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Volume 8, Number 1, Spring 2011

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Preface

Self-directed learning is coming of age....

In recognition of the 25th International Self-Directed Symposium, held in February 2011, this issue begins with some brief comments on the history and impact of these annual gatherings over the last quarter century from the Editor and the Editor Emeritus and an introduction to the International Society for Self-Directed Learning, which grew out of the annual symposia and now sponsor them as well as this journal.

Continuing a tradition begun in the first issue of this journal to provide an international perspective that reflects cultural differences in the interpretation and terminology of self-directed learning, Philippe Carré and some of his colleagues present an in-depth view of *l'Autoformation*, self-directed learning in France.

Then four authors who presented invited papers at the first International Self-Directed Learning Symposium in 1986 offer expansions or new perspectives on their topics. Carol Kasworm explored self-directed learning in institutional contexts in her 1986 paper, arguing that “acts of self-directed learning” should be conceptually framed through adult developmental theories, focused upon qualitative cognitive and affective change and growth. To that contention she adds new insights, primarily based on the work of Magolda and Kegan. Paul and Lucy Guglielmino, who focused on self-directed learning in business and industry as an information age imperative in 1986, report on an outgrowth of the cross-cultural examination of self-directed learning in business and industry over the last 30 years: data that indicate very strong associations between self-directed learning readiness, Hofstede’s cultural dimensions, and country economic indicators. Finally, Roger Hiemstra argues that, despite the many years of research and discussion on the benefits of self-directed learning and the approaches that promote its development in the classroom, many educators and trainers still rely on traditional approaches. He reiterates and expands on his suggestions to bring practice into alignment with the SDL approaches that have proven more promising.

Lucy M. Guglielmino, Editor

International Journal of Self-Directed Learning

Volume 8, Number 1, Spring 2011

CONTENTS

Preface	ii
 <i>The International Self-Directed Learning Symposium: A 25-Year Perspective</i>	
Lucy M. Guglielmino and Huey B. Long	1
 <i>L'autoformation: The State of Research on Self (-Directed) Learning in France</i>	
Philippe Carré, Annie Jézégou, Jonathan Kaplan, Pascal Cyrot, and Noël Denoyel	7
 <i>New Perspectives on Post-Formal Cognitive Development and Self-Directed Learning</i>	
Carol Kasworm	18
 <i>An Exploration of Cultural Dimensions and Economic Indicators As Predictors of Self-Directed Learning Readiness</i>	
Paul J. Guglielmino and Lucy M. Guglielmino	29
 <i>Self-Directed Learning: Individualizing Instruction – Most Still Do It Wrong!</i>	
Roger Hiemstra	46

**Perspectives:
The International Society for Self-Directed Learning and
The International Self-Directed Learning Symposium**

Lucy Madsen Guglielmino and Huey B. Long

On the 25th anniversary of the first International Self-Directed Learning Symposium (ISDLS), the authors describe the International Society for Self-Directed Learning (ISSDL), an organization that grew out of the Symposium and now sponsors it; and detail the history and some of the contributions of the Symposia. They also note the Malcolm Knowles Memorial Award given by the ISSDL, which recognizes individuals who have made significant lifelong contributions to the field of self-directed learning.

Self-direction in learning is coming of age; it is now recognized as a dynamic combination of attitudes and skills, essential for dealing with the complexity individuals face in all aspects of their lives. In educational institutions at all levels, the development of skills and attitudes supportive of self-direction in learning is now often an integral part of mission and goals statements. Accreditation standards of medical programs and engineering programs incorporate a requirement for evidence of preparation of future doctors, nurses, engineers, pharmacists, and physical therapists, among others, for future lifelong, self-directed learning (For example, National Academy of Engineering, 2004; Simon & Aschenbrener, 2005). In business and industry human resource development, there is increasing recognition that, in a highly competitive global economy, employees can no longer be taught everything they need to learn in order to help their organizations remain relevant and productive (Friedman, 2005). Instead, each individual in the organization must be constantly alert to opportunities to improve products, systems, or services; and they must be capable of learning what they need to know in order to do that. There can no longer be a few visionaries assessing the needs of organizations and passing the needs along to trainers who design programs. Change is happening too fast. Senge's (2006) call for the learning organization is now clearly heard by all, if not yet perfectly understood. In addition, as Pink (2009) so eloquently documented, the old training approach, normally based on a "carrots and sticks" mentality, has been demonstrated in research to actually reduce motivation for task completion and for learning in many situations (p. 35).

Our world is vastly different now from the world we lived in 25 years ago. The few who were calling insistently for more attention to preparing both children and adults for self-direction in learning are finally being heard, and the echoes are global—but the work is not done. Many questions still exist, and many who are in positions where facilitation of learning should be the norm continue to fall back on the stale and motivation-sapping lecture-and-test syndrome. We are in the middle of a paradigm shift in institutional and organizational approaches to learning, and paradigm shifts require time, trial and error, research and application, and constant adaptation and re-invention. The period of change is inevitably marked by enthusiasm, innovation, and creative response by some; and by resistance, false starts, and disjunction of espoused theories and theories of use by others. The need for research and information dissemination on self-direction in learning continues to be a vital one.

On the occasion of the 25th International Self-Directed Learning Symposium, it seems appropriate to document the inception of the International Society for Self-Directed Learning (ISSDL), which now sponsors the symposia and this journal, and to reflect on the contributions of the annual symposia over the past quarter-century.

The International Society for Self-Directed Learning (ISSDL)

The International Society for Self-Directed Learning exists because of the continued need for dedicated research in the critical area of self-directed learning. Founded in 2006 by a group of researchers attending the 20th International Self-Directed Learning Symposium, the ISSDL formed as a Florida nonprofit corporation in 2007, with the papers being filed as of January 1, 2008.

We are dedicated to

- the promotion of self-directed, lifelong learning and
- the encouragement and dissemination of continued research on self-directed learning both within and outside of institutional contexts (ISSDL, 2011, p.1).

Those contexts include childhood education, higher education, adult education, training and human resource development, as well as informal and non-formal learning settings. The ISSDL offers two major venues for information exchange and research dissemination:

The International Self-Directed Learning Symposium

Founded by Dr. Huey Long in 1986, the Symposium provides an annual international forum for the presentation and discussion of current developments in the study and application of self-directed learning.

The International Journal of Self-Directed Learning

Published biannually since 2004, the *IJSDL* is a refereed, electronic journal founded to disseminate scholarly papers that document research, theory, or innovative or exemplary practice in self-directed learning. Founding co-editors were Lucy M. Guglielmino and Huey B. Long.

The ISSDL maintains a website to disseminate the journal and to provide information about the Symposium. For information on paper submission for the symposium or article submission for the journal, go to www.sdlglobal.com. Both Maurice Gibbons (2011) and Roger Hiemstra (2011) maintain links to www.sdlglobal.com on their excellent and very active SDL websites.

The ISSDL also presents the *Malcolm S. Knowles Memorial Award* to honor Knowles for his pioneering contributions to the study and practice of self-direction in learning and to recognize others who have made significant lifelong contributions to the field of self-directed learning. Further information about each of these three functions follows.

Contributions of the Symposium

For 25 years, a group of researchers have been devoted to exploring the phenomenon of self-direction in learning at the International Self-Directed Learning Symposia. In 1986, approximately 20 years had passed since Houle's (1961) and Tough's (1967) seminal research, closely followed by some major studies in the 1970's (for example, Brookfield, 1978; Gibbons et al., 1980; Guglielmino, 1978; Hiemstra, 1976; Long, 1975). Noting the proliferation of research in this area, Huey Long invited a small group of individuals who had been involved in research and writing on self-direction in learning to share and discuss their work. Nine presentations were given by 14 researchers to an audience that included 25 other scholars and students of self-directed learning (Long & Associates, 1988, p. x). Setting a pattern that continues to this day, each presentation was followed by an opportunity for the listeners to question, critique, and suggest refinements.

At the symposia, the research is rigorous, but the atmosphere is informal. In keeping with the concept of fostering self-direction in learning, we strive to develop a true learning community. The rigor: All proposals are refereed, and those accepted for paper presentations are required to submit their papers a month before the symposium. Each paper presenter is assigned a reactor, who receives the paper in advance and leads the discussion after the paper is presented. The atmosphere: Collegial discussions and constructive feedback are the norm. We strive to create a true learning community.

The symposia have provided an international forum for the discussion of important current developments in research and theory-building related to self-directed learning, as well as opportunities to study successful models of the application of SDL concepts and processes in a rich variety of contexts. For those whose research focus is self-direction in learning, the symposia offer a valuable stimulus to research and discussion in which new conceptualizations and applications can be explored and cooperative research efforts germinated and nurtured. This opportunity is especially helpful for graduate students, who often comment in their evaluations of the experience. A few comments reflect the participants' perceptions of the value of the Symposium:

- *The Symposium was a wonderful opportunity to meet some of the major researchers in self-directed learning. . . . I think it should be on a must-*

attend list for any student, practitioner, or faculty member interested in this line of research. . . .

- *The value of the SDL Symposium for me is that we talk across boundaries and form a true learning community.*

Books and CDs Originating From the Symposia

After receiving feedback at the symposia, researchers are encouraged to revise their papers and submit them for publication. From 1986 through 2003, the revised papers were then submitted for editorial review and selected papers were published as book chapters in print or CD format. Sixteen books or CDs including 288 chapters were published. An index to the chapters was created by a symposium attendee, Travis Plowman, and it is accessible on the Society's website, (www.sdlglobal.com).

The International Journal of Self-Directed Learning

Since 2004, researchers have been encouraged to submit their revised papers to this peer-reviewed journal, the *International Journal of Self-Directed Learning*, which also accepts independent contributions. Some of the presented papers have, of course, been submitted elsewhere for publication. This journal marks the 15th issue; 82 articles have been published, and the evidence indicates that the journal has been well-received. In addition to numerous citations of the ISSDL articles in other refereed journals, the ISSDL has received a number of requests to link to specific articles, reprint, or repost them. A few examples:

- The Canadian College of Health Leaders incorporated a page from Volume 5, Number 1, "Why Self-Directed Learning?" to make the case for the value of self-directed learning in their *Maintenance of Certification Program Policy and Requirements*.
- Maurice Gibbons requested permission to repost the lead article from Volume 7, Number 2 on his website.

An index by author and title is available on the ISSDL website (www.sdlglobal.com).

The Malcolm Knowles Award

The first Malcolm Knowles Award was presented in 2001 to honor the memory of Knowles' contributions to the field of self-directed learning and to recognize Huey Long, the Symposium's founder for his lifelong contributions to the field. Nominations are now accepted only from the previous awardees. Sample documentation includes (a) involvement in SDL (research, practice, writing) for a lengthy portion of the nominee's career, (b) recognized research and/or publications in SDL, (c) supervision of doctoral students researching SDL, (d) development or implementation of an innovation that contributed significantly to the field, and (e) other important contributions to the advancement of SDL.

Those who have been recognized with the Malcolm Knowles Award for significant lifelong contribution to the field of self-directed learning are:

- 2001 Huey B. Long, University of Oklahoma, U.S. (Emeritus)
- 2002 Lucy M. and Paul J. Guglielmino, Florida Atlantic University, U. S.
- 2004 Ralph G. Brockett, University of Tennessee, Knoxville, U.S.
- 2005 Roger Hiemstra, Syracuse University (Emeritus)
- 2006 Allen Tough, University of Toronto, Canada (Emeritus)
- 2007 Maurice Gibbons, Simon Fraser University, Canada (Emeritus) and
Gary Confessore, George Washington University, U.S.(Emeritus)
- 2008 Richard Durr, Motorola University, Scottsdale, Arizona, U.S. (Retired)
- 2009 Sharan Merriam, University of Georgia, U.S. (Emeritus) and
Rosemary Caffarella, Cornell University, New York, U.S.
- 2010 Philippe Carre, University of Paris, France
- 2011 Naomi Boyer, Polk State College, Florida, U.S. and
Robert Bulik, LPI Global Consultants, Texas, U.S.

The first 25 years have been productive, generating helpful research findings and many new questions to be explored at future symposia.

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L'Autoformation: The State Of Research On Self- (Directed) Learning In France

**Philippe Carré, Annie Jézégou, Jonathan Kaplan, Pascal Cyrot,
and Noël Denoyel**

The term *autoformation* (literally, self-learning) first appeared in French literature on education in the early 1970's, within the wake of the lifelong education movement. Globally, the notion of autoformation may be viewed according to five complementary perspectives: radical (autodidacticism), sociocognitive, educational, organizational, and biographical, which are presented here. These diverse views are united by a common thread: the role of agency, *i.e.* the human capacity to make choices and decisions and act on one's own, in the field of adult learning and development. Paradoxically, at a time when the European Union promotes the image of a lifelong, independent learner within a cognitive society in the making, autoformation appears as both essential and hazardous for the future of adult education in France.

The term *autoformation* (literally, self-learning) first appeared in French literature on education in the early 1970's, in the wake of the lifelong education movement, in the seminal writings of established authors such as Dumazedier (1985), Schwartz (1973), and Pineau (1977). A first collection of articles specifically devoted to the topic appeared a few years after the upsurge of the concept of self-directed learning in North America (Dumazedier, 1985). By the end of the 1980's a link between both strands of research was established in France and Quebec (Carré, 1992; Tremblay, 2003).

For the past 25 years, a common thread has united several views of autoformation, which will be presented here. Whichever the focus, each of them stresses a common paradigm of agency in learning and self-development. The concept of autoformation places the emphasis on the learner's personal control of his or her learning (learning by oneself), as opposed to the idea of *heteroformation* (learning through the action of others). In spite of differences and even oppositions between perspectives that we shall examine in this paper, all of them underline the agentic dimension of learning. The idea of autoformation implies looking at education, learning, and development from the angle of the agent's personal power to act, as the French philosopher Ricœur (1986) put it, in accordance with Bandura's image of people as "at least partial architects of their own destinies" (1997, p. 8). According to this view, there is room for freedom and choice in the individual's way of leading his or her life and learning, alongside and

beyond the constraints of historical, social, and biographical determinants that French sociology and clinical psychology have repeatedly uncovered for the past 50 years. Within this common paradigmatic view, there is room for *autoformation* as a powerful agentic lever of human learning and change.

Globally, the notion of autoformation may be viewed according to five complementary perspectives. According to the oldest view, which could be labeled *radical*, what is at stake is the learner's complete control of his or her learning, in total independence from educational agents or institutions. We are close to the historical notion of autodidacticism here. Secondly, a more psychological, sociocognitive approach, draws us closer to the North American notion of self-directed learning, with a deliberate focus on the psychological dimensions of adult learning (Long, 1989; Carré, Moisan, & Poisson, 2010). When leaders and teachers endeavor to promote learners' self-direction within schools, training centers or open learning programs, we are faced with a third *educational* conception of autoformation. Fourth, an organizational perspective examines collective practice of autonomous learning in 'natural' settings such as trade unions, voluntary organizations, companies and local communities. Lastly, a biographical outlook, strongly linked to the phenomenological approach of life histories, focuses on human experience as deciphered and analyzed by the agent himself or herself. Let us now turn to these different views.

Radical Perspective: Autodidacticism

Autodidacticism is an old term. It comes from the Greek *autos* (self) and *didaskein* (to teach) and is synonymous with self-teaching. There are many different terms for self-education. As Tough (1967) writes,

...Self-teaching has also been called self-instruction, self-education, independent study, individual study and self-directed study. The term self-teacher has been used to refer to any person while he [sic] is engaged in self-teaching.... Self-teachers have also been called autonomous learners, self-propelled learners, and autodidacts. (p. 3)

As an archetypal figure of clandestine learning, the autodidact epitomizes in Europe a bygone way of learning. When sociologists became interested in this issue they devised a sociological category for autodidacts. Some recognized that autodidacts lose their sense of belonging to a social class in their cultural promotion efforts; others distinguish the old-style autodidacts from the new-style ones, or the true from the false. Obviously, these scientific works are very helpful for the understanding of this ancestral and particular way of learning, but now it seems more appropriate to work on the process of self-teaching in a world where knowledge is more and more short-lived; a world that prompts everyone to indulge in independent learning at some point. Today's processes of self-teaching are in effect different from the old ones. Compulsory schooling does away with the entirely personal learning, which carries the mythical model of the autodidact, and invites us to focus on the activity. We can then consider that a self-teaching episode develops outside of the school environment and independently of a

full-time tutor or mentor. One also needs to distinguish between intentional and unintentional learning. Such episodes are free of any external aims or syllabi, but may rely on the help of others.

In line with the French concept of *apprenance* (Carré, 2005), autodidacticism exists, and has always existed, in all professions. We encounter autodidacticism in ancient Greece as well as in Arab philosophy; in working classes as well as in upper ones; during the French Renaissance as well as among African-American slaves. Characteristics of autodidacticism differ through the ages. For example, during the Age of Enlightenment, autodidacticism seems to have mainly been an aristocratic peculiarity; but, right after the French Revolution it seems to have become extremely proletarian. As much as historians have neglected this issue, educationalists have worked on it ever since the late 1960's. Across the Atlantic, Tough (1967) focused on adult self-teaching projects and questioned the reasons for beginning and pursuing a learning episode; Spear and Mocker (1984) underlined the organizing circumstances in self-directed learning; and Tremblay (1981) studied the needs for assistance during self-teaching periods. More recently in France, Le Meur (1998) identified the elements of a professional neo-autodidacticism; Verrier (1999) endeavored to gain better understanding of contemporary self-teaching; while Bézille-Lesquoy (2003) noticed the discrepancies between autodidactic representations and practices. Nevertheless, self-teaching is seldom considered through the relationships which support it. If we focus on self-teaching sociabilities, we can easily identify that self-teachers' social networks are very important throughout past and contemporary independent learning phases (Cyrot, 2007). Furthermore, the new social networking websites (FaceBook, Hi5...) bring this issue to the fore. Through vastly increased possibilities of high-speed horizontal communication between peers, opportunities for group autodidacticism are soaring.

Scientific interest in the matter certainly prompts new respect for this kind of learning. Indeed, often derided in literature or in everyday life, the formerly stigmatized self-learner is gaining increasing legitimacy in France; more so since legislation on Recognition of Prior Learning (RPL) came into effect on January 17, 2002 (Ministère de l'Éducation Nationale, 2011), allowing academic institutions to deliver formal recognition for curricular units; and, if all requisites are fulfilled, to deliver degrees on the basis of life experiences.

Social-Cognitive Perspective: Self-Direction in Learning

The next perspective on autoformation is directly inspired by the works of several North American authors on self-directed learning from the 1960's and 1970's, such as Houle (1961), Knowles (1975), Long (1975), Tough (1967), Hiemstra (1976) and Guglielmino (1978), as noted by Carré (1992). A global sociocognitive model of self-learning was gradually elaborated on this basis, using three key psychological concepts targeting both to better understand agentic learning processes, and to understand environmental conditions. The emerging theory articulates the concepts of self-determination, self-regulation and self-efficacy within a common framework (Carré, Moisan, & Poisson, 2010).

Self-determination theory (Deci & Ryan, 2000) helps us identify the role of self-processes in human motivation, choice and decision-making within the area of learning and education. The self-determination continuum spans the gamut of possibilities between absence of motivation and fully self-determined action, with varying other-determined forms of action in between. What is at stake here is the understanding of personal control (or the lack thereof) in learning projects, educational choice, commitment, persistence and efficiency in adult training and development. The core of research efforts in this domain is on adult learners' initial motivation, decision, freedom and choice to learn... or not to.

When it comes to actual learning behavior, self-regulated learning theory (Schunk & Zimmerman, 2008) provides us with an ideally suited empirical and notional framework in order to investigate and promote agency during the learning process itself, once the decision to embark on a learning project has been made. There is a surprising lack of interaction between the two research traditions of self-regulation and self-direction in learning, which opens an avenue for empirical and theoretical work within the sociocognitive perspective of autoformation.

Underlying the two basic concepts of self-determination and self-regulation, a third milestone of the sociocognitive approach is self-efficacy, also encompassed by self-determination theory under the heading of perception of competence. The role of self-efficacy in self-directed learning has been delineated in numerous recent studies. It is a major determinant of both self-determined and self-regulated action and thought. As Bandura (1997) states, "Unless people believe that they can produce desired results by their actions, they have little incentive to act or to persevere in the face of difficulties" (pp. 3-4). It seems quite obvious that this central statement applies strongly to self-directed learning issues.

The sociocognitive approach formulates autoformation as the dynamic interplay of self-determination (an autonomous, authentic free will to learn), self-regulation (the exercise of agentic, self-controlled learning activity) and self-efficacy. Current research in this area in France has contributed to endorse the model with empirical meaning, based on field studies of nurses, medical doctors, managers, entrepreneurs and teachers (Carré, Moisan, & Poisson, 2010). Future research using this approach should enable establishing a link with the educational perspective presented below, in order to further elaborate on issues relating to learning environments that are favorable to self-directed learning. The notions of autonomy supportive, enabling, or capacitating learning environments, whether they be thought of in terms of instructional design, informal learning or digital resources, are crucial here.

Educational Perspective: Self-Learning Environments

Another important trend in research and practice in autoformation and self-directed learning focuses on open and distance learning environments, designed and implemented by in-house corporate training, adult education providers, and institutions of higher education. Environments designed to individualize instruction so as to foster more self-direction in learning can be found in classrooms, adult learning groups and

many face-to-face situations (Hiemstra & Sisco, 1990). But, most of the discussion on the educational perspective in recent years in France has focused on open and distance learning. These environments take on forms such as multimedia resource centers, settings for individualized training, or e-learning. Instructional design in these environments endeavors to support the expression and development of the learner's self-direction. In France, Jézégou (2005) points to two main levers that can be used to achieve this.

The first lever is to provide the learner with opportunities for personal decisions or self-determination in the choice of various components of the learning environment, while helping the person to regulate management of these components (Hiemstra, 2000; Jézégou, 2005). The learning environments are shaped by training modalities, pedagogical methods, course documents, distance communication tools, human resources or spatial and temporal aspects of learning situations (Jézégou, 2008). One is able to promote learner self-direction by providing the learner with freedom of choice in the determination of these. The learner can thus exercise control over the structure and manage learning situations (Garrison, 2003; Jézégou, 2005). However, opening to freedom of choice does not automatically guarantee the learner will be self-directing. Two fundamental aspects are in play here. The first is the learner's motivation to seize that freedom of choice, while the second refers to his or her ability to exercise control over the learning settings. An instructor may play a facilitating role in helping the learner make choices, organize and manage the various aspects in these settings. To be effective, the educational intervention requires transactions based on dialogue and negotiation between instructor and learner according to their respective constraints and resources (Brockett & Hiemstra, 1991; Dron, 2007; Jézégou, 2005).

The second instructional design lever to support expression and development of self-direction in learning is to create the organizational, pedagogical and technical conditions to encourage collaboration between learners at a distance. Collaboration here is seen as the conditions that enable learners to engage in a joint and common approach for solving a problem or conducting a project. A distance collaborative approach is based on transactions between learners (Garrison & Anderson, 2003; Jézégou, 2010). Transactions are social interactions built on confrontations of points of view, on negotiations and deliberations. They are promoted when the socio-emotional climate generated by the interactions between learners is based on asymmetry of the social relationship and affability (Jézégou, 2010). Despite the geographical distance between learners, these transactions and climate create a cognitive and socio-emotional presence which, in turn, contributes to the emergence and the development of a learning community (Jézégou, 2010). In addition, this collaborative dynamic allows the expression of self-direction by each learner in the group. On one hand, it encourages the learner to participate in making choices and organizing all aspects of the collaborative space, and in the collective management of these aspects, while controlling his or her behavior during interactions with other learners, as well as his or her emotions and motivation. On the other hand, this collaborative dynamic may enable the learner to satisfy a need for affiliation and belonging to a community, which is a driving force for his or her distance learning. Such an approach, both collective and individual, may be encouraged by an instructor who acts as coordinator, moderator and animator. Through

such interventions, and despite geographic distance, the educational agent embodies a pedagogical presence for the learners and supports not only the transactions and socio-emotional interactions existing within the learning community, but also motivation and strategies of self-regulation of each learner in the community (Jézégou, 2010). These two main levers, together or independently, contribute to open and distance learning environments supporting the expression and development of learners' self-direction.

Socio-Organizational Perspective: Collective Self-Learning

In contrast with the previous perspective, the Socio-Organizational Perspective of autoformation or self-learning focuses on learning processes organized outside of education institutions. This type of self-learning takes place in associations, unions and other instances of civil society. It may also designate learning that takes place in corporations when it is part of the daily work environment. The fact that the learning is integrated into regular activities distinguishes these forms of self-learning from the previous category which relates to institutionalized education.

Self-learning in groups relies on collective organization of the learning activities by the persons implicated. This distinction sets collective self-learning apart from autodidactic self-learning. In collective self-learning collective aims and individual aims need to be accommodated for in the pursuit of learning goals. In this type of self-learning the weight of collective aims on one hand, and those of individuals on the other, can result in varying degrees of perceived control over choice, management, and orientation of the learning. This does not imply that individuals risk feeling that they do not have as much control as they may wish to when collective aims are strong. First, collective aims may be endorsed by individuals; and secondly, individual aims can co-exist harmoniously with collective aims. By all means, effective learning is a question of the suitability of that which is learned within a social context. In such cases where collective learning settings promote self-direction, the balance between individual and collective aims becomes tangible when the boundaries of the self blur. In research that inquired into learner self-direction in Study Circles, learners could not easily distinguish between their inner self and their collective one when asked about their strategies when regulating their learning. Moreover, learning regulation strategies were more often than not, perceived as collective (Kaplan, 2010a).

One can classify in the category of collective self-learning, networks of learners such as those organized by the Reciprocal Exchange of Knowledge Movement (Mouvement des réseaux d'échanges réciproques de savoirs) (Héber-Suffrin, 2001) where individual goals are salient; nevertheless, embedded in collective organizing of the learning. Study Circles (Oliver, 1987; Kaplan, 2010b), which were used at the end of the nineteenth century and became culturally embedded during the twentieth century in Sweden and the Nordic countries, are illustrative of a format in which social aims weighed more; at least this was the intention of the unions that organized them when they were initially launched in Sweden. The reemergence of the format in the mid nineteen eighties in other parts of the world, sometimes referred to as Learning Circles, is generally underpinned by aspirations for social change also.

These examples are given as an illustration of collective self-learning; nevertheless, many other such forms of learning occur in communities of learners. Self-directed work teams and the learning organization (Senge, 2006) are other forms of collective self-learning that, in the latter examples, emerge in organizational environments. One can find many other examples in communities of practice (Wenger, 1998) such as in associations, unions, activist groups or the professions (e.g. physicians, software programmers, educators).

When realizing the scope and effectiveness of learning in collective situations (communities of practice, communities of learners, online communities, etc.) one can hardly ignore their potential power to shape the environments people inhabit. Realizing this opens up perspectives for the development of these forms of collective self-learning, if not as a new social reality, at least with renewed interest.

Biographical Perspective: Existential and Experiential Self-Learning

The biographical perspective on existential autoformation, or self-learning, aims to cope with the harsh modern and postmodern experience of incompleteness in adult life. Life is not an achieved given. It still remains something to be done, repeated and reflected on; something to which a shape must be given. This intrinsic incompleteness of life literally founds the necessity for an ongoing process of shaping life and giving meaning to it through biography-forming approaches. In the context of lifelong learning in French-speaking regions, the biographical perspective, the concept of autoformation and the research on what is possibly learned through experiential learning emerged simultaneously, and to a certain extent in a conjunct manner, in the 1970's and 1980's. They were thought to deal with essential and unseen issues, emerging on existential and experiential levels.

Pineau and Marie-Michèle's (1983) book *Produire sa vie, autoformation et autobiographie*, can be seen as a sign of the emergence of a biographical perspective and of autoformation in the early 1980's. Its title underlines a vital constructivist perspective by using the prefix *auto* recurrently in order to indicate a dual appropriation; by the individual of his or her own training, and of the written expression of his or her life story. Pineau conceives life narratives as tools allowing a process of autoformation based on a dialogical co-investment, by the narrator and the listener, of a story in which both promoting and hindering episodes are considered. Through such a process the narrator produces a story of his or her life. The biographical perspective can be understood through the use of three different terms: autobiography, life narrative, and biography (Delory-Momberger, 2003; Pineau & Le Grand, 1992).

The term *existential autoformation* made its appearance in 1995 in an issue of the journal *Education Permanente* entitled *L'autoformation en chantiers* (Self-learning under construction) and edited by the Groupe de Recherche sur l'Autoformation (GRAF). In 1997 Galvani's (1997) book *Quête de sens et formation* (Quest for meaning and education) was published. Existential autoformation has been studied since with innovative phenomenological approaches such as life narratives, learning blazons and other projective methods.

As early as 1991, based on Dewey's works, Courtois and Pineau (1991) popularized the neologism *experiential* in the book *La Formation Expérientielle des Adultes (Adults' Experiential Learning)* and thus anticipated the law on RPL, passed in France in 2002. Denoyel (1999) has been working on pragmatism and semiotics in order to formalize the concept of *experiential reason* through a ternary model: perceptive, experiential and formal. Ferry (1991), after analyzing the power of experience, explores the Peircean distinction between icon, index and symbol, in order to configure the cognitive grammars of intelligence. Mezirow (2001) validates the reflexive turn (Schön, 1991) and suggests thinking over one's experience to develop self-learning as an emancipatory practice. In his view, a lived experience becomes a vital one only when it is exposed to the community, where it must be fed with otherness. As in the case of the related concept of autodidacy, autoformation must be accompanied, as it is in trade unions: this training cannot be self-sufficient. Experiential continuity, as Dewey put it, is a matter of process. Biographical approaches may reveal, through ongoing experiences one lives, moments of intense autoformation; moments that singularize our lives and that cannot be achieved through teaching.

Hopes and Perils of Autoformation

The notional and practical universe of autoformation or self-learning is rooted in the traditional, historical and literary vision of autodidacticism. It also explores the potential of the most up-to-date learning resources of the information society. This 'galaxy' of seemingly diverse notions, based on independent empirical and theoretical traditions and references, is held together by the common paradigm of agency that accounts for the individual's personal control and responsibility over his or her learning and educational career. This shared vision of a fully adult, autonomous learner, as the goal of education in the 21st century, is fully supported by the ideological and political program enshrined in the slogans of *cognitive society*, *knowledge economy*, and the *lifelong learner* (Carré, 2005). Yet, we must remain watchful of the perils of a radically liberal understanding that entails the risk of putting tomorrow's learner in a dangerous position of being the sole manager of his or her education. Contemporary forms of educational Darwinism are thus at work under the banner of autoformation and self-directed learning that could lead to neglecting or abandoning those adults who cannot turn to self-directed learning for lack of personal resources, motivation or information. One of the ambiguities of the autoformation / self-directed learning paradigm is that agency in learning may at once be indispensable at the individual pedagogical level of analysis, and highly hazardous at the macro-political level. This paradoxical pitfall calls for even more collaboration between sociologists, psychologists and educationists around what remains the most promising track of research into authentic adult learning in the years to come.

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New Perspectives on Post-Formal Cognitive Development and Self-Directed Learning

Carol Kasworm

This investigation expands the current discussion on the theoretical and practice relationship of hypothesized developmental levels of self-directed learning in relation to post-formal cognitive development. It is suggested that the conceptual understandings of post-formal cognitive development provided a potent and conceptually significant area for differentiating the nature of engagement and meaning-making for adult self-directed learners. The current discussion considers this qualitative differentiated complexity of self-directed learning through the research and writings of Baxter Magolda and Kegan.

What is the relationship between cognitive development and the learner's engagement in self-directed learning? In 1983, I suggested that the "acts of self-directed learning" should be conceptually framed through adult developmental theories, focused upon qualitative cognitive and affective change and growth (Kasworm, 1983, p. 632). My central intent was to explore and understand the differences among learners who participated in interior acts of self-directed learning beyond the procedural strategies (often presented through pedagogical language) (Brockett & Hiemstra, 1991; Candy, 1991; Knowles, 1975). I was curious about the differences among adult learners in acts of self-directed learning — and hypothesized that they were operating at different levels of the Perry's Scheme of Cognitive and Ethical Development. In my research, reflecting a variety of studies (Kasworm, 1982, 1983, 1988, 1992; Kasworm & Blowers, 1994), these individuals described their experiences of self-directed learning in very different ways, reporting that their understandings and processes of enacting self-directed learning were understood and were enacted from different set of world views, assumptions, and beliefs.

In addition, these experiences were documented from both individual interviews of engagement in self-directed learning as well as classroom observations of these individuals utilizing the structure of a learning contract and the key focus of engaging in self-directed learning for class projects. The grounding conceptual article in 1983 and subsequent research suggested that post-formal cognitive development provided a potent and conceptually significant area for differentiating the nature of engagement and meaning-making for adult self-directed learners. For example, some of these learners spoke to either a change of world-view perspective or of insights to a new set of understandings during their self-directed learning endeavors, while other individuals spoke to a more additive knowledge and skill exploration and to maintenance of an

ongoing world view. Further, as part of this reconceptualization of self-directed learning in 1983, the then-recent work of Mezirow and key understandings of transformative learning further illuminated conceptual understandings of the potential complexity of self-directed learning.

Thus, the 1983 article suggested key conceptual relationships and assumptions of self-directed learning *vis a vis* adult development through Perry's scheme of post-formal cognitive development and Mezirow's transformational learning theory. Self-directed learning was judged not to be the simplistic development of uni-dimensional or linear sequential acts of learning; rather, there was a qualitative cognitive and affective progression in complexity and depth of development in relation to learner knowledge, skills, and attitudes that impacted the nature and conditions of the learner's engagement in self-directed learning. This perspective suggested that it was "a three-dimensional relationship to include (a) levels of behavior or skill; (b) levels of cognitive complexity; and (c) level of affective/value orientation to knowledge and learning actions" (Kasworm, 1983, p. 45). Further, the interactional characteristics of this model suggested a "transformation, a paradigm shift... towards (a) an active creator of new learning events, (b) maker of new meaning of the learner's reality and (c) the learner's development of a new component of knowledge and skills" (p. 35). In addition, these qualitative changes suggested a conceptual relationship with the recently formulated transformational theory of the influence of critical disjunctures impacting qualitative changes of one's world view, self as learner, and self as creator of knowledge.

Since this initial presentation, other researchers have also recognized this conceptual relationship between cognitive development and key developmental differences in learner's acts of learning (self-directed learning) (Candy, 1991; Hofer & Pintrich, 1997; Merriam, 2004). For example, more recent discussions have argued that self-directed learning doesn't always occur on a known cartographic knowledge map; the holistic landscape of knowledge is often not known prior to starting a self-directed learning project. Thus, the learner has a unique and important engagement of cognitive responsibility not only for "organizing events," but to engage in initial experiences which are murky and ill-defined, reflecting a potential change or disjuncture in one's current cognitive scheme. In addition, a learner may seek a self-directed learning journey which does not meet his or her initial goals or desires. Further, these involvements sometimes result in *learning how to learn*, with the adult facing new challenges to gain skill in a technology, to gain new metacognitive skills in the learning efforts, in another area of skill development, or in a new content of language and discourse structures as a foundation for pursuits of desired knowledge and skill. Lastly, self-directed learning is not always obvious learning, reflecting a learner's beliefs about the task of self-directed learning. Engagement in self-directed learning can represent unplanned and disjunctural engagements; learners in self-directed learning may experience the shadowed engagements by exploring new possibilities in critical thinking, of challenges to one's assumptions and beliefs about areas of presumed knowledge and skill, or of a discomfort that may conflict with existing attitudes, values, or beliefs. However, little research and discussion has focused upon these possibilities. As noted in a recent discussion regarding self-directed learning with ill-defined and complex explorations,

Meaningful and worthwhile learning must view external task control and cognitive responsibility concerns as integral and reciprocal constructs. For example, self-direction simply focused on task control neglects the critical issues of setting goals that are relevant and meaningful as well as neglecting cognitive strategies and opportunities to question accepted orthodoxies. An adult learner who is fully self-directed has moved beyond simple task control and learned to think critically and construct meaning in ill-defined and complex content areas. (Garrison & Archer, 2000, p. 95)

While most recent research and scholarship of self-directed learning has contributed limited in-depth examination of an individual's meaning-making and cognitive strategies or the conceptual focus on self-regulation of learning, there have been significant collateral engagements and explorations in other disciplinary areas. In particular, there are a number of scholars and practitioners who are developing new conceptual understandings and related applications of adult cognitive development within educational psychology, adult development, and higher education student development. Building upon the 1983 presentation, this paper will explore these enhanced understandings and specific intersections of recent research and writings focused upon post-formal cognitive development and related understandings of transformative learning. Specifically, this paper will review recent work and discussions by Baxter Magolda and Kegan regarding the construct of *self-authorship* and of the related understandings of transformative learning as part of the differentiated movement towards the self-authoring mind and to a more complex level of the self-transforming mind. This operational construct of the self-authoring mind has become a significant focus of practitioner and researcher understandings concerning the development of post-formal cognitive development (now labeled constructive development) and of constructive pedagogy for engaging adult learners. Although these individuals have focused their research and writings predominantly upon the context of undergraduate higher education, I suggest that their work has significant implications for furthering our understandings of the complexity and nature of the broader contexts of self-directed learning (Baxter Magolda, 1999; Kegan, 2000; Mezirow & Associates, 2000).

Meaning-Making and Self-Authorship: Kegan's Perspectives

In contextualizing this current discussion, the 1983 Kasworm article posited a set of understandings that focused upon social constructivist principles and of the nature of meaning-making as a core of self-directed learning development. In addition, it anchored the nature of self-directed learning development also within the adult development arena, suggesting that systems of adult development evolve through stability and change moving towards greater complexity and differentiation. Kegan's work (1982) in adult development also placed adult activity—and the evolution—of meaning making at the core of development. He suggested that our meaning-making structures are a combination of elements over which we have control (what Kegan calls *object*) and elements that have control over us (what Kegan calls *subject*), and that growth is “liberating ourselves from that in which we were embedded, making what was subject

into object so that we can ‘have it’ rather than ‘be had’ by it” (1982, p. 34). This conceptual understanding is a holistic evolution drawing upon all elements of a human’s engagement in life. As suggested by Baxter Magolda, “this portrayal of self-evolution integrates thinking and feeling, cognition and affect, self and other” (2009, p. 623). In discussing this notion of meaning-making, Kegan (1994) asserted that adults, in these modern times, face demands for adapting the way that they organize their experiences, “the evolution of consciousness” (p. 9). This consciousness “is the personal unfolding of ways of organizing experience that are not simply replaced as we grow but subsumed into more complex systems of mind” (Kegan, 1994, p. 9). Kegan, for example, suggests that as workers, adults are expected to “invent or own our work, to [be] self-initiating, self-correcting, self-evaluating...to be guided by our own visions...to take responsibility for what happens to us...to be accomplished masters of our particular work roles, jobs, or careers” (p. 153). At the heart of these understandings and actions are the expectations of self-authorship; they require the ability to construct one’s own visions, make informed decisions in conjunction with coworkers, act appropriately, and take responsibility for those actions.

Kegan’s work has also focused upon the interrelationship of conceptual understandings between his theory and Mezirow’s (Mezirow & Associates, 2000) theory of transformative learning. Kegan (2000) suggested that from his perspective, transformative learning is viewed as an epistemological change, rather than a change in behavioral repertoire or a change in the quantity or fund of knowledge. Elaborating on Mezirow’s theory, Kegan viewed this particular type of learning as epistemological engagement in two different arenas. The first arena of epistemological engagement is meaning-forming, “the activity which we shape a coherent meaning out of raw material of our inner and outer experiencing” (p. 52). The second arena is meaning reforming, in which we change our epistemologies. This change of epistemologies or change of worldview represents the essence of transformative learning delineated by Mezirow. Thus, Kegan views reforming meaning, or transformative learning, as a developmental process of moving away from external authority toward self-authorship. Mezirow defines transformative learning as:

The process by which we transform our taken-for-granted frames of reference (meaning perspectives, habits of mind, mind-sets) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action. (Mezirow & Associates, 2000, pp. 7-8)

This expansion of meaning making also hinges on “how we learn to negotiate and act on our own purposes, values, feelings, and meanings rather than those we have uncritically assimilated from others” (p. 8). Thus, Kegan’s (1994) work, *In Over Our Heads: The Mental Demands of Modern Life*, suggests that adults can best adapt to the chaos and changing understandings of modern life through their engagement in transformative learning and in creating a more complex set of world views, shifting from the Socialized Mind to the Self-Authoring Mind to the Self-Transforming Mind. Thus, educators who desire to enhance the capability of learners would foster a qualitative set of distinctions

among various sets of information and experiences and would recognize the significant cognitive and affective engagement of transformation of self and world-view in these activities.

At the heart of these discussions is the core of an evolving self-directed learner. This individual would not only engage in additive knowledge and skill development; but, when faced by daunting experiences which impact upon the individuals' sense of epistemology, this individual would engage in changing views of the world and oneself. Thus, Kegan's work offers new understandings, insights, and supports for viewing the context and complexity of self-directed learning in this contemporary world.

Meaning-Making, Self-Authorship, and Baxter Magolda

Throughout her academic scholarship career, Baxter Magolda has actively explored post-formal cognitive development and constructivism through significant longitudinal research studies of undergraduates and has subsequently followed the same groups as post-graduates (Baxter Magolda, 1999; Baxter Magolda, 2001). As part of her theorizing, she also examined the implications of this descriptive theory for educators, suggesting an operational set of understandings for constructive-developmental pedagogy and the importance of developing self-authorship (Baxter Magolda, 1999). She suggested that self-authorship is simultaneously cognitive (how one makes meaning of knowledge), interpersonal (how one views oneself in relationship to others), and intrapersonal (how one perceives one's sense of identity). The cognitive component of how people make meaning is their assumptions about the nature, limits and certainty of knowledge, or their epistemic assumptions. The shift of knowledge from certainty to uncertainty is accompanied by a shift from viewing oneself as a receiver to a constructor of knowledge. The intrapersonal component of meaning-making involves assumptions about oneself. Intrapersonal growth moves from distinguishing one's impulses from oneself and identifying enduring qualities of the self to experiencing and eventually authoring one's inner psychological life. Lastly, the interpersonal component hinges on assumptions about the relation of the self to others. Growth in this arena moves from lack of coordination of one's point of view with that of others, through subsuming one's own view to that of significant others, to developing a system that regulates interpersonal relationship (Baxter Magolda, 1999).

Drawing from her extensive longitudinal research studies of college students and post-college adult years exploring the constructive developmental trajectories of adult learners, she suggests,

Self-authorship... is a complicated phenomenon. It is simultaneously an ability to construct knowledge in a contextual world, an ability to construct an internal identity separate from external influences, and an ability to engage in relationships without losing one's internal identity. (Baxter Magolda, 1999, p. 12)

In particular, her focus has been on formal and informal higher education contexts, which can influence this constructive development, as well as the nature of self-authorship, or the internal capacity to define one's beliefs, identity, and relationship.

In her development of this conceptual landscape, she identified three key elements of self-authorship, to include: trusting the internal voice, building an internal foundation, and securing internal commitments (Baxter Magolda, 2008, 2009). The first element of self-authorship, trusting the internal voice, focused upon recognition of reality: "what happened in the world and their lives, was beyond their control, but their reactions to what happened was [sic] within their control" (Baxter Magolda, 2008, p. 279). This recognition or realization was the basis for adult learners to take responsibility for "choosing how to interpret reality, how to feel about their interpretation, and how to react" (Baxter Magolda, 2009, p. 631). This exploration and making choices has been suggested as comparable to the actions within the Mezirow's scheme of perspective transformation--of exploring options and beginning to take actions. Baxter Magolda believes that this process of making choices in relation to one's reality provides the catalyst for change and potentially for transforming one's journey towards self-authorship. The second element is focused upon building an internal foundation, suggested by Baxter as beginning "to organize their choices into commitments that form a philosophy, or an internal foundation, to guide their ongoing reactions to reality" (Baxter Magolda, 2009, p. 632). The third element, securing internal commitments, focused upon moving beyond internal philosophy to living everyday life with those commitments. These second and third areas reflect a comparable understanding of Perry's later stages of ethical commitments such as building and solidifying the contextual relativist stance of the individual. As noted by Baxter Magolda,

These commitments automatically came into play as participants navigated the challenges of their lives, making them comfortable with the chaos they encountered. These commitments also offered a sense of security that led to a greater sense of freedom. Trusting that they could use their foundations to make the best of what happened to them, they were more open to taking risks and to reevaluating their internal foundations. (2009, p. 632)

The anchoring of these three elements of self-authorship is embedded within an intentional framework promulgated by Baxter Magolda (1999, 2001) of three key context assumptions for fostering self-authorship:

1. Knowledge is viewed as complex and socially constructed.
2. Self is viewed as central to constructing knowledge.
3. Authority and expertise are shared in the mutual construction of knowledge.

Her work adds an additional perspective and set of research engagements that support the complex differentiation of post-formal cognitive development and lead to a more holistic set of understandings that interact with the person's beliefs and values as a guiding referent.

Why This Continuing Focus Upon Constructivist, Post-Formal Cognitive Development And Self-Directed Learning?

Self-directed learning is an extremely complex phenomenon. It is a process of constructivist understanding and development towards a more holistic being within a lifespan perspective (Kasworm, 1983). As noted by King (2000),

As individuals mature, age-related (but not age-dictated) changes become apparent in the way they organize and reorganize their thinking to interpret experience. These changes are posited to evolve in cycles of differentiation and integration, reflecting developmental patterns of increasing complexity and ability to connect elements. (p. 601)

As more complex and elaborate mental models evolve, each new approach and understanding becomes incorporated, more automatic in response. These new understandings and approaches become part of the everyday way of perceiving and acting. “Each increasingly complex level may be considered a developmental benchmark, one that is built on prior levels and sets the ground work for subsequent levels” (p. 601). However, King warns about the naïve perceptions of this development and its often-assumed self-hedonistic focus. Rather, she states,

As John Dewey (1944) astutely noted, “We never educate directly, but indirectly by means of the environment. Whether we permit chance environments to do the work, or whether we design environments for the purpose makes a great difference” (p. 19). Experience is a key driver of development, and experience occurs in environments that may or may not be designed with developmental purposes in mind. (King, 2009, p. 613)

Thus, King suggests that environments for fostering learner development require both supports and challenges. King and Baxter Magolda have predominantly focused upon the undergraduate environment as the enriched educative environment offering opportunities for longer-term engagement of faculty and student learners in both content and learning development. Further, this focus has become an important discussion, because of its implications for developing critical thinking, a major goal of academic environments.

However, I should also share the finding of Baxter Magolda regarding her post-graduates and their experiences beyond the academic environment. These graduates faced renewed challenges in the adult world of work [post undergraduate studies], particularly in their independence of establishing a sense of adult self and also of being adult workers. As noted,

...They learned disciplinary content and process of thinking about it [an internal sense of self] and applying it. It was not until after college, however, that their employers and graduate educators stressed that their thinking, knowing, and applying their perspectives to their work all hinged on their internal values and how they defined themselves. (2001, p. xxii)

In examining these postgraduate work experiences, she notes that a number of national authors writing on college graduate preparation for the work setting suggested that employers expect developed skills in teamwork, critical thinking, interpersonal communications, as well as such skills as flexibility and innovation. However, because the participants after college graduation “lacked this level of complexity and autonomy, many struggled to respond effectively. Their reliance on externally acquired formulas for success led them to expect those formulas in their work setting” (p. 240). Although most of these individuals had displayed the level of self-authorship within the collegiate context, when they moved beyond the academic structures, they appeared to regress or potentially suggest an inability to operate in self-authorship in this new world context. Baxter Magolda suggested that campus work environments needed to provide a more self-directing environment to instill these younger learners with a scaffolding base to develop further meaning-making of themselves in relation to work life. Thus, reaching the level of self-authorship is not a universal strength across all domains of the individual’s world for action in the world of adulthood. Could this mean that self-directed learning as a support for self-authorship is context- or schema-based?

These three authors, Kegan, Baxter Magolda, and Mezirow, provide an enriched consideration that expands and enhances our understanding of self-directed learning. If one reframes the readings of Baxter-Magolda beyond the traditional undergraduate higher education setting, one can identify the intellectual understandings and threads of self-directed learning engagement throughout her discussion. Her focus upon constructive pedagogy suggests a commitment to self-directedness of learner engagement in both formal learning experiences, as well as the broader investment in self development. Baxter Magolda raises issue with current dominant forms of teaching and learning and of student services within higher education. She suggests that the “educational process requires moving away from the traditional forms of teaching and control-oriented forms of organizing student life...” (p. xxii). Thus, she views through her scholarship the importance of developing the qualities that have been identified as self-directedness in relation to the constructivist development of an adult self. As scholars of self-directed learning, we can gain much from her work, but we can also provide another set of informed understandings to aid these notions of self-authorship towards a more holistic framework. In addition, Kegan offers a helpful developmental understanding based within his examination of the complex and ambiguous demands upon adult life. As with the examination of Baxter Magolda, there are significant threads that suggest an adult’s engagement in self-directed learning is instrumental in the individual’s development and evolution of consciousness, of the developmental evolution from a social conscious mind, to a self-authoring mind toward a self-transforming mind. Kegan’s work is clearly grounded in similar perspectives of adults gaining autonomy and self-efficacy, as in the foundational understandings of self-directed learning. Lastly, Mezirow’s scholarly work on transformative learning and the many subsequent colleagues who have furthered these understandings offer a significant additional frame for us to explicate the nature and complexity of self-directed learning. It is evident from my preliminary research in the 1980’s and subsequent research in the 1990’s, the current significant research on transformative learning (Mezirow & Associates, 2000; Taylor, 1998), and my current synthesis of transformative learning

research in higher education settings (Kasworm & Bowles, in-process) that transformative learning can be viewed as a self-directed engagement.

Adult learners are faced with challenging issues and tasks in this modern society. Our work is to focus a sustained spotlight on developing awareness within adult learners towards the continued development of their self-directed learning capabilities. In addition, as educators we should continue to develop their skills and abilities for self-directedness, as well as offer stimulating environments for them to learn, adapt, and critique this new or challenging way of acting as a self-directed learner. Secondly, as suggested through this focus on transformative learning, development within self-directed learning is often in response to perceived dissonance or disjunctures of experiences and knowledge. It is difficult for adult self-directed learners to easily engage in an unknown or unvalued world-view change of their beliefs or assumptions. Further, these experiential challenges are grounded in affect and emotions of self and others, of values of self and the world, and beliefs of how the world and its components work. Thus, not only do we need to aid adults to understanding the cognitive work of epistemological change and development; we need to also focus upon the emotional, affective components of engaging in self-directed learning which challenge our sense of world and self. As noted in a number of discussions of post-formal cognitive development (Kegan, 1982; Kegan, 1994; Perry, 1970), epistemological change within a learner is a highly complex and often affectively challenging set of experiences. Thus, within self-directed learning, it may be that the environment of people, supports, experiences, all can provide a significant “holding environment” to aid the learner’s journey towards a more evolved state of cognitive complexity or of consciousness (Kegan’s construct).

It is evident that self-directed learning has become a valuable frame which can encompass this recent scholarship and continue to demonstrate the importance of understanding post-formal cognitive development in relation to the learner’s acts of meaning making. However, in examining Baxter Magolda’s scholarship, there is need to further explore her underlying findings in relation to their salience for the autonomous actions of the adult learner beyond the collegiate setting. Baxter Magolda’s research was housed within the formal higher education community and related to equipping educators to better prepare the traditional age student (18-24 years of age) for a more mature and vital adulthood in society. However, this work does not address the key role of the nonformal and informal learning world for an adult learner’s developmental journey in self-directed engagement. This opportunity to expand upon her understandings is significant. Through these examinations of more recent scholarship, we face new interdisciplinary dialogues and research to guide us in the future. For those of you working with self-directed learning research, I particularly challenge you to consider these conceptualizations and their relationship to current and future scholarship as well as practice.

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An Exploration of Cultural Dimensions and Economic Indicators As Predictors of Self-Directed Learning Readiness

Paul J. Guglielmino and Lucy M. Guglielmino

This study explored Hofstede's (2011) cultural dimensions scores for Power Distance and Individualism and the economic indices of gross national income per capita (GNIPC) and gross domestic product per capita (GDPPC) as possible predictors of self-directed learning readiness in 16 country samples. The predictive relationships were significant and exceeded Cohen's (1992) criterion for a large effect size for each regression. The variance accounted for was also significant for each variable. The relationship with Power Distance was negative; the others were positive.

The exponential expansion of knowledge, technology, and global interconnectedness have changed the world as we know it. Part of that change has been reflected in the way people learn, innovate, create, and produce. Lifelong, self-initiated learning is now increasingly recognized as essential for individuals to function effectively in their personal lives and in the workplace. At the global level, *Revisiting Lifelong Learning for the 21st Century*, a publication of the UNESCO Institute for Education (Medel-Añonuevo, Ohsako, & Mauch, 2001), asserts:

As information and communication technologies (ICTs) permeate our societies and communities, the role of the individual learner is highlighted. Globalization has produced outcomes and processes which make the learning of new skills and competencies of paramount importance. Today it is no longer enough to have the same living and working skills one had five years ago. Learning to learn, problem solving, critical understanding and anticipatory learning - these are only a few of the core skills and competencies needed for all, at a time when 60% of trades and jobs to be performed in the next two decades or so are not yet known. (p. i)

The analysis also notes, "...Lifelong learning as it is presently promoted has become more individual-oriented.... The emphasis of lifelong learning on the learner could be interpreted as assigning more agency to individuals in contrast to lifelong education's thrust on structures and institutions" (p. 4). The recognition of the need for individuals to assume more responsibility for their own learning is even more pronounced in the work of the European Union (European Commission, 2006) and is more explicitly linked to economic well-being. In 2006, they expanded their emphasis on learning to

learn, initiative, and entrepreneurship and produced a later document (European Commission on Education and Training, 2007) detailing the key competences for lifelong learning that need to be developed and renewed at every level of education and training: “the knowledge, skills and attitudes...which all individuals need for personal fulfilment and development, active citizenship, social inclusion and employment” (p. 3). *Learning to learn* and *sense of initiative and entrepreneurship* constitute two of the eight competences and are described as equally as important as basic skills such as communication, mathematical competence, and the like.

The recommendations of these international bodies are aligned with the comments and findings of a number of prominent authors, who suggest that self-directed learning is increasingly viewed as a favored educational and training paradigm in post-modern economies (e.g., Bedard, 1997; Brockett & Hiemstra, 1991; Candy, 1991; Carré, 1997; Costa & Liebmann, 1997; Figueiredo, 2001; Guglielmino & Guglielmino, 2006, 2008; Hiemstra, 1996; Long, 1999; Oliveira & Simões, 2006; Papert, 2001; Pink, 2009; Straka, 1997; Zomorrodian, 1998).

While there are numerous studies linking readiness for self-directed learning to positive personal characteristics, individual achievement, and satisfaction, this paper focuses on relationships to cultural dimensions and country economic indicators. This line of research was suggested by a number of prior research findings. Several studies found positive links between self-directed learning readiness and workplace performance (for example, Durr, 1992; Guglielmino, 1996; Guglielmino & Guglielmino, 1983, 1994; Guglielmino & Klatt, 1994; Oliveira, Silva, Guglielmino, & Guglielmino, 2010; Roberts, 1986). Studies in many different countries have reported cultural differences in self-directed learning readiness among samples drawn from business or students preparing for business careers; for example, Beitler, Mitlacher, and Faller (2005) found differences in SDLRS means in German and U.S. college business students; and an analysis of data from business samples in China, Guatemala, Hong Kong, Lithuania, and the U.S. found that the mean SDLRS differences by country are strongly correlated with Hofstede’s (1980) cultural dimensions of Individualism (positively) and Power Dominance (negatively). The self-directed learning readiness means of the country samples also were found to have a very strong positive correlation (above .90) with the gross national income per capita (GNIPC) of the countries (Guglielmino and Guglielmino, 2006).

The prior research suggests that some cultural values may support self-directed learning while others discourage it, and that there is a strong relationship between the SDL readiness of country business samples and the per capita income of the country. As the relationships were quite strong in the five countries examined previously, it appeared valuable to explore these relationships across an expanded sample and to explore possible relationships with another economic indicator, country productivity (GDDPC).

Purpose

The purpose of this study was to determine whether the self-directed learning readiness of country samples could be predicted by Hofstede’s cultural dimensions scores for power distance (PD) or individualism (IN) or by the economic indicators of

gross national income per capita (GNIPC) or gross domestic product per capita (GDPPC).

This study of samples from 16 countries from Asia, Latin and Central America, North America, and Europe examines the culture of these countries based upon Hofstede's (2011) cultural dimensions as well as their readiness for self-directed learning as measured by Guglielmino's Self-Directed Learning Readiness Scale (SDLRS). In addition, the study examines the standard of living of these countries as measured by gross national income per capita (GNIPC) as well as gross domestic product per capita (GDPPC).

Research Questions

Two research questions guided this study:

1. Can self-directed learning readiness of a country sample as measured by the SDLRS be predicted by Hofstede's cultural dimensions scores for Individualism, Power Distance, or a combination of the two?
2. Can self-directed learning readiness of a country sample as measured by the SDLRS be predicted by the economic indicators gross national income per capita (GNIPC) or gross domestic product per capita (GDPPC) or a combination of the two?

Method

Instruments and Assessments

Hofstede's Dimensions of National Cultures. Hofstede, a social psychologist, began his comparison of nations in 1965, while employed as a travelling international staff member of IBM and later as a visiting professor at an international business school in Switzerland. In *Culture's Consequences* (Hofstede, 1980), he presented his cultural dimensions drawn from answers to attitude survey questions by (a) matched employee samples from 40 different countries and (b) his executive students, who represented 15 countries and a variety of companies and industries. Systematic differences between nations were found for questions dealing with values. His research has continued and expanded, now representing two additional dimensions and 76 countries (Hofstede, 2010). This study examined the first two dimensions in relation to self-directed learning readiness.

The values that distinguished countries (rather than individuals) from each other grouped statistically into four clusters. These became the Hofstede dimensions of national culture: Power Distance, Uncertainty Avoidance, Individualism versus Collectivism, and Masculinity versus Femininity. Between 1990 and 2002, these dimensions were largely replicated in six other cross-national studies on very different populations from consumers to airline pilots. (Hofstede, 2011, p.1)

Because of significant relationships in prior studies, the variables examined in this analysis were Power Distance and Individualism. Descriptions of the two dimensions, adapted from Hofstede (2011) follow:

Power Distance. Power distance refers to the extent to which the less powerful members of organizations and institutions accept and expect that power is distributed unequally. In cultures with a high level of power distance, the society's level of inequality is endorsed by the followers as much as by the leaders.

Individualism. Individualism and its opposite, collectivism, represent the degree to which individuals are integrated into groups. In highly individualist societies the ties between individuals are loose: everyone is expected to look after her/himself and her/his immediate family. In collectivist societies, people are integrated from birth into strong, cohesive in-groups, often extended families that protect them in exchange for unquestioning loyalty. Collectivism in this dimension refers to the group, not the state; it has no political meaning.

The Self-Directed Learning Readiness Scale (SDLRS). Developed by L. Guglielmino (1978), the *SDLRS* is a 58-item, Likert-type instrument designed to assess individual attitudes, values, skills, and personality characteristics supportive of self-direction in learning. The self-scoring form is called the *Learning Preference Assessment* (Guglielmino & Guglielmino, 1991). Expert judgment was used to ensure the content and construct validity of the instrument. A Delphi panel of 14 experts in the field of self-directed learning (including Malcolm Knowles and Allen Tough, among others) were involved in a three-stage process to develop a list of characteristics of individuals with high levels of readiness for self-direction in learning. The panel arrived at consensus on the characteristics they deemed important for self-direction in learning, including attitudes, values, abilities, and personality characteristics.

Reported reliability figures (Cronbach alpha) range from .72 to .94. Finestone (1984) and Wiley (1981) reported test-retest reliability coefficients of .82 and .79 respectively. Based on a population of 3,151 individuals from the United States and Canada, a split-half Pearson product moment correlation with a Spearman-Brown correction produced a reliability figure of .94 (Guglielmino & Guglielmino, 1991). There have been some criticisms of the *SDLRS* (Brockett, 1985; Field, 1989), which have been responded to by Long (1989), McCune (1989), and Guglielmino (1989). The vast majority of studies have supported the reliability and validity of the instrument (See, for example, Delahaye & Smith, 1995; Durr, 1992; Finestone, 1984; Graeve, 1987; Hassan, 1981; Long & Agyekum, 1984; McCune & Guglielmino, 1991; Posner, 1990, 1991; Russell, 1988). The *SDLRS* is the most widely-used quantitative instrument in the study of self-directed learning (Merriam, Caffarella, and Baumgartner, 2007). It has been translated into 20 languages and used in research in more than 40 countries. Thorough overviews of research using the instrument can be found in Brockett and Hiemstra (1991), Guglielmino (1997), Merriam and Caffarella (1999) and Delahaye and Choy (2000).

Data Sources

SDLRS mean scores were obtained from studies previously conducted in 16 countries. The original researchers collected data from 6753 individuals. All of the subjects were adults in educational settings or in the workplace. Most of the samples were convenience samples taken from the *SDLRS* database, with the exception being a small portion of the U.S. sample, specifically the study of top U. S. entrepreneurs

(Guglielmino & Klatt, 1994, $N = 162$). The list of top entrepreneurs came from *Inc.* magazine's *Inc. 500* listing (1994).

Quantitative representations of the cultural dimensions of the various countries examined in this study (Power Distance, Individualism) were obtained from Hofstede's (1980, 2011) seminal work. Economic data for the countries were retrieved from national and international indices. GDPPC data were obtained from *The World Factbook* (CIA, 2009) using the 2009 estimates. GNIPC data came from the World Bank (2011), again using the 2009 estimates (Note: Both of these economic data sources are updated and altered slightly from time to time.). The data are displayed in Table 1. Limitations of the study include the diversity of sample size and the fact that the data were collected at different times. Because of these limitations, this study must be considered exploratory.

Table 1. *SDLRS Mean Scores, Economic Indicators, and Hofstede's Cultural Dimension Indicators of Power Distance (PD) and Individualism (ID) for 16 Countries*

Country	N	SDLRS	GDPPC ^a	GNIPC ^b	PD ^c	IN ^c
Australia	172	221	\$ 40,000	\$ 43,770	36	90
Canada	214	225	38,500	41,980	39	80
China	273	189	6,900	3,650	80	20
Germany	393	217	34,500	42,450	35	67
Guatemala	178	187	5,100	2,620	95	6
Honduras	70	187	4,200	1,820	80	20
Hong Kong	655	219	43,200	31,420	68	25
India	300	210	3,200	1,180	77	48
Ireland	358	207	38,000	44,280	28	70
Japan	921	187	32,600	41,858	54	46
Latvia	133	202	14,600	12,390		
Lithuania	628	205	15,700	11,410		
Portugal	384	216	22,800	21,910	60	21
Singapore	289	207	54,800	40,070	74	20
U.K.	79	216	34,600	41,370	35	89
U.S.	1706	238	46,400	46,360	40	91
Total	6753					

Note: Hofstede's cultural indices are not available for Latvia or Lithuania.

^a Data from CIA (2009). *The world factbook*.

^b Data from World Bank (2011). GNI per capita, Atlas method (2009 data).

^c Data from Hofstede, G. (2011). *Dimensions of national culture*.

Data Analysis

The relationships of the variables were analyzed using linear regressions. First, because visual examination of the goodness of fit was desired, each variable was considered separately as a predictor of self-directed learning readiness as measured by the SDLRS using the SPSS statistical package. Then two stepwise linear regressions with SDLRS scores as the criterion variable were conducted to determine whether

adding one cultural variable to the other or one economic variable to the other made a significant contribution to the prediction. For Research Question 1, Individualism and Power Distance, respectively, were the predictor variables. For Research Question 2, GNIPC and GDPPC, respectively, were the predictor variables. The PASW Statistics 18 Release 18.0.0 (July 30, 2009) was used for the stepwise regressions.

Results

Self-Directed Learning Readiness and Individualism

Hofstede's Individualism scores significantly predicted the SDLRS mean scores, $\beta = .69$, $t(13) = 3.42$, $p < .004$. Higher Individualism scores were positively associated with SDLRS scores. Using the formula $f^2 = \frac{R^2}{1 - R^2}$, the effect size is .92. Cohen (1992) lists .02, .15, and .35, respectively, as small, medium, and large effect sizes for f^2 ; therefore, this effect size is large. Individualism explained 48% of the variance in self-directed learning readiness scores [$R = .69$; $R^2 = .48$, $F(1, 13) = 11.75$, $p < .004$]. The scatterplot of the linear relationship constitutes Figure 1.

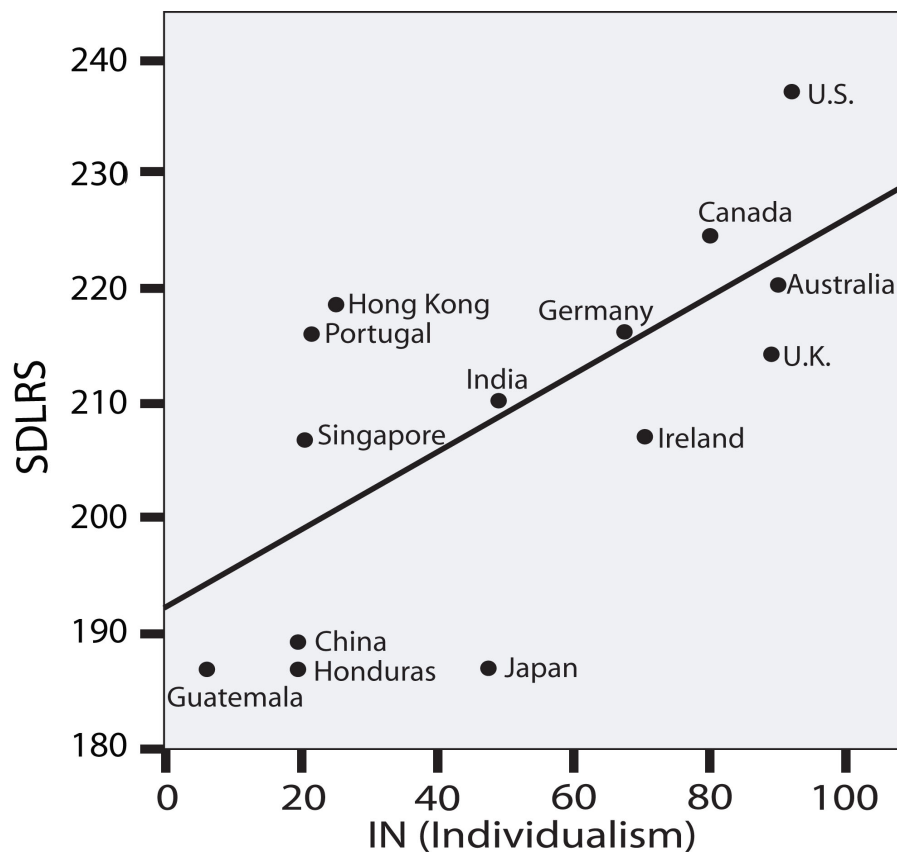


Figure 1. Scatterplot of linear relationship between SDLRS and Individualism.

Self-Directed Learning Readiness and Power Distance

Hofstede's Power Distance scores significantly predicted the SDLRS mean scores, $\beta = -.66$, $t(13) = -3.04$, $p < .009$. Based on Cohen's (1992) effect size indices, the f^2 of .72 is a large effect. Higher Power Distance scores were associated with lower SDLRS scores. Power Distance scores also explained 42% of the variance in self-directed learning readiness scores [$R = .65$; $R^2 = .42$, $F(1, 13) = 9.25$, $p < .009$]. The scatterplot of the linear relationship constitutes Figure 2.

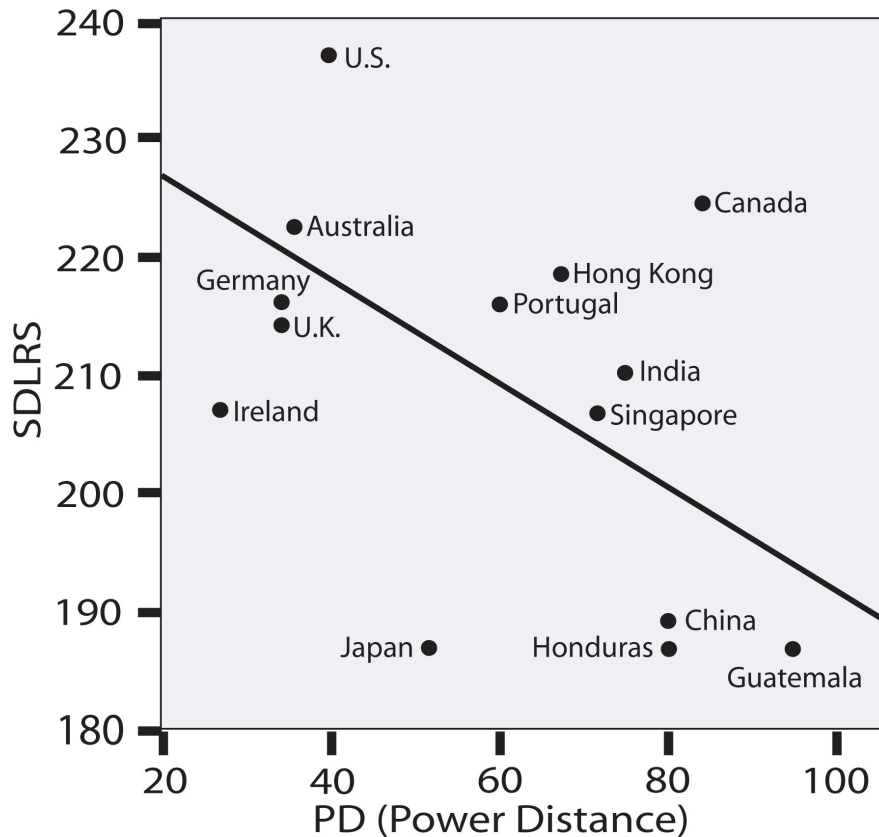


Figure 2. Scatterplot of linear relationship between SDLRS and Power Distance.

Predicting Self-Directed Learning Readiness from Individualism and Power Distance

Although Individualism and Power Distance, individually, were significantly correlated with SDLRS mean scores, adding Power Distance to the model predicting SDLRS scores from Individualism did not make a significant contribution, $\beta = -.15$, $t(13) = -0.32$, $p = .75$. Power Distance accounted for no additional variance in SDLRS scores beyond the 48% accounted for by Individualism. The lack of a significant difference in variance accounted for when adding GDPPC to the model predicting SDLRS scores from GNIPC can be attributed to the strong correlation between them ($r = .89$).

Self-Directed Learning Readiness and Income

Gross national income per capita (GNIPC) of the countries significantly predicted the SDLRS mean scores of the country samples, $\beta = .55$, $t(15) = 2.57$, $p < .02$. The f^2 of .42 is a large effect (Cohen, 1992). Higher GNIPC figures were positively and strongly associated with SDLRS scores. GNIPC explained 30% of the variance in self-directed learning readiness scores, a significant portion [$R = .55$; $R^2 = .30$, $F(1, 15) = 6.59$, $p < .02$]. The scatterplot of the linear relationship constitutes Figure 3.

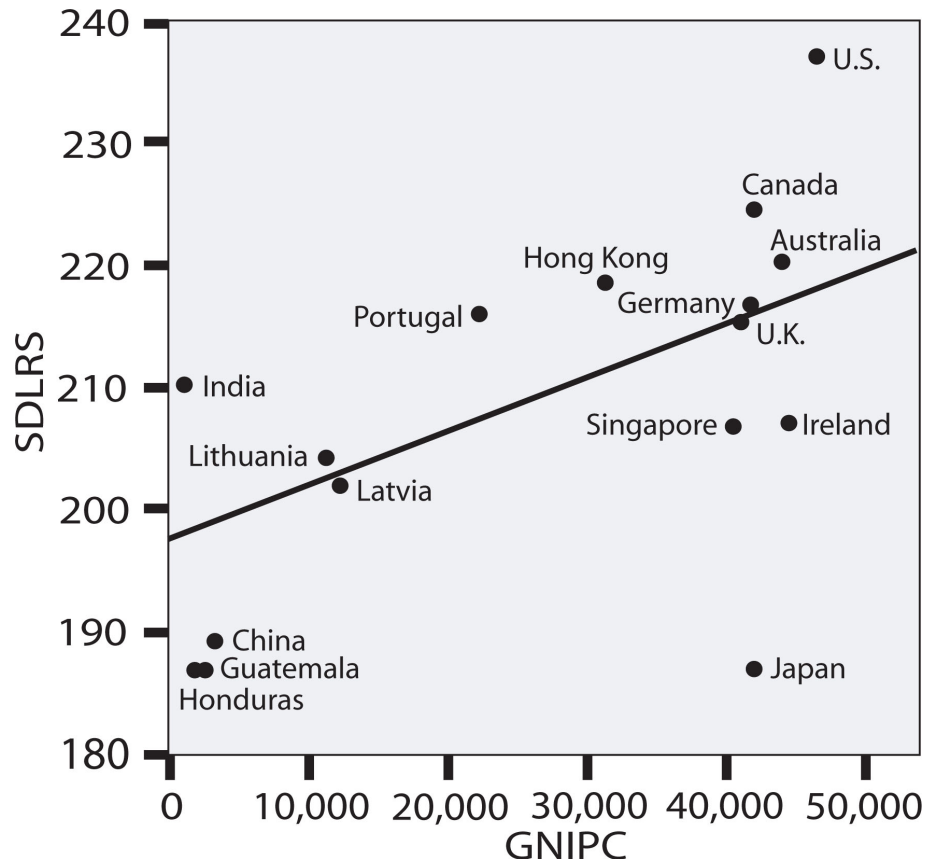


Figure 3. Scatterplot of linear relationship between SDLRS and GNIPC.

Self-Directed Learning Readiness and Productivity

Gross domestic product per capita (GDPPC) of the countries significantly predicted the SDLRS mean scores of the country samples, $\beta = .59$, $t(15) = 2.80$, $p < .01$, with a large effect size ($f^2 = .51$) (Cohen, 1992). A strong positive relationship was found between GDPPC figures and SDLRS scores. GDPPC explained 34% of the variance in self-directed learning readiness scores [$R = .59$; $R^2 = .34$, $F(1, 15) = 7.85$, $p < .01$]. The scatterplot of the linear relationship constitutes Figure 4.

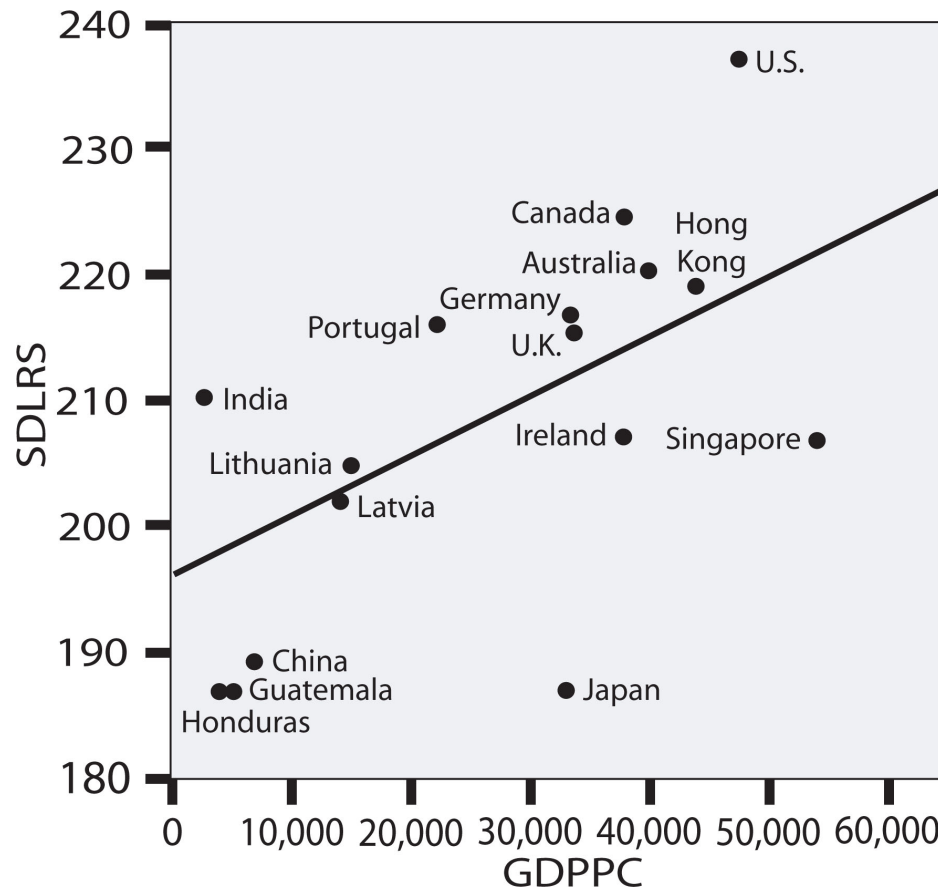


Figure 4. Scatterplot of linear relationship between *SDLRS* and *GDPPC*.

Predicting Self-Directed Learning Readiness from GNIPC and GDPPC

Although GNIPC and GDPPC, individually, were significantly correlated with *SDLRS* mean scores, adding GDPPC to the model predicting *SDLRS* scores from GNIPC did not make a significant contribution, $\beta = .387$, $t(15) = .732$, $p = .476$. GDPPC accounted for only an additional 3% of the variance in *SDLRS* scores beyond the 30.6% accounted for by GNIPC, raising the total variance accounted for to 33.6% (rounded to 34%). The lack of a significant difference in variance accounted for when considering both variables can be attributed to the strong correlation between them ($r = .91$).

Conclusions and Discussion

Cultural Dimensions and Self-Directed Learning Readiness

Based on the samples studied, there are significant predictive relationships between the cultural dimensions of Individualism and Power Distance and readiness for self-directed learning. As one might logically predict, countries with higher scores for Individualism have higher mean scores for self-directed learning readiness. It is natural that when individuals take the responsibility for providing for themselves and their

immediate families and do not have a strong expectation that a larger reference group will aid and protect them, they are more likely to exhibit the characteristics associated with a high level of self-directed learning readiness. It follows that they would be motivated to recognize learning needs and take the initiative to seek out new knowledge, adapt to change, and solve problems in order to meet their needs and the needs of their families. Hofstede's (2011) Individualism scores accounted for more than 48% of the variance in self-directed learning readiness mean scores ($R = .69$, $R^2 = .58$). This effect size is categorized by Cohen (1992) as large.

Based on Hofstede's definitions, Individualism should not be seen as a selfish focus on oneself and one's family at the expense of others; rather, high Individualism scores reflect an *acceptance of responsibility* for providing for oneself and one's family without the expectation that some larger entity will provide support in return for allegiance. In fact, some of the individuals and groups with the highest recorded SDLRS scores are in positions devoted to helping others, as documented in Liddell's (2007) research with heads of charitable foundations; Hillard's (2005) case study of exemplary elementary school principals recognized for raising achievement levels at their schools; and Phares' study of volunteer leaders of community organizations (Phares & Guglielmino, 2010). The acceptance of responsibility for one's own learning and for providing for oneself and one's family does not exclude concern for and assistance to others. Further evidence emerged from a study of prominent current and historical figures whose work had a major impact on society; the researchers found that "a strong sense of social responsibility and desire to contribute to the well-being of others ... drove many of their self-directed learning efforts" (Guglielmino, et al., 2009, p.11).

In contrast to the strong positive relationship with Individualism, in countries in which there is a large discrepancy in the power of various levels of society and those who are at lower levels accept and expect these power differences, the levels of readiness for self-directed learning are lower. It appears logical that if large portions of the population see themselves as having less power or status than others and either accept this unequal balance of power as the natural order of things that will never change or believe that they are unable to change it, regardless of the effort expended; their independent thought, initiative, and the drive for independent learning would be lessened. They do not see themselves as free to or capable of exercising individual power to "shed the shackles of history and circumstance in pursuit of learning" (Pratt, 1993, p. 22). Again, the effect size of the inverse relationship between self-directed learning readiness and Power Distance ($R^2 = .42$) is notable (Cohen, 1992).

Since there was a strong significant relationship (negative) between Power Distance and Individualism ($r = -.89$), it is not surprising that adding Power Distance as a predictor did not significantly increase the variance explained beyond the 48% accounted for by Individualism.

Although the limitations of sample sizes, non-randomness, and differing time frames for data collection must be kept in mind, these data offer a compelling argument for a strong cultural relationship with readiness for self-directed learning. While it is not possible to determine causality among the variables or to ascertain whether some other variable may be affecting both, it is clear that the relationship is a powerful one.

Economic Indicators and Self-Directed Learning Readiness

The predictive power of GNIPC and GDPPC for self-directed learning readiness in the samples studied was also strong, with Betas of .55 and .59 respectively. Based on the data examined, samples from countries with higher individual incomes and higher productivity can be expected to have higher levels of readiness for self-directed learning than samples from countries where these economic indicators are lower. Since levels of readiness for SDL have been found in previous studies to correlate with workplace performance (Durr, 1992; Guglielmino & Guglielmino, 1983, 2008; Hillard & Guglielmino, 2007; Oliveira, et al., 2010; Roberts, 1986, Zsiga, 2007) and higher levels of management (Durr, 1992; Liddell, 2007; Roberts, 1986) and two of the samples with the highest levels of readiness for SDL were top U.S. entrepreneurs (Guglielmino & Klatt, 1994) and top female corporate executives (Guglielmino, L., 1996), the strong relationship between self-directed learning readiness of country samples and economic indicators of those countries is not surprising. The research data cited support the concept that creative, entrepreneurial men and women are likely to be highly self-directed in their learning. The proclivity of highly self-directed learners to take responsibility for their own learning, to view problems as challenges, to exhibit independence and initiative in learning, and to seek out needed resources instead of waiting for someone to hand them materials or tell them what to learn or what to do would appear to provide strong support for the intrapreneurship and entrepreneurship that can fuel productivity and boost income at an individual level, organizational level, or national level. Despite the limitations of this study, the strength of the relationships between self-directed learning readiness and country economic indicators has important implications.

Summary

In an increasingly global and technological world, those individuals who can identify their own learning needs, who are self-directed in their ability to find out what they need to know and devise a way to address those learning needs, will not only be able to adapt to change and address challenges in their personal lives; in the world of work they will be in critical demand. Rapid innovation in education, medicine, engineering, the law, manufacturing, financial services, construction, and computer technologies requires men and women who can manage their own learning. They are the people that can make a major difference in the long-term health of their organizations and their countries. The findings of this exploratory study suggest that cultures with values that support and encourage self-directed learning may realize benefits in terms of productivity and individual income, impacting the living standards of their people. While recognizing the limitations of the study, the robust relationships with Power Distance (negative) and Individualism, GNIPC, and GDPPC (all positive) cannot be ignored.

Suggestions for Further Research

In a time of worldwide economic crisis and expanding international trade, national leaders are seeking answers and solutions. Research is needed to further explore the relationships between self-directed learning readiness and cultural dimensions, productivity and income. The evidence so far indicates that societies whose populations have higher self-directed learning readiness have more productive economies and also have higher incomes. Large power distances and acceptances of those inequalities are associated with lower levels of self-directed learning readiness, while acceptance of the responsibility for providing for oneself and one's immediate family (individualism) is associated with acceptance of responsibility for one's own learning, a central characteristic assessed by the SDLRS.

Ideally, larger samples of country data need to be collected within a rather narrow timeframe in order to verify these findings. In addition, it would be valuable to determine if these relationships hold in other countries. Research to address the following question also appears to be merited: In countries where a national effort is currently being made to promote self-directed learning, such as Malaysia and Korea, can long-term changes in self-directed learning readiness of country samples, cultural values, or economic indicators be documented?

While further research is needed, the available evidence strongly supports the contention that self-directed learning readiness is higher in cultures that provide the opportunity for individuals to learn and grow to reach their fullest potential. In addition, higher levels of self-directed learning readiness are not only associated with positive personal characteristics or conditions such as life satisfaction (Brockett, 1982), flexibility and creativity (Torrance & Mourad, 1978a, 1978b), emotional intelligence (Muller, 2007); on a country level, they are also very closely associated with higher levels of income and productivity. For individuals, organizations, and cultures, self-directed learning readiness appears to be a key to adaptation, survival and quality of life.

Malcolm Knowles (1975) presciently observed more than 30 years ago:

The “why” of self-directed learning is survival—your own survival as an individual, and also the survival of the human race. Clearly, we are not talking here about something that would be nice or desirable....We are talking about a basic human competence—the ability to learn on one's own—that has suddenly become a prerequisite for living in this new world. (pp. 16-17)

The research increasingly supports his contention.

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Self-Directed Learning: Individualizing Instruction— Most Still Do It Wrong!

Roger Hiemstra

During the first International Self-directed Learning Symposium in 1986 I described a teaching and learning process called *individualizing instruction*. I had experienced the viability of the process then and still do based on the past nearly four decades of developing and using it. However, I have observed that many teachers of adults today, even given all the self-directed learning knowledge that has developed, do not employ aspects of the process. Many appear to fall back on teaching that was modeled by their own teachers. The intent of article is to describe this situation, detail what still needs to be done in promoting instruction that helps learners take increased responsibility for their own learning, and challenge readers to help make use of individualizing instruction more widespread.

From Past to Present

I was fortunate enough to present at the inaugural self-directed learning (SDL) symposium held in 1986 in which several people provided their views on SDL's state of the art. My presentation, *Self-Directed Learning: Individualizing Instruction*, appeared as a chapter (Hiemstra, 1988a) in the resulting book (Long & Associates, 1988). In this work I set out what I called the individualizing instruction approach to SDL. I was urging fellow teachers of adults to allow the maximization of adult learner potential. I hoped to reach not only professors working with graduate students, but also professional trainers and even facilitators of adult learning in the myriad of non-credit experiences that happen daily.

I meant then and today that if adults can be helped to take increasing responsibility for their own learning, as opposed to a teacher's or institution's version of what that learning should be, their potential for success and resulting ability to become skilled lifelong learners will be greatly enhanced. These beliefs and the corresponding instructional methodology I espoused in that 1986 presentation became the foundation of *Individualizing Instruction* (Hiemstra & Sisco, 1990) and *Self-Direction in Adult Learning* (Brockett & Hiemstra, 1991).

Alas, I fear that the clarion call made 25 years ago has not been very well believed, heeded, or, perhaps, understood. As could be expected, the tremendous amount of research on SDL since then has branched into a number of streams. That is obviously very positive, and professionals in the field can only be pleased with the tremendous

expansion of SDL knowledge during the past four decades. However, I contend that we must do a better job of applying what we know about SDL in our own work as facilitators, professors, teachers, and trainers.

In this article, I will:

1. Describe how I became involved with SDL and developed my views about adults taking increasing responsibility for their own learning.
2. Summarize what I said in the 1986 symposium with a few elaborations based on my work after then.
3. Summarize selected pieces of literature that help make my point about the nature of related research and applications related to individualizing instruction.
4. Provide suggestions on where we go from here in terms of practice and future research.

How I Got From There To Here

My professional beginning was as a County Cooperative Extension Agent in Iowa. Although I was initially designated to work with youth primarily through 4-H, music, summer camps, and county fairs, a supplemental part of my responsibilities involved training the many adults who volunteered for these various activities. Having been heavily involved with 4-H youth programs during my formative years, somewhat to my surprise I quickly found more enjoyment working with adults than with youth. In essence, like many others, I entered the adult education field through the back door.

Although not formally trained to work with adults, I think being the oldest of six children with much responsibility for helping with the family farm provided intuitive experience and opportunities for working with adult audiences. I also quickly learned that the parents and community leaders whom I began introducing to various 4-H projects easily mastered the content. Although I did not really recognize it then, I was obtaining an understanding of how many adults eagerly assume responsibility for their own learning when given the opportunity. In addition, as I look back on those initial training experiences, I was building an understanding of what eventually would work for me as a college professor.

After two years of valuable experience as an Extension Agent, I began pursuing a Master's degree in Extension Education at Iowa State University. When my major advisor convinced me to pursue a doctoral degree, I was fortunate to obtain a fellowship toward a PhD in Adult Education at the University of Michigan (Hiemstra, 2007). I had every intention of returning to Iowa upon completion of the doctorate and working as an administrator in the Extension Service's state office.

In the fall of 1967 I began working with one of the early leaders in Adult Education, Howard McClusky (Hiemstra, 2002). His masterful teaching and valuable mentorship quickly convinced me to pursue the professoriate rather than administration. Although there were no formal courses or experiences related to college teaching in my program other than co-teaching a graduate course with Howard my last year in Ann Arbor, I did complete three courses related to adult learning, psychology, and television production. I also began consciously observing the various teaching styles and

approaches of my professors; some of them, like Howard's, were outstanding and uplifting; while I knew I would not want to emulate the styles of others. However, when I arrived in Lincoln, Nebraska, in the fall of 1970 as a new assistant professor I was fairly unprepared for college teaching, especially when in that first semester of teaching two graduate courses I faced a total of 48 adults, only two of whom were younger than me. I was nervous and simply fell back on following the preset syllabi handed me, did lots of lecturing, administered fairly standard types of exams, and graded on a curve. In essence, I was modeling most of the approaches I had experienced as either an undergraduate or graduate student. I tried to incorporate a few of the techniques I had experienced with Howard but did not have the confidence to follow most of what he used. I believe that many if not most professors today rely a great deal on modeling what their prior teachers did, whether such styles do or do not work well with adult learners.

Fortunately for me, in 1972 two things happened that changed both my teaching approach and research directions. I attended the annual conference of the Adult Education Association of the United States of America and heard Allen Tough give a conference presentation related to his work with adults' learning projects (Tough, 1971). That same year Malcolm Knowles came to the University of Nebraska campus to talk about his work with andragogy (Knowles, 1970). Because of my limited television production experience during my doctoral work, I was asked to work with Malcolm and the Nebraska Educational Television system to produce a 30-minute video in which I interviewed him about his development of the andragogical concepts (Hiemstra & Knowles, 1972). Because of both experiences I slowly began using an andragogical approach in my instructional efforts and initiated what has been nearly four decades of SDL research.

The 1986 Presentation On Individualizing Instruction

The notion of adults having a deep need or at least desire to be self-directing, even if they are not always conscious of it, and the corresponding teacher roles were important to my contentions that day. After summarizing some of Knowles' andragogical notions, I referred to his observation that an essential aspect of the maturation process is an adult's ability to take increasing responsibility for life (Knowles, 1975).

After talking about some research related to SDL and instruction, I laid out the individualized teaching-learning process based on what I had experienced and developed since 1972. This process facilitates adult learners' growth in making many of their own decisions as they move toward the accomplishment of personal goals. In terms of university teaching, obviously some learning goals need to be set by an instructor or are established by standardized curricular decisions; however, decision-making by adults toward their own specific learning needs should be the goal. Such goals can range from needing to meet several course requirements to a desire for meeting various personal needs. The rate at which such goals are determined will vary from learner to learner, but the point in helping such adults take increasing responsibility for their own learning is to allow differing rates to take place.

In essence the individualized instruction process is based on a notion that all adults are indeed capable of self-directed learning involvement and choice making when given the opportunity. It remains my contention that when such decisions are left to instructors, administrators, or pre-determined curricula, opportunities for adults to take increasing responsibility for learning are greatly limited.

It has been my experience that some adult learners will quickly take to the notion of making their own learning decisions, while others will be more hesitant because of prior experiences with instructors and courses. Thus, the individualizing process and the use of learning contracts (Knowles, 1986), allows an instructor to provide more guidance and support to those who most need it, while allowing early decision-makers or adults confident with their own self-direction to move forward more quickly. My observation over the years is that very few adults reject or withdraw from the individualizing processes, especially when they understand that their own learning needs within the parameters of a course structure can be focused on and accomplished. In reality, many, if not most, adult learners not only thrive within such an environment, they also carry the resulting personal empowerment feelings forward into other learning experiences.

I also have been involved with considerable online teaching during the past twenty-five years. The individualized instruction process has worked well for me in that environment, and I have received corresponding positive responses from learners. Because online adult learners usually must be more self-directed than when they are in face-to-face courses, creating an environment where they can take initiative and make more of their own learning decisions has been relatively easy to accomplish. Even in a few instances when others prepared the online syllabus, I was able to include several individualizing opportunities that appeared to help adults go beyond the predesigned requirements and create final products tailored to more specific needs.

The results of my instructional approach over the years, such as teaching awards, considerable related scholarship, and overwhelmingly positive feedback from adult learners, plus my increasing knowledge of SDL, continue my contentions that such learners are capable of and typically really appreciate being given increased responsibility for their own learning. Here are just a few comments from past course evaluations that seem to accurately represent how adult learners feel about the individualized instruction process.

I love the learning contract concept. I was happy to see it at the graduate level.

Rog did a great job balancing the need for structure with my own goals and desires for my professional development and learning

This was my first time dealing with a learning contract. I definitely found it helpful to make this course more individualized.

The syllabus was overwhelming and daunting at first, but proved to be an absolutely invaluable resource as I worked independently.

Allowing us to individualize our work and focus on things of interest to us is what makes this course work. My most challenging, and one of the most rewarding courses to date.

Usually I can sail right through my courses, but this course forced me to go out and do real work, which therefore helped me to learn.

I believe that my utilizing the individualized instruction process with several hundred adults over the past 35 years has helped many learners and future instructors move toward notions of learning involving increased personal responsibility. One of the reasons for this article, however, is my belief that many college instructors continue to utilize more teacher-directed approaches; even in light of our ever-increasing body of knowledge about SDL. In addition, I have observed the teaching approaches of many fellow professors over the years and seldom see them using learning contracts, individualized learning techniques, or the encouragement of learners taking increased responsibility.

For some instructors the efforts of moving toward an individualizing instruction approach can be difficult. It will mean giving up on several personal beliefs about teaching and learning. It often will necessitate reevaluating past learning experiences. It will most likely mean acknowledging that many such experiences with teaching need to be reexamined. It definitely will mean assessing personal philosophical beliefs about the teaching process and “doing some real soul searching as to whether or not some of the assumptions about humans that underlie the process are acceptable” (Hiemstra, 1988a, p. 104). My assumption is that few college professors, for example, take the time to construct a personal teaching philosophy statement or think about how such a philosophy, even if unrecognized, impacts their teaching (Brockett & Hiemstra, 2004; Hiemstra, 1988b; Zinn, 1990).

Specific Instructional Roles

The purpose of this section is to describe briefly some of the roles in the individualized instruction process that an instructor plays in helping adults assume more responsibility for their own learning. For additional detail see such resources as Brockett (1998), Brockett and Hiemstra (1991), Hiemstra (1988a, 1998, 2000), Hiemstra and Brockett (1994), Hiemstra and Sisco (1990), and Sisco (1998). In the Brockett and Hiemstra book is a description of the PRO (personal responsibility orientation) model in which we provide a framework for better understanding SDL that also has served as a basis for additional research (Banz, 2009; Fogerson, 2005; Newell, 1995; Stockdale, 2003).

Five years after that initial symposium, I presented another symposium paper based on examining the SDL literature from 1971-1991 (Hiemstra, 1992). From that effort I drew five conclusions related to self-direction and assuming personal responsibility for learning. They are abbreviated below:

1. All adults are capable of self-directed involvement in, personal commitment to, and responsibility for learning.

2. Adult learners are capable of taking personal responsibility for their own learning and assuming an increasingly larger role in the instructional process.
3. Linking the instructional process with learner inputs, involvement, and decision making is crucial.
4. There are various links between an adult learner's propensity to be self-directed and several personal attributes or characteristics.
5. Self-direction in learning can take place in any location.

I then described the individualized process:

The individualizing process includes six steps in which the facilitator becomes involved with instructional activities before any initial contact with learners occurs and the involvement continues through the final evaluation. Step one involves several activities prior to meeting with any competencies or requirements, acquiring learning support materials, and preparing study guides. Step two involves paying attention to physical, emotional, and social environmental needs (Hiemstra, 1991). Step three requires that some initial time be spent clarifying probable educational needs and focal points. Step four necessitates the identification of various ways learners [via learning contracts] can build knowledge or increase competencies through reading, writing, discussion, and design activities related to the needs they identified earlier. Step five in the process begins to parallel traditional instruction. It consists of monitoring and contributing to the progress of the initial planning efforts. Step six entails facilitating learners in self, teacher, and course evaluation efforts. The individualizing instruction process works because it helps adults take responsibility for their own learning. It does not work equally well in every teaching situation, but its foundation in the belief that all people are capable of self-directed involvement with learning makes it a process that should be studied, understood, and tried. (Hiemstra, 1992, p. 335)

From this work over the years have emerged six instructional roles that I believe provide the foundation for promoting personal responsibility among adult learners:

1. Content resource—Sharing expertise and knowledge with learners through written material, web pages, presentations, face to face or online discussions, and some one-on-one advising, conversations, counseling, and coaching (Posner, 2009).
2. Resource locator—Locating and sharing various learning resources to meet needs identified and emerging during a learning experience. These can be written materials, Internet resources, and facilitating people-oriented experiences such as agency audits or visits, mini-internships, and talking with topic specialists.
3. Interest stimulator—Arranging for and employing, face to face or online, various resources and learning experiences designed to maintain learner interest such as gaming devices, small group discussions, online asynchronous forums, guest presenters, and humorous PPT presentations.

4. Positive attitude generator—Helping learners via constructive feedback, personal encouragement, positive reinforcement, and extensive critique of written material.
5. Creativity and critical thinking stimulator—Stimulating a learner's creative and critical thinking skills through discussions (face-to-face or online), face-to-face or electronic study groups, journal writing, interactive reading logs, role playing, and simulation of real-life experiences. Additional means include helping learners develop web pages, blogs, and wikis as a means of sharing what they have developed.
6. Evaluation stimulator—Evaluating learner progress and stimulating self-evaluation by learners. The learning contract provides opportunities for learners to think about how they can use an instructor, colleagues, and others to enhance personal evaluation of their learning efforts.

Have We Progressed Much In 25 Years?

I am still surprised when I ask adults in all of my courses how many have experienced the learning contract approach. It is very rare that anyone says yes unless they have had a course with me before. I wonder, then, how much influence my work and the work of leaders like Grow (1991), Guglielmino (1978, 2008), Knowles (1970, 1975, 1980, 1984, & 1986), Long (2000, 2002), Tough (1971), and others have had on instructional approaches? It has been my observation that very few of my colleagues utilize learning contracts or individualized approaches. Why is this? Is it too easy to fall back on modeling from prior years as a learner? Are they unwilling to trust that the individualizing approach will work? Has SDL research failed to have lasting impact on instruction and instructors? Are too many instructors required to follow preset curricula or institutional expectations? Are today's university-required evaluation rubrics tied only to teacher-directed philosophies?

I do recognize that I may be overzealous in promoting my view of implementing what we know about SDL in terms of instruction. There is, of course, some SDL literature that supports or relates to my contentions. Bulik (2009) urges that we “build in an opportunity for learner control of the environment” (p. 57) in our instructional efforts. Bulik and Frye (2004), however, note how many faculty still

hold beliefs about teaching and learning that are strongly associated with the traditional notions of course and content delivery that are undergoing such radical change. How can faculty beliefs about the traditional teaching-learning interaction be changed? Even more important: Are continuing education (faculty development) workshops providing a venue for faculty to address long-held traditional beliefs about their teaching? (p. 70)

Coe (2009) also talks about facilitating self-directed learning: “For the autonomous learner who is resourceful, the classroom is only one source of information to choose from among many. Students frequently use the Internet for research and seek

out other students to further their learning” (p. 145). Grow (1991) “proposes a way teachers can be vigorously influential while empowering students towards greater autonomy” (p. 128). Knox (1986) talked about helping adult learners assume responsibility for their own learning:

What attention do you give to helping participants learn how to learn, explore, and assume responsibility for direction of their learning activities? Most instructors want participants to be interested in learning and able to learn independently after the program. What assistance do you provide to make this likely? (p. 47)

Long and Agyekum (2003) posit that

effective classroom learning is in reality a result of greater self-direction rather than dependence upon the instructor. If this is the case, student perceptions of important learning tasks vis-à-vis perceptions of important instructor tasks should be helpful in linking self-direction in classroom learning. (p. 143)

Boyer and Maher (2005) describe some of the angst an instructor will experience in sharing power with learners: “The departure from traditional learning models can create discomfort for faculty as power and control become shared. A collaborative process and increased time are necessary for facilitation of individual and group learning contracts, content design, and basic structural frameworks” (p. 78). Boucouvalas (2009) describes what can happen for a learner encouraged to grow:

We have the ability, as demonstrated over the years, to develop an autonomous aspect of selfhood that enables us to: (a) take initiative and responsibility for learning, (b) understand ourselves as learners, and (c) maintain our self-direction, even when in other-directed environments; however, as individuals we are also embedded in relationships, groups, communities and cultures, nations, and society-at-large. As well, beyond these affiliations, the entire human species shares a global identity as citizens of planet earth. (pp. 3-4)

Ponton (2009) suggests,

instructors can help students to interpret arousals [physiological and affective] as indicants of expanding, rather than limited, capabilities. Armed with strong beliefs in personal efficacy, the self-directed learner is better able to reject disconfirming evidence of capability while selectively highlighting successful endeavors, thereby feeling empowered to influence personal life trajectories via SDL activities. (p. 73)

Guglielmino (2008) makes a viable argument in support of the growing need for self-directed learning in at least three areas: (a) SDL in formal learning settings, (b) SDL in the workplace, and (c) SDL for personal effectiveness and satisfaction. Zsiga and Webster (2007) make a strong case for needing SDL in secondary education settings.

Finally, Brockett (2006) is concerned that with the growing amount of information facing people today there is a need to help all adult learners deal with the “ever-exploding range of choices they are likely to face: (a) helping self-directed learners make good decisions; and (b) recognizing that there are [even] times when choosing not to learn is a viable option” (p. 31).

There are, of course, those who have critiqued, dismissed, or discounted aspects of self-directed learning, and not only those in adult education. A few of them are presented here. As an example, Brookfield (1995), an adult educator trained in England but who has worked in the United States for most of his career, has raised a loud and influential voice in opposition to some of the points I made: “An example of a causal assumption is that if we use learning contracts, this will increase students’ self-directedness” (p. 3). However, later he talks about a potential fallacy in this assumption: “Unless the ground for learning contracts has been well prepared and a detailed case for them has been built, students may interpret their use as evidence of a teacher’s laziness or of a *laissez-faire* intellectual relativism” (p. 5). It has been my experience that adult learners will question, consider, and interpret learning contracts in ways that make sense to them, especially if you provide adequate descriptions and examples at the beginning of a learning experience.

Eneau (2008), a French adult educator, cautions that autonomy and self-directed learning must be considered in relation to societal as well as an individual’s needs:

To help an adult to be autonomous, to recognize and support autonomy (to become a person), is then to help the other find a rightful place in the construction of a communal society, and therefore to question one’s own place and one’s responsibility as an educator to help build a new model of how we are to live together. (p. 246)

Darbyshire (1993), from the nursing field, critiqued notions of andragogy and self-directed learning. Field (1989), an Australian educator, raised his concerns about the SDLRS as a valid and reliable measure of self-directed learning readiness. Baveye (2003), a faculty member in environmental engineering at Rensselaer Polytechnic Institute, believes we need means other than the SDLRS to quantify self-directed learning preparedness. Jones (1996), a Physical Sciences professor at Emporia State University provided several criticisms of self-directed learning for both learners and instructors.

Finally, the PRO model (Brockett & Hiemstra, 1991) has not escaped its critics. Flannery (1993), for example, in a review of the book, expressed the belief that we minimized cultural and sociological issues. Newell (1995), an adult learner who had worked with Hiemstra and used the PRO model in her medical-related research, urged not only an expansion of social aspects of the model, but also more thought about such dimensions as political and economic aspects. Garrison (1997) believed the PRO model was somewhat limited because it did not thoroughly examine psychological dimensions of SDL. Kohns (2006) believed that personal responsibility should be separated more from various learner characteristics. Such criticisms have been valuable, as we have now reconceptualized the model and refer to it as the Person-Process-Context (PPC) mode

where social contexts are seen in dynamic interrelationships with personal components and instructional processes (Brockett & Hiemstra, 2010). We hope that the revised model will serve to stimulate additional research, thought, and critique.

Where Do We Go From Here?

Given that there are mixed views of SDL but with my strong belief in individualized instruction's value, where do we go from here? Here are my initial ideas of what to do next, and I welcome dialogue from readers of this article:

- An obvious suggestion is to note that we need more research on teaching in relation to SDL. The annual International Self-Directed Learning Symposium and the *International Journal of Self-Directed Learning* have been venues for presenting such research. However, it is my hope that this article will stimulate additional thinking, research, and scholarship, even in other venues, related to individualizing the instruction process.
- I encourage every person who already teaches or plans to teach adults to develop a statement of personal philosophy if they have not already done so. In addition to the references noted earlier pertaining to the process of doing this, several examples of such statements can be found at: <http://www-distance.syr.edu/ethics.html>.
- I encourage authors and presenters at the International Self-Directed learning Symposium and other research reporting venues who are doing SDL research to think about and include within their work various implications for teaching that emanate from their research.
- I encourage professors teaching adult learners to find ways of including aspects of SDL and individualizing the instruction process within their teaching efforts.
- Finally, I encourage those who have ideas about instruction counter to what I have presented to share their ideas in journals, online publications, and at future national and international meetings so we can have more debate and dialogue on this topic.

Francom (2010) provides four principles for helping adults better transition to taking on more responsibility for their own learning that provide an appropriate ending for this article. They are as follows:

1. Match the level of self-directed learning required in learning activities to student readiness.
2. Progress from teacher to student direction of learning over time.
3. Support the acquisition of subject matter knowledge and self-directed learning skills together.
4. Have adults practice self-directed learning in the context of learning tasks. (pp. 33-36)

In essence, faculty who desire to enhance the abilities of their adult learners to take increasing responsibility of and for their own learning have the skill to create an effective environment in which this can happen. In the long run they will help to foster adults who are better able to make choices, develop improved learning skills, and become more effective lifelong learners.

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