to allow them to send a signal to many people, which is akin to writing a social media message on a digital wall that unknown others can read. The problem within (b) is that especially if the message each sends is to a large group of others—akin to the social media wall—there needs to be some likelihood that the sent message "gets" to the *appropriate* participant (where no one knows in advance who that might be), which is akin to posting on a social media wall but adding special [hash]tags that increase the likelihood that certain parties will see it. In what follows, I will explain a few ways in my own classroom that I have found do (a) and (b).

The Practice: Teachers, Brokers, and Platform Designers

"Hey everybody; does anyone here know what the learning standards are for third and fourth grade math?" Everyone in the classroom stopped working on their own self-directed projects, and a few students raised their hands. I asked if they could come over and help another student, and they did. A few minutes earlier, this student (the one now receiving peer help) was describing to me their self-directed project, designing a lesson plan for an art classroom that incorporates third and fourth grade math. The problem the student described is that they did not know what the standards for math looked like in those grades nor had any idea about how to help their own students who might struggle with that math. This student did not know (i.e., had nonredundant relationships with)

most others in the class so had no idea who to ask for help. Once connected with the right peers, this student and several other students shared information.

In SHT language, I did not exactly plug a structural hole as their relationship continued to be a weak and nonredundant one. However, I did help direct a more productive flow of knowledge than would have occurred if the structural hole prevented the exchange. The problem here was that one student had a gap in their knowledge that they were aware of and other students had the information that could fill that gap, but neither party had any reason to think about coordinating with the other. Since I also did not know who might have the knowledge, my goal was less to direct particular students towards each other than it was to help one student send a signal ("Hey everybody, does anyone know …?") to the class of students among whom an answer might be found.

In other cases, it often happens that because I see everyone's project description—keeping a record of what everyone is working on each week—I am positioned to direct particular students to other particular students. It often happens that when I read through student proposals for SDL projects, I recognize that certain students are working on similar things or that one student is researching what another has already made progress on. Even though in any given case I may not have reason to think anyone has a pressing gap in their knowledge, I will often respond in my feedback to each student that they might contact the other. I have done this for students within one course section, between course sections in the same semester, and between course sections where one is presently taking the course and another has previously taken the course.

The above examples are examples of a teacher as a broker of sorts. As a teacher in an SDL classroom, one of my jobs is to keep an eye out for and unclog structural holes between students that might prevent useful exchanges of knowledge. However, there is another way besides being a broker that a teacher can facilitate the flow of information, which is to design a process that allows and incentivizes students to unclog their own structural holes. Thus, while the teacher can play the role of broker, another viable strategy is for a teacher to play the role of platform designer.

When I created a self-directed classroom curriculum, I built into it that we would start class with project check-ins; that is, we would sit in a circle and take turns sharing with each other our progress on projects using prompts such as the following: (a) remind us what you are doing, (b) what is the most exciting thing you learned this week? and (c) any questions we can help you with? What I only later realized was that this was quite an effective way to update everyone on what everyone else's project is and to allow everyone to ask each other for help and feedback. In other words, it allows students in nonredundant relationships to send each other signals that increase the likelihood that knowledge can network in productive ways.

An example from my own classroom that best illustrates the point is when a particularly shy student responded to a check-in question: What was the hardest thing about the last project and might that challenge show up in your current project? The student mentioned that they are not only shy but also often feel anxious about asking others for help even when the help would be appreciated. After a perfunctory round of reassurance by other students including reassurance that no one will think negatively of the student for requesting help, a particularly tech-savvy student suggested that in

addition to face-to-face check ins, the students in the course could also use a texting app to create a class-wide text chain where folks can (even anonymously) text each other when they have questions. When I individually asked students after the project was over whether the texting app was helpful, a few said yes, some said no, and the shy student said that while they did not use it, it was helpful because they now talked to a few classmates when they had questions.

Information was shared between peers. The question prompt and the opportunity to check in with the group led one student to disclose information that signaled to other students what they might be able to help with. Moreover, the sharing of information that resulted further translated into an increased likelihood that peers would share information with each other in the future. It is worth noting that teachers can design similar opportunities for knowledge sharing in online spaces. While the check-in process detailed above was in a face-to-face environment, teachers can use discussion forums and other tools in course management systems to design similar spaces for knowledge sharing.

Discussion: Nodes in a Network

The section above illustrates concrete ways I have endeavored to more mindfully network student knowledge together. This, however, is only the effect of using SHT to reconceptualize the way I think about my role in the SDL classroom. It has helped me better appreciate not only that the classroom is a potential network for knowledge but also how and why these networks become clogged as well as my role in helping to unclog and assist students in unclogging them.

To become a more effective facilitator of networked knowledge, we must appreciate why knowledge that could be shared often does not get shared. It can be, of course, that folks do not want to share their questions or advice or that they are too shy to do it. In that case, the teacher's role is to incentivize students in various ways to share more and maybe to model such sharing by doing it oneself. (With check-ins and making student project proposals visible to the entire class, I practically mandate some form of sharing.) But SHT suggests that the problem often goes deeper than an aversion to sharing: people in nonredundant relationships may not share because they have no idea of who would be helpful to share with or that they have questions or suggestions that will pay off to share.

Once this obstacle is appreciated, there are two roles for the teacher: a broker who helps connect various parties, and a platform designer who designs spaces where parties can network themselves. For their differences, what these roles have in common is that they increase the opportunity for transparency between parties, allowing parties to send and receive signals that might instruct them on where to best network their knowledge.

A teacher-as-broker does this by staying mindful of who in the class is working on what and keeping an eye out for situations where one party might be able to help another party without each realizing it. The teacher-as-broker invites these parties directly to come together. A teacher-as-platform designer creates opportunities and incentives for students to share questions, advice, and details about their areas of

competency, such as regular class-wide check-ins, a master list that allows all students to see who is working on what, or a common discussion forum for sharing information that can leverage tagging to increase the likelihood that messages get to the appropriate participants. Teachers-as-brokers should offer many opportunities for learners to connect in order for nonredundant relationships to become redundant ones; teachers-as-brokers can do this by providing multiple, regular opportunities for students (especially those with nonredundant relationships) to interact in ways that are both accessible and encourage the sharing of information. In a face-to-face environment, this can be repeated elements of the class experience that offer opportunities and incentives to share with peers. In an online environment, it could mean designing easy-to-use common spaces (e.g., in a learning management system) for students to easily share information, allowing for some method of tagging or keyword searching that might allow students to easily locate information or queries from other students relevant to them.

References

Burt, R. S. (1995). *Structural holes: The social structure of competition.* Harvard University Press.

Carter, J. A., Clark, A., Kallestrup, J., Palermos, S. O., & Pritchard, D. (Eds.). (2018). *Socially extended epistemology*. Oxford University Press.

Currie-Knight, K. (2019). When college students direct their learning: How a college professor redesigned an undergraduate course in education to incorporate self-directed learning. *Other Education, 8*(2). https://othereducation.org/index.php/OE/article/view/230

Gallagher, S. (2009). Philosophical antecedents of situated cognition. In P. Robbins & M. Ayede (Eds.), *Cambridge handbook of situated cognition* (pp. 35–52). Cambridge University Press.

Lave, J., & Wenger, E. (2020). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.

Salomon, G. (Ed.). (2003). *Distributed cognitions: Psychological and educational considerations*. Cambridge University.

Shirky, C. (2011). *Cognitive surplus: Creativity and generosity in a connected age*. Penguin.

Wenger, E. (2018). *Communities of practice: Learning, meaning, and identity*. Cambridge University Press.

Zoref, L. (2015). *Mindsharing: The art of crowdsourcing everything*. Portfolio.

Kevin Currie-Knight (currieknightk14@ecu.edu) is a teaching associate professor in East Carolina University's College of Education. His research focuses on the history and philosophy of education as well as self-directed learning.