2013

Are young professionals engaging in self-planned learning projects? Twenty-first century implications for self-directed learning among post-four-year undergraduate students

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In partial fulfillment of the requirements
for the degree of
Master of Education

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December 2013

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This Master's Thesis submitted for the degree of Master of Science in General Education by

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Acknowledgements

This thesis project is full of support and encouragement from family, friends, and faculty at Le Moyne College, especially my advisor, Dr. Roger Hiemstra.

A very special thanks to my parents for all of the cheers, encouragement, and patience while I navigated through my own post undergraduate years in search of a meaningful research topic as well as for leading by example and showcasing the enormous possibilities of true life-long learners.

Also, sincere gratitude to Dr. Hiemstra for introducing me to the concept self-directed learning and always recognizing and motivating me to reach my full potential throughout my coursework and all future endeavors.

Abstract

The combination of 21st century technological advancements and globalization has dramatically increased the rate at which information is available to the individual adult learner. Furthermore, the "knowledge society" in which we currently live demands that adults participate in lifelong learning in order to survive professionally, personally, and socially. Recent research has identified self-directed learning as a feasible vehicle for navigating 21st century complexities; however, there is limited data on the specific population that includes the post-four-year undergraduate student. The purpose of this study is to determine if young professionals are taking a self-directed approach towards identifying their learning needs, planning learning goals, and following through with learning initiatives to enhance their personal and/or professional development. The qualitative study surveys a group of 11 post-four-year undergraduate students who have obtained bachelor degrees. The study was conducted using Allen Tough's (1971) Learning Project Interview Protocol which includes probing questions that help the participant think across the span of a 12 month period about a variety of projects that could be deemed as learning projects. Accompanying the protocol is a survey that further assesses the attitudes that young professionals have toward the value of self-directed learning in the 21st century. The culminating study provides implications for encouraging and improving self-directed learning among the researched population in undergraduate programs and organizational environments.

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Chapter 1: Introduction

That *we are living in a learning society* is a concept I continuously read about, experience, and discuss as both a graduate education student and young professional working towards personal and professional development. In fact, it was during my first course focusing on adult education that I became familiar with the concept in Merriam, Caffarella, and Baumgartner's (2007) text:

> Educators, employers, and society at large are focusing attention on developing the skills needed to be productive and informed members of a fast-changing and highly technical society. With the erosion of boundaries in the content and provision of adult learning, we may be witnessing the emergence of what has been called the *learning society.* (p. 25)

What exactly does this notion mean and what are the 21st century implications for a growing population of adult learners trying to use their ability to learn as a catalyst for personal change and growth?

As I navigate through my graduate program and young adulthood, I continue to search for my place in the world while trying to answer that infamous question pondered by adults of all ages – *What do I want to be when I grow up?* I have noticed a pattern in the dialogue that develops when I look for insight towards a personal conclusion. Peers in their mid-late 20's, colleagues who have decades of industry experience but are ready to try 2nd or 3rd careers, and relatives who are nearing retirement but anticipate their increased longevity are similarly exploring new personal or professional pursuits. Conversations are simultaneously full of excitement, optimism, frustration, and hesitation. Based on the diversity in career opportunities combined with the competition to obtain desirable positions in today's job market, it is not surprising that discussion on the topic elicits such a range of emotions.

Although adult education is a diverse field, encompassing a wide range of learners, learning goals, facilitators, programs, and learning environments, there is a common and consistent thread evident across the spectrum of adult learners that emphasizes the importance in exercising our abilities to be lifelong learners. Rapid technological advancements and globalization in the 21st century are connecting adults professionally, socially, and individually to each other and surrounding environments in ways that were previously unimaginable – strengthening and drawing attention to the concept of lifelong learning (LLL). Furthermore, as we become aware of what others around the world are doing, individuals across the spectrum of adulthood are expecting more from themselves.

The anticipated uncertainty, constant change and flexibility in learning opportunities that exist within the 21st century have increased research and discussion examining the feasibility of self-directed learning (SDL) as a means for adults to keep up with the demand for constantly acquiring and updating knowledge while experiencing personal and professional growth. Within the literature focusing on SDL as a central theme, there appears to be a generation gap in the researched audiences. Noticeable attention has been given to older adults in upper management positions, post-retirement years, and graduate programs. However, studies reflecting the feasibility in utilizing SDL as a post four-year undergraduate student to transition into the role of a young professional in adulthood are limited.

As longevity continues to increase, older adults are beginning to push off their anticipated retirement. This implies that many of the seventy million baby boomers born between 1946 and 1964 are still occupying jobs that professionals from younger generations are waiting to fill (Merriam, Caffarella, & Baumgartner, 2007). Consequently, this could impact the availability of entry and mid-career level positions available to the emerging group of young professionals.

Furthermore, the number of four-year undergraduate students completing a bachelor's degree is on the rise. According to data collected by the United States Census Bureau (2012), throughout the 21st century there has been an increase in earned bachelor's degrees. Many undergraduate students are transitioning into professional positions that are not necessarily related to their area of study, suggesting a constant need for LLL starting in young adulthood. Additionally, with the large pool of bachelor's degree holders in the job market, hiring managers have greater opportunity to be selective with potential candidates further indicating that those actively engaged in SDL have added value.

For the post four-year undergraduate student, trying to determine how to best market one's self along with acquiring new skill-sets to improve one's standing with prospective employers can be a challenge. Additionally, determining which types of employers and organizations would make a good, personal fit can be overwhelming. As a young adult, for me this is an area where lifelong and self-directed learning have taken on real personal meaning. Professional and personal development is a perpetual process and with today's immediate access to resources and an array of learning opportunities, SDL has become a viable vehicle for individual's that strive to reach their full potential as adult learners.

Exercising a self-directed skill set as a young professional to navigate 21st century complexities is beneficial for both short and long term individual success. Therefore, a thorough examination focusing on this underrepresented population in the area of SDL is crucial. More specifically, further research regarding the feasibility of utilizing SDL for a post-four-year undergraduate student to transition into both the workforce and adulthood will be a valuable contribution to the development of this population.

Statement of Purpose

Therefore, the purpose of this study is to determine if young professionals are taking a self-directed approach towards identifying their learning needs, planning learning goals, and following through with learning initiatives to enhance their personal and professional development. It is a qualitative study involving interviews within a group of 11 post four-year undergraduate young professionals aged 24-30 who obtained bachelor's degrees in the Northeastern United States. Although the increase in and flexibility of learning opportunities has attracted adult learners across a wide range of ages to participate in four-year undergraduate programs, I selected the age range of 24-30 to represent a general group of young professionals who are commonly transitioning from an educational environment to a professional environment.

The study was conducted using Allen Tough's Learning Project Interview Protocol (Tough, 1971). Tough's protocol was designed to focus on individuals engaged in self-teaching projects and reveal the extent to which self-teaching projects are part of an individual's total range of learning projects. The protocol includes probing questions that help the participant think across the span of a 12 month period about a variety of projects that could be deemed as learning projects. The specific format of the protocol is structured to inquire about the project's content, length, current involvement, reason for project, director (facilitator) of learning, and source of subject matter. The intention of utilizing Tough's protocol is to determine if young professionals are taking a self-directed approach in expanding their personal and/or professional development and to see if there is a trend across any aspect of the protocol's questions. Accompanying the interview is a set of additional questions to further assess the attitudes that young professionals have toward the value of self-directed learning in the 21st century, their readiness to be self-

directed learners based on educational background, experiences, and work environment, as well as their views toward SDL in fulfilling future LLL goals.

Research Questions

Research questions addressing SDL discussed in the literature review and throughout my study are as follows:

- Are young professionals intentionally using SDL as a means for enhancing personal and/or professional development?
- In what ways have rapid technological advancements and globalization influenced the types of resources as well as the rate at which adult learners are seeking new knowledge?
- Could undergraduate programs and organizational environments better encourage young professionals to develop and utilize SDL for professional and personal development?

Significance of the Study

This study has significance as it works towards understanding the familiarity that a sampled group has with SDL in their personal and professional development. The overall data reveals implications for formal undergraduate facilitators and organizational managers as to if and how they can adjust their instruction to encourage the utilization of SDL. Results also indicated that researchers should further investigate this population group. Finally, this brings awareness to young professionals holding a bachelor's degree that SDL is a feasible way for improving their standing with employers, self-awareness, and life chances.

Chapter II: Review of the Literature

The combination of rapid technological advancements and globalization in the 21st century has changed the landscape of adult learning. Information is readily available at our fingertips and accessible in a multitude of ways. Learning and educational opportunities are offered in a variety of formats, providing flexibility for a wide-range of individuals to take advantage of such opportunities. Although learning has been a part of our way of life since the inception of time, the demand for knowledge that exists in our present global society is more apparent now than ever. As Merriam and Brockett (2007) pointed out, "the split between learning and living is no longer clear-cut" (p. 88). As a result, "Adults find that they must continue their learning past formal schooling in order to function at work, at home, and in their communities" (Merriam, Caffarella, & Baumgartner, 2007, p. 2).

The concept of LLL has surfaced in the literature as a necessity for experiencing continuous personal and professional development. Whether adults are consciously or subconsciously adapting and practicing this mentality, there is an increase in learners who are taking on and following through with learning initiatives, frequently due to work related or personal motives. More specifically, adults often are taking a self-directed approach to keeping abreast with the present day demand for acquiring new and updated knowledge. According to Merriam and Brockett (2007), "Self-directed learning, however defined, is the most frequent way in which most adults choose to learn" (p. 140). Furthermore, Guglielmino, and Guglielmino (2011) summarized it this way:

> 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. (p. 39)

Although the use and necessity for SDL as a viable 21st century tool for professional and personal development is increasingly gaining attention, there is still a lack of awareness among the adult population regarding the concept. Additionally, although experts in the fields of education and human resource development have increased and expanded research relating to SDL, there is a distinct population gap in the data. There is a large and growing population of post-four-year undergraduate students who have obtained their bachelor's degree and are experiencing difficulties navigating 21st century complexities while transitioning into the role of a young professional. Research aimed at this population is very limited.

The following review of literature examines the feasibility in utilizing SDL in the 21st century for professional and personal development. To begin, the rapid technological advancements and globalization that affect our present learning society will be discussed. This will help frame the following section on what it means to be a lifelong learner in the 21st century and how this connects to SDL. Following is a more detailed exploration of why adults, employers, and facilitators of adult education are turning to SDL. This will transition into an examination of how SDL is integrated into professional development specifically related to workplace learning and a connection will be made to personal development. Finally, the chapter concludes with the implications of the culminating review for post-four-year undergraduate students transitioning into the role of a young professional.

Implications of Technology and Globalization for Lifelong Learning

The motivation behind the how, what, and why of learning engagements is heavily influenced by society at large. In the 21st century, our present day society is highly affected by

technological advancements and globalization. It is with the combination of these contributing factors that our global society has been deemed a knowledge society. Existing in a society that is known for its emphasis on and requirement to update knowledge at a rapid pace is engaging more adults in LLL initiatives. Guglielmino and Guglielmino (2011) discussed the impact changing technologies and globalization has on learning:

> 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. (p. 29)

Technology. It is widely agreed upon by industry experts and cited within an abundance of research that on-going technological advancements and improvements are increasing the expectancy to which we, as a global population, obtain knowledge. In a study conducted by Holt and Brockett (2012), they directly address this, calling for a "revolution in education and learning" (p. 2075). Merriam, Caffarella, and Baumgartner (2007) discuss in depth the degree to which technology has impacted society and adult learners. As a result of technology advancements, they explain that as a society, we have experienced an "information explosion." This explosion of information has changed both society as a whole and the daily lives of all individuals. A wide spectrum of basic tasks to more complex tasks is constantly being altered. "Within a short span of time, electronic, communication, and information technologies have changed society as a whole and affected how people go about their daily lives" (Merriam, Caffarella, & Baumgartner, 2007, p. 17). It is a result of these regular, yet often unpredictable, changes that adults have naturally begun to increasingly accept LLL as a part of their way of life.

While advanced technological capabilities have triggered a demand for acquiring knowledge, these same advancements have created a means for accessing learning opportunities through flexible delivery. As Merriam, Caffarella, and Baumgartner (2007) illustrate, "Computer assisted instruction, teleconferencing, interactive videodisk, the Internet, and the World Wide Web are expanding the possibilities of meeting the growing learning needs of adults" (p. 20). Further examples provided by Mishra, Fahnoe, Henriksen, and the Deep-Play Research Group (2013) include YouTube videos and free access to university courses. With access to learning opportunities bountiful, "Successful thinkers must be able to manage this complexity, solve problems with innovative solutions, and network in a diverse global environment" (p. 10).

As I have discussed, rapid developments in technology is flooding the globe with a demand to acquire knowledge for both professional and personal survival. The resources for navigating 21st century complexities are available and plentiful; the real question is how and if adult learners are thoughtfully considering which resources are most beneficial for reaching maximum potential. I will continue to investigate this question through the following sections of the literature review.

Globalization. With the development of high tech means for communication, collaboration, and transportation, individuals and organizations around the world are faced with the opportunity and need to connect, interact, and work with each other in ways that were previously unimaginable. Earlier, I referenced the idea of technology innovations creating an information explosion. Globalization is largely responsible for the growth of this information society (Glastra, Hake, & Schedler, 2004). Although globalization is a combination of many current, contributing factors, all of which have implications for adult education and learning, for this review I have focused on globalization's connection to technology communication and

economic gain. From this regard, Glastra, Hake, and Schedler (2004) describe globalization as a key facilitator in providing information instantaneously with no regard to quantity, time, or place. With no restrictions to obtaining information, nation-states, organizations, and individuals are constantly competing with one another to stay updated on rapid changes in unstable and local environments.

Also heavily infiltrated by globalization's relationship to technology communication and economics is the organizational environment. Globalization has serious implications for LLL in the workplace which ties to professional development. I briefly introduce the relationship in this section and return to it in more detail supported by empirical research in the following sections. According to Merriam, Caffarella, and Baumgartner (2007), "Global economics has led to changing work practices, which require different kinds of preparation and training" (p.13). Both adult education and human resource development have been faced with the challenge of rethinking how to address the evolving needs of employees to participate in training and development programs in order to stay updated and at pace with the organizational environment. Furthermore, Merriam, Caffarella, and Baumgartner (2007), convey the implications for work-related training and learning:

> Already the amount spent annually by business, industry, and government agencies on job-related training is in the billions of dollars and exceeds that spent on public higher education. Furthermore, because skills learned in preparation for a job or career cannot keep pace with the demands of the world of work, the ability to learn becomes a valuable skill in and of itself. (p. 15)

Twenty-first century technological advancements and globalization have no doubt, set the stage for LLL. As longevity continues to increase, adults must prepare themselves for decades of

learning, recycling knowledge, and renewing skills essential to professional and personal survival. There is no escaping the need to operate as a lifelong learner. Jongbloed (2002) puts it well, “Lifelong learning is a manifestation of the unpredictability, heterogeneity and individualization in the global, information-driven knowledge economy” (p. 419).

Then, why is it both feasible and necessary for adults to utilize their self-directed abilities for continuous professional and personal development in a society where LLL is crucial?

Lifelong Learning Implications for Self-Directed Learning

With the constant demand for acquiring knowledge and learning new skills combined with an increasing expectation to want more from ourselves both personally and professionally, it is undisputable that adults of all ages will be faced with a need to participate in LLL. Jarvis (2011) simply puts it, “Lifelong learning emphasizes that we are able to learn throughout the whole of our life spans and that we need to keep on learning in order to keep abreast with the developments in contemporary society” (p. 117). However, as individuals transition through the phases of adulthood, they are met with multiple responsibilities, commitments, and challenges. The adult’s ability to take personal responsibility for identifying, initiating, and following through with learning goals will provide flexibility in achieving set goals. This flexibility could enhance their commitment to LLL, problem solving, and facing unpredictable challenges with resiliency. The concept of SDL is framed by the idea of taking personal responsibility for learning. Although numerous definitions of the concept have been developed, for this review I will go by Knowles (1975) definition:

> In its broadest meaning, ‘self-directed learning’ describes a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning,

> choosing and implementing appropriate learning strategies, and evaluating learning outcomes." (p. 18)

The unpredictability and constant change of our present-day society has affected adults by causing uncertainties in both their work and personal lives. Seizing the opportunity to take personal responsibility towards continuous learning is a solution to managing unpredictability, overcoming set-backs, and prevailing in times of adversity (Caffarella, 1993). As society changes, adults are more commonly expected to shape their own future (Evans, Schoon, & Weale, 2013). When personal responsibility is taken by utilizing SDL, adults gain greater control of their destiny (Brockett & Hiemstra, 1991, p. 27). Similarly, LLL can serve as a tool for helping individuals to improve their life chances, especially during times of transition to create positive outcomes (Evans, Schoon & Weale, 2013).

LLL is inevitable. It is necessary in guaranteeing individual functionality in all aspects of life. An expert in SDL, Lucy Guglelmino, stresses this:

> The almost incredible volume of new information production is accompanied by vast changes in technology, globalization, social norms and systems—in virtually every area of life. In a world of unprecedented proliferation of information and technology, instant worldwide communications, and intense global competition, lifelong self-directed learning is now, more than ever, a necessity for survival. (2008, p.4)

As supported by the research, SDL is a viable option for following through with LLL pursuits. The following section explicitly examines specific groups in the adult population who are using SDL to enhance their personal and/or professional development.

Self-Directed Learning for Professional and Personal Development

As suggested by empirical research, SDL is an effective and realistic way to keep up with the changing demands of the 21st century (Davis, Bailey, Nypaver, Rees, & Brockett, 2010; Guglielmino, P. & Guglielmino, M., 2011; Guglielmino, P., Guglielmino, L., & Long, 1987; Holt & Brockett, 2012; Kranzow & Hyland, 2009; Maung, Abas, & Abdulla, 2007). Results from multiple studies examining the feasibility in using a SDL skill-set to improve particular aspects of life including professional and personal performance have been recorded.

An increase in studies has been conducted examining the necessity for SDL in workplace learning and formal education programs of graduate study. These studies have correlated positive, high performance results in relationship to individuals who display strong SDL skills.

Formal education programs. As technological advancements and globalization are shifting societal patterns in learning, the entire field of education, including formal, non-formal, and informal programs and institutions will need to adjust in order to accommodate changing global demands.

Over three decades ago, Knowles (1975) proposed that being able to learn on one's own was a mandatory skill for life in society past formal education. In support of his claim, Knowles reiterates the importance in being able to continuously acquire new knowledge throughout the duration of one's life:

> When a person leaves schooling he or she [*sic*] must not only have a foundation of knowledge acquired in the course of learning to inquire but, more importantly, also have the ability to go on acquiring new knowledge easily and skillfully the rest of his or her [*sic*] life. (p. 17)

Since Knowles's 1975 book was published, his discussion on learning how to learn while developing the skills to be a sufficient self-directed learner past formal schooling has become increasingly more important. As the 21st century continues to demand more research exploring how to empower individuals through SDL, studies examining this in a formal education setting have been conducted.

Through a literature review, Zsiga and Webster (2007) shed light on Knowles theory of learning how to learn through SDL. They recognize a need and expectation for adults to exercise self-direction in the workplace for success both nationally and globally. In order to assist adult learners in enhancing their abilities to utilize a self-directed skill-set for lifelong learning, Zsiga and Webster propose that secondary educators should incorporate SDL into their curriculum. Additionally, they suggest that change in instruction is needed at the secondary level for teachers, administrators, and educational leaders to be able to shift their attention to teach students how to learn (p. 60).

By introducing students to SDL at the secondary level, they have a greater chance at taking responsibility for their own personal and professional development throughout adulthood. Zsiga and Webster (2007) make a good point that it takes practice and work for both the facilitator and student to become sufficient at teaching and learning through SDL (p. 62). An argument can be made that if educators and facilitators implement SDL into their formal curriculum, students will be more readily prepared to excel in adulthood.

The expanding diversity in how learning opportunities are offered has become another topic of interest for researchers studying the effectiveness of SDL. Knowles (1975) anticipated that the changing delivery and development of new curriculums, nontraditional study programs, external degree programs, and independent study would require students to have foundational

self-directed skills in order to be successful. Similarly, research has questioned the degree to which SDL is essential when incorporating technology advancements into education and learning programs, for example, distance learning (Guglielmino, 2008: Holt & Brockett, 2012: Mishra, Fahnoe, Henriksen, & the Deep-Play Research Group: 2013).

Davis, Bailey, Nypaver, Rees, and Brockett (2010) conducted a study to determine and evaluate the SDL projects of graduate students over a one-year span as well as better understand how technology advancements over the past three decades have impacted such learning projects. Methods included using Tough's Interview Protocol combined with updates made by the researchers in order to accommodate recent technological changes. A sample of 40 graduate students from education and nursing programs were interviewed and a total of 435 individual learning projects were reported. The overall gathered data indicated that participants completed 10.9 projects per year and 47.8% of the projects were self-planned. Of the total number of projects, 41.5% of the projects incorporated computer technology as a major source of information. The highest number of learner planned projects fell into categories of personal growth/change and hobby/avocational. Implications from this study suggest that as Knowles (1975) anticipated, there is a relationship between advanced technologies and SDL in the formal learning environment. Further research stemming from this study should investigate the potential for students to experience personal development through the combination of SDL and technology while meeting course objectives.

At the graduate level, students most often have already transitioned into adulthood and are working towards shaping some aspect of their professional career. Research has targeted this audience as prime candidates for investigating how SDL can enhance their development as graduate learners, professionals, and individuals. For example, Kranzow and Hyland (2009)

created a study to exemplify why and how higher education "culture" needs to evolve with 21st century students (p. 40). Action research was conducted in order to determine if a course designed around the setting of a professional conference could inspire graduate students to utilize SDL for professional development. Through the duration of the course, faculty members noticed students taking personal responsibility to plan for their involvement with the conference while networking with peers in the course concerning logistics. Overall, results indicated that students not only increased their self-direction as a result of the course, but had positive feelings towards taking the initiative to shape their personal and professional development goals (p. 48). The results from Kranzow and Hyland's (2009) action research provide evidence that students have the ability to adapt to changes in the formatting of formal coursework—it is up to institutions and facilitators to implement the needed changes.

Self-directed learning in the workplace. Today, more adults are engaging in some form of workplace learning. Many older adults are holding positions longer or trying 2nd and 3rd careers due to their anticipated increased longevity. As a result of technological advancements and globalization, the flexibility in how and where people access work, for example, the option of working remotely from home is making it possible for more adults to participate in the professional world. Due to recent innovations in flexible delivery of course offerings, distance training opportunities, and easy access to information, more adults are pursuing learning engagements to improve standing with employers and experience career growth.

Employers and organizations are especially beginning to recognize the need to for promoting SDL among employees to increase both efficiency and effectiveness. According to Barth (1997) (as cited in Guglielmino, 2008), in the late 1940's, 75% of what was learned during high school would be enough to maintain employment until retirement. Fifty years later the

figure plunged to 2% and today it is at an estimated 1%. These dramatic figures affect the rate at which human resource trainers and developers can respond by designing and delivering instruction adequate to meeting employee learning needs. As a result, Guglielmino and Guglielmino (2008) suggest that "Formal education and training are now only the beginning of learning; each individual must continue to learn in order to remain effective" (p. 294).

Addressing the implications for SDL in the workplace, Guglielmino, Guglielmino, and Long (1987) conducted a study using the Self-Directed Learning Readiness Scale (SDLRS) to determine the relationships between job performance and SDL readiness. Researchers sampled 753 managers and non-managers from a large US utility company who were attending training courses in 1981. The collected data were used to determine self-directed readiness connected to six variables: job performance, level of management, gender, educational level, age distribution, and race. The analysis of data revealed that high SDLRS scores were strongly related to high levels of job performance. Additionally, individuals who indicated that their jobs required high levels of creativity and problem solving displayed outstanding SDLRS performance scores compared to other respondents.

Oliveira, Silva, Guglielmino and Guglielmino (2009) conducted a study that was intended to look at self-directed readiness from a cross-cultural perspective. The main purpose of the study was to identify the SDL readiness of managers and non-managers with top companies in business and industry from Portugal. Data were then compared with scores found in previous studies to conduct a cross-cultural analysis. A list of hypotheses was developed to test on the Portuguese sample using a non-experimental, correlation research design. Participants included 145 professionals (68.3% were managers and 31.7% were non- managers) who were instructed to respond to a Portuguese version of the Self-Directed Learning Readiness Scale. Overall, the

findings from this study were fairly consistent with those of similar North American studies displaying that high SDLRS scores are crucial for dealing with the 21st century complexities and changes that will continue to impact the globe. Findings from this study gave empirical evidence for the association between SDLRS scores and levels of performance, creativity, and level of education. These findings also contribute to the implications that fostering SDL in organizations as well as in higher education will be beneficial to the individual, company, and institution as a whole.

As organizations and employers are beginning to place more value on the employee's ability to operate as a self-directed learner, the employee simultaneously is being provided with an opportunity to use SDL in workplace learning to shape personal development. This idea is prevalent in the work of O'Donoghue and Maguire (2005) and Evans, Schoon and Weale (2013).

O'Donoghue and Maguire (2005) examined the relationships between the individual, LLL, the workplace, and employability. Findings generated through Ireland's Programme for University Industry Interface's (PUII) perspective were used to determine how growing 21st century complexities and issues that challenge both individuals and organizations can be met through a LLL approach. Based on the PUII's findings, O'Donoghue and Maguire (2005) suggest that the global knowledge society has strong implications for lifelong, self-directed learning tied to both organizational and individual success. In order to connect professional development to personal development, individual responsibility in learning is a must:

> A lack of security of employment puts the onus on the individual to take control of future employability. Individuals need to take responsibility for their own personal development, take ownership of their own employability and view their career in terms of wider employability across industries and sectors…The more scope individuals have, the

> more opportunity they in turn will have to drive their own development and learning in the areas that support their individual goals. (O'Donoghue & Maguire, 2005, p.442)

SDL in this sense will assist adults in evolving and transferring skills once developed for specific employability to new future opportunities. As O'Donoghue and Maguire (2005) point out, in a "knowledge economy," (p. 442) lifetime employment is no longer probable. If individuals are able to take responsibility for their own learning through lifelong, self-directed initiatives and maintain self-motivation, they can experience stronger control of their personal development and employability across a variety of industries.

Evans, Schoon, and Weale (2013) also make a connection between professional and personal development. Authors reviewed and analyzed various data from research to highlight the benefits of LLL in making transitions during young adulthood and influencing life chances. It was suggested that young adults transitioning from school to work environments are experiencing uncertainty and a prolonged period for establishing themselves in the labor market (p. 27). This suggestion is further implied by Beck (1992) and Giddens (1991) (as cited in Evans, Shoon, & Weale, 2013):

> Recent socio-economic changes, especially changes in education and labor market opportunities, place increasing demands on young people's initiative and ability to navigate possible options and multiple demands. While until 30 years ago individual lives were supposed to be more strongly shaped by structural forces such as social class, gender and ethnicity, it has been argued that young people are now increasingly expected actively to shape their own destiny. (p. 30)

A strong connection can be made here between self-directed, lifelong learning related to improving employability as well as increasing both immediate and future opportunities for young adults transitioning into the role of a young professional while navigating through adulthood.

Recent research exploring the feasibility in using SDL to enhance personal and professional development is favorable. The majority of this research considers older adults, mid-career level adults, and adults participating in graduate programs. Evans, Schoon, and Weale (2013) bring attention to the difficulties young professionals are experiencing transitioning from the educational environment to the role of a young professional. With time, the post-four-year undergraduate population will transition into roles of the graduate student, mid-career professional, and the post-retirement older adult. It will be beneficial to focus more research relating to this specific population. The following section addresses the need for further research on and a deeper introduction to the concept of SDL among post-four-year undergraduate students holding bachelor's degrees.

The Post-Four-Year Undergraduate Student and Self-Directed Learning

Throughout the literature review thus far I have examined the research exemplifying not only the need, but demand for lifelong, self-directed learning in adulthood. More specifically, I have drawn positive connections between SDL and perpetual professional and personal development. The majority of the research has focused on adults who have already entered either one or more professional environments or are working their way through a graduate program of study. However, individuals who fit the category of the post-four-year undergraduate student seem to have been overlooked for the most part. These individuals are at a unique stage in their lives as they are no longer a part of the formal education environment, yet are experiencing frustration trying to make the transition into the workforce.

As the substantial transition from school to work is taking longer than anticipated and often not translating into the focus of one's undergraduate study, young professionals are having a difficult time focusing on their personal development as they move into adulthood while determining a professional path to embark on. Arnett (2000) and Shanahan (2000) (as cited in Evans, Schoon, & Weale, 2013) identify this trend:

> It has been argued that life course transitions, such as making the step into economic independence, have become more variable and less uniform; that the transition into employment has been prolonged; that it takes longer for young people to establish themselves in the labour [*sic*] market than was the case thirty years ago (p. 27).

While the job market is becoming more competitive and undergraduate coursework, although important, is not necessarily enough to land a job, especially that matches with individual values and motives, young professionals will need to be more creative with how they market themselves to employers. Data collected by the United States Census Bureau (2012) revealed an increase in four-year college degrees obtained by both males and females through the 21st century. In 2000, 530,000 males and 708,000 females earned bachelor's degrees. By 2009, 613,000 males and 826,000 females completed bachelor's degrees. Based on the steady increase in bachelor's degrees obtained each year between 2000 and 2009, it is probable that the numbers will continue to show a steady increase throughout the 21st century. As the workforce gains more four-year college graduates, there will be greater competition for filling entry level and professional positions. The ability of young professionals to take a self-directed approach to develop skills, knowledge, and experience critical to landing certain positions could assist them in improving their individual marketability with employers. As the job market becomes more competitive, it could be beneficial for young adults making the transition into the workforce or

transitioning between positions to be familiar with the concept of SDL and possess the confidence to exercise self-direction in enhancing their professional and personal development.

Further evidence that suggests more attention needs to be given to the post-four-year young professional crowd in relation to SDL is apparent in a lengthy survey conducted by the Partnership for 21st Century Skills (2006) in collaboration with four participating organizations. The 2006 survey determined and rated the importance of 20 basic knowledge and applied skills areas that employers thought were necessary for new entrants to experience job success. Four hundred thirty-one employers represented over 2 million U.S. based employees. Employers responded on behalf of new job entrants from three educational levels – high school diploma, two-year college or technical school diploma, and four-year college diploma. The survey's findings indicated that applied skills were most highly valued by 21st century employers and of the 11 identified important applied skills; lifelong learning/self-direction was among the list. The study determined that over the next five years (2006-2011), college graduates would continue to increase among new hires and 60% of companies anticipated an increase in four-year college graduate hires (p. 11). The analyzed survey data revealed that 78.3% of employers ranked lifelong learning/self-direction as a "very important" applied skill for job success (p. 21). Survey data was also organized to display percentages for four-year college graduate skill readiness in categories labeled "deficient," "adequate," and "excellent" (p. 14). Results showed that in the category of lifelong learning/self-direction, 14.3% of four-year college graduates ranked "deficient" for readiness, 59.8% ranked "adequate," and 25.9% ranked "excellent" (p. 34).

The findings determined by The Partnership for 21st Century Skills (2006) are somewhat predictable as suggested in Guglielmino's (2008) article: "Self-directed learning is our most basic, natural response to newness, problems, or challenges in our environment" (p. 2). The

59.8% of surveyed four-year undergraduate participants ranking “adequate” in self-directed learning skills could have been a reflection of them using their innate senses to respond to 21st century changes. However, with today’s ever-changing global landscape, it is imperative that young professionals transition from formal four-year undergraduate programs with an awareness of why exercising SDL is a viable tool for initiating their own professional and personal development as well as hold confidence and commitment in their abilities to identify, plan, and follow through with learning goals.

Summary

The 21st century will continue to experience changes caused by rapid technological advancements and globalization. Moving forward socially, professionally, and individually will be affected by our abilities to continue learning through adulthood. This review of the literature has indicated that self-directed, lifelong learning is a feasible means for adults to meet the learning demands of an ever-changing, complex society. Implications for SDL as an individual tool in enhancing perpetual personal and professional development have been revealed. Furthermore, research implying a positive experience with SDL among graduate education students and adult employees has been discussed. Evidence portrayed in the final section discussing the post-four-year undergraduate student suggests that developing a self-directed skill-set will have short and long term benefits throughout the course of adulthood. Additionally, it supports the hypothesis that the post-four-year undergraduate student could utilize a self-directed skill-set to experience a more personal and successful transition from the formal education setting to the professional setting. The following study addresses the population gap in the research that has not given substantial attention to the group of individuals experiencing

professional and personal difficulties in navigating the 21st century landscape after completing a four-year bachelor's degree.

Chapter III: Methods

As indicated in Chapter II, 21st century rapid technological advancements and globalization not only demand that adults participate in LLL, but provide the means and flexibility to do so. Inspired by 21st century implications for SDL, this project is designed to address the population age gap in previous research surrounding adult learners. The project examines if and how post-four-year undergraduate students are taking a self-directed approach towards identifying their learning needs, planning learning goals, and following through with learning initiatives to enhance their personal and professional development. Additionally, the attitudes that the surveyed group has towards the value of SDL in the 21st century, their readiness to be self-directed learners based on their educational background, experiences, and work environment, as well as their stance towards becoming stronger self-directed learners in order to fulfill future LLL goals was assessed.

For the purpose of this project, a qualitative research design was used to interview a group of 11 post-four-year undergraduate young professionals holding bachelor's degrees. Allen Tough's Learning Projects Interview Protocol (1971) was used to interview participants. Each participant fit the criterion of falling between the ages of 24-30 and having received their bachelor's degree from an institution of higher education in the Northeastern United States. These specific criterions were chosen to represent a general population of candidates commonly making the transition from a formal learning environment to a professional environment. The region of the Northeastern United States was chosen to maintain consistency across the interviewees.

The analyzed qualitative results of this project suggest if the sampled group members are using SDL to navigate personal and professional complexities faced in today's fast-paced,

changing, society. Detailed results provide evidence for further needed research in the area of SDL as a way for young professionals to shape their professional and personal development after exiting a formal learning setting. This project is beneficial as it is designed to inquire about contemporary issues facing the current field of adult education.

The Setting

The setting of this study was flexible. A convenient, quiet, and comfortable location was agreed upon between the interviewer and interviewee. In some situations, participants who resided in other cities and states were interviewed via Skype. Interviews that were conducted via Skype followed the same process as those conducted in-person. Prior to each interview, the participant was informed that there would be no reimbursement for traveling and time. Participants were chosen strictly on a voluntary basis.

The Participants

The participants in this study ranged in age from 24-30. The highest level of education completed by each participant is a bachelor's degree from an institution of higher education located in the Northeastern United States. Participants were first recruited by an e-mail that described the researcher's background as a Master's candidate, an overview of the thesis project, what their role as an interviewee would be, and why they were being reached out to as potential candidates. Recipients were asked to consider what had been presented to them in the e-mail and were provided with contact information to reach out to the researcher directly with questions or concerns. The majority of candidates who were reached out to responded quickly, expressing interest in the subject matter and excitement in volunteering as an interviewee. Table 1 provides participant information including their age, institution of higher education attended, bachelor's degree obtained, and current professional position.

Table 1: Participant Information

Participant	Age	Higher Education Institution & Graduation Year	Bachelor's Degree Obtained	Professional Position
Participant #1	25	Siena College '09	B.A. in Political Science	Contract Administrator
Participant #2	26	Ithaca College '09	B.A. in Speech Communication	Benefits Administrator
Participant #3	26	Siena College '09	B.A. in Psychology	Manager of Office Services
Participant #4	26	Siena College '09	B.A. in Political Science	Dental Assistant/Coordinator
Participant #5	26	Ithaca College'09	B.A. in Sports Management	Account Executive
Participant #6	24	Nazareth College '11	B.A. in Communication and Rhetoric	Account Executive for Marketing and Advertising
Participant #7	26	University of Albany '08	B.A. in Communication and Rhetoric	Freelance Web Marketing, Associate at Pottery Barn
Participant #8	26	SUNY Cortland '09	B.S. in Business and Economics	Association Analysis
Participant #9	26	SUNY Oswego '09	B.S. in Business Administration	Operations and Logistics
Participant #10	30	Dartmouth College '05	B.S. in Economics	Market Analysis
Participant #11	28	Dartmouth College '08	B.A. in Linguistics	Manager, Finance

Instruments Used

The primary instrument used in this study was Tough's Learning Projects Interview Protocol (1971). The interview protocol was designed to focus on individuals engaged in self-teaching, or self-directed projects, also known as learning projects. For the purpose of this study, the definition of learning is taken from Hiemstra (1976) and described as follows: "The acquisition of knowledge, attitudes, or skills and the mastery of behavior in which facts, ideas, or concepts are made available for the individual's use" (p. 333). Furthermore, Tough (1971) specifically explains the term *knowledge and skill* with the following description:

> The term *knowledge and skill* includes any positive or desired changes or improvement in a person's knowledge, understanding, awareness, comprehension, beliefs, ability to apply, ability to analyze, and synthesize, ability to evaluate, judgment, perceptual skills, physical skills, competence or performance, response tendencies, habits, attitudes, emotional reactions, recall, awareness, sensitivity, insight, confidence, patience, and self-control, and /or some other personality characteristic, inner behavior, or overt behavior. (p. 8)

The extent to which learning projects are used by the individual to achieve desired change and improvement were revealed through extensive dialogue and recorded with detailed notes during the interview process.

The interview protocol includes probing questions that help the participant think across the span of a 12 month period about a variety of learning efforts that could be deemed as learning projects. The original protocol was structured to inquire about the project's content, length, current involvement, reason for project, director (facilitator) of learning, and the source of subject matter. For this study, minor updates were made to the protocol in order to fit 21st century technological changes that could influence learning projects. Similar to a recent study by Davis, Bailey, Nypaver, Rees, and Brocket (2010), the use of internet and web-based learning have been added to the updated interview schedule. Only learning projects that were approximated to total a minimum of seven hours were used in the analysis of data.

Three supplemental sheets were used to guide interviewees through the recollection process of learning projects. Sheet one provided detailed questions for helping the interviewee recall a variety of projects. Sheet two helped the interviewee determine the length of each project

and how actively they were engaged. Sheet three assisted the interviewee in determining the director of their learning project. Appendix A includes a copy of the implemented protocol.

After each participant was introduced to the concept of SDL through the interview process and had a chance to identify personal self-directed projects throughout the past year, a brief survey was administered. The five question attitude assessment scale, designed by me, was created to measure the participant's confidence in their ability to plan and execute a self-directed learning project, the extent to which SDL could enhance personal development, the extent to which SDL could enhance professional development, the extent to which improving one's ability to function as a self-directed learner could expand their range of experiences, and their confidence towards the potential long-term benefits of establishing a self-directed skill-set as an undergraduate student. The survey was inspired by Lucy Guglielmino's *Self-Directed Learning Readiness Scale (SDLRS)* (1977). The *SDLRS* is a detailed survey that measures the variety of attitudes, skills, and characteristics that indicate an individual's strength and readiness in managing their own learning. The short survey used in this study (Appendix B) reveals the attitudes and confidence that the sampled group has towards SDL as a tool for enhancing life chances in adulthood while providing implications for further research.

Prior to conducting interviews with the 11 participants, a pilot test was administered to one individual. This person was a 26 year-old female holding a bachelor's degree from Villanova University. Because this participant is in the process of completing her master's degree, she was not an eligible candidate for the actual study. The pilot test was administered to check the interviewee's comprehension of the probing questions used to help identify learning projects. Although the protocol functioned as it was intended to, insight from the pilot test was noted and implemented into the interview process. It was determined that participants would need to be

informed that the duration of the interview could take up to two hours. It was also determined that prior to starting each interview, it was helpful to remind participants that there were no right or wrong responses nor standard number of learning projects they were expected to have completed. Lastly, it was found that providing a few examples of learning projects that an individual might engage in over 12 months was useful in helping them understand that any type of project whether personal or professional was acceptable for discussion. Examples of learning projects that were provided prior to the start of each interview included learning to improve your physical and mental health, learning about personal finances, and seeking out professional and social networks in order to connect with and learn from like-minded individuals.

Accompanying the gathered information is a participant profile including the following data: age, gender, college/university attended, year of graduation, degree obtained, and current professional title. Specific learning projects identified with Allen Tough's protocol were noted as well as any additional dialogue that was triggered while discussing the participant's transition following completion of their bachelor's degree. Table 2 provides the format I utilized to enter the obtained information for each project. Each interview protocol and survey assessing attitudes towards SDL was saved in a folder created for each participant. Following completion of the interview process, the gathered information was organized and analyzed for patterns and results.

Table 2: Learning Project Information

Learning project name and number:	
How was it learned:	
Number of hours:	
Activity:	
Reason for project:	
Director of learning:	
Source of subject matter:	
Do you consider this to be a self-directed project:	
Personal or professional development:	

Data Analysis

For confidentiality purposes, each participant was assigned a number and referred to as "Participant #" for all data analysis. Participant responses during the interview conducted with Tough's Interview Protocol were typed in order to reference and recall specific details during the data analysis. Once the interview process was completed, the recorded data was reviewed in depth to collect a general, overall sense of where participants stood in relationship to SDL. Patterns reflecting a consistency in reasons for learning projects, director of learning projects, and the source of learning projects were categorized. In addition, the actual number of learning projects for each participant was tabulated and organized into three groups: personal development, professional development, and both personal and professional development. Participant familiarity with the concept of SDL prior to the interview was also noted. Data were then coded and organized in a table to summarize findings.

The same participant confidentiality was maintained for the 5 question survey assessing attitudes towards SDL. Data were organized and reflected in a second table. Results were analyzed to determine suggestions for future research as is discussed in Chapter V.

Chapter IV: Findings

Overview

The purpose of this study was to examine if and how young professionals aged 24-30 who have completed a bachelor's degree are using SDL to experience personal and professional development while navigating 21st century complexities.

Through up to 2-hour interviews conducted using Tough's Learning Projects Interview Protocol (1971), a variety of probing questions helped participants recall a wide range of learning projects they have engaged in over the past year. Participants discussed the information displayed in Table 2. As the interviewer, I was particularly interested in whether the learning effort contributed to the individual's overall personal development, professional development, or both personal and professional development. The results from the interview protocol demonstrate the attempts that the interviewed population is taking through SDL to take personal responsibility for shaping their personal and professional development.

Prior to starting the interview, many of the participants commented that they were worried about disappointing me, the interviewer; because they believed their participation in SDL was low and their total number of reported learning projects would be minimal. By the conclusion of the interview, many of the interviewees found that they had taken part in more learning projects than suspected over the one year period and were surprised to find that although many of their learning efforts are intentional, in the moment, they often do not recognize these initiatives as self-directed attempts to obtain knowledge. Furthermore, many participants were surprised to find patterns in the things they choose to learn about and were able to draw connections between particular learning efforts, grouping them as one larger learning project. Often, participants agreed that a given learning project contributed to both their personal and

professional development, indicating that at this stage in life, the two areas may influence one another. Finally, most of the participants commented at some point during the interview that they could be doing more to take personal responsibility for initiating different learning projects that would enhance their personal and/or professional development. Talking through their learning efforts over the past 12 months seemed to be motivating for each participant in thinking about expanding current projects or creating new future projects.

Following the interview, each participant completed an attitude scale in SDL. They were asked to rate their confidence on a 5 point scale responding to statements regarding their abilities in and beliefs about using SDL as a vehicle for experiencing personal and professional development as well as improving life chances. Having completed the interview protocol prior to the attitude assessment scale helped participants reflect on how they value SDL. The confidence ratings from the attitude scale in SDL provide implications for further needed research in promoting and developing SDL skills in undergraduate programs and the workplace.

The following data correspond to the research questions outlined in Chapter 1:

- Are young professionals intentionally using SDL as a means for enhancing personal and/or professional development?
- In what ways have rapid technological advancements and globalization influenced the types of resources as well as the rate at which adult learners are seeking new knowledge?
- Could undergraduate programs and organizational environments better encourage young professionals to develop and utilize SDL for professional and personal development?

Are Young Professionals Intentionally Using SDL as a Means for Enhancing Personal and/or Professional Development?

Of the 11 interviewees, 87 reported projects were considered self-directed. Each participant averaged approximately eight SDL projects over the past year. A total of 52 learning projects were considered to contribute to the individual's overall personal development. On average, each participant reported approximately five learning projects that enhanced personal development. A total of 11 learning projects were considered to contribute to the individual's overall professional development. On average, each participant carried out approximately one learning project that enhanced professional development. A total of 24 learning projects were considered to contribute to both the individual's overall personal development and professional development. On average, each participant reported approximately two learning projects that enhanced both personal and professional development. Figure 1 illustrates the percentage of projects considered to be a contribution towards the individual's overall personal, professional, or both personal and professional development.

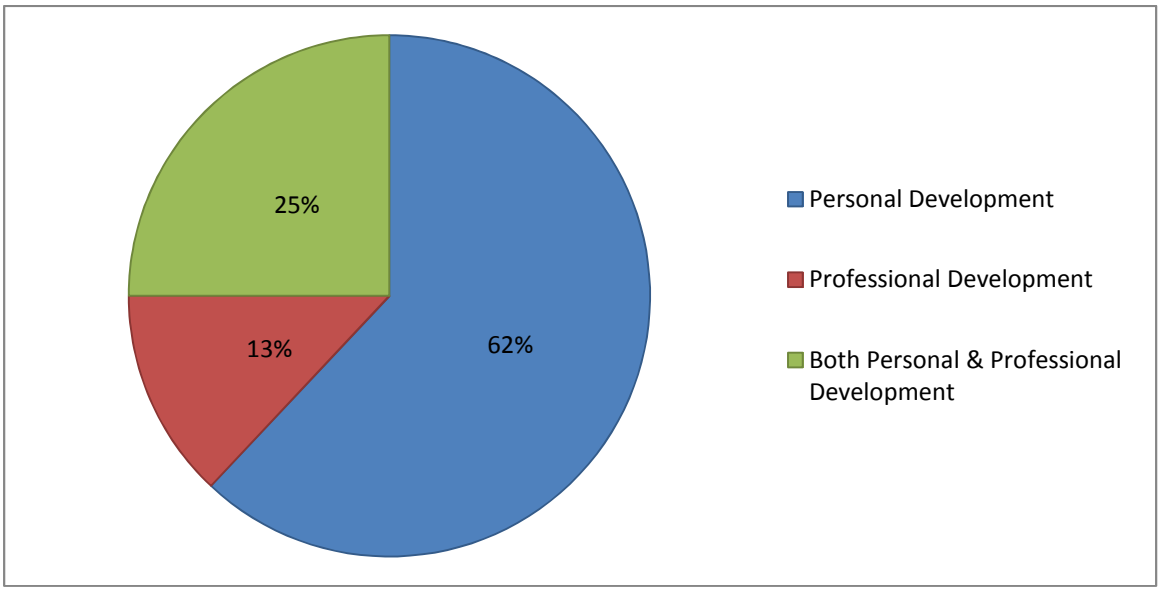

Figure 1. Average Percentage of Learning Projects Contributing to the Individual's Development

Across the spectrum of interviewees, many of the SDL projects were similar in nature. The majority of projects could be categorized into general groups representing the type of project. This data is interesting as it reveals commonalities in learning across the researched population. Of the 87 total SDL projects that were reported, Figure 2 represents the top seven categories into which the learning projects fell. Over 25 categories were created for the total number of reported projects.

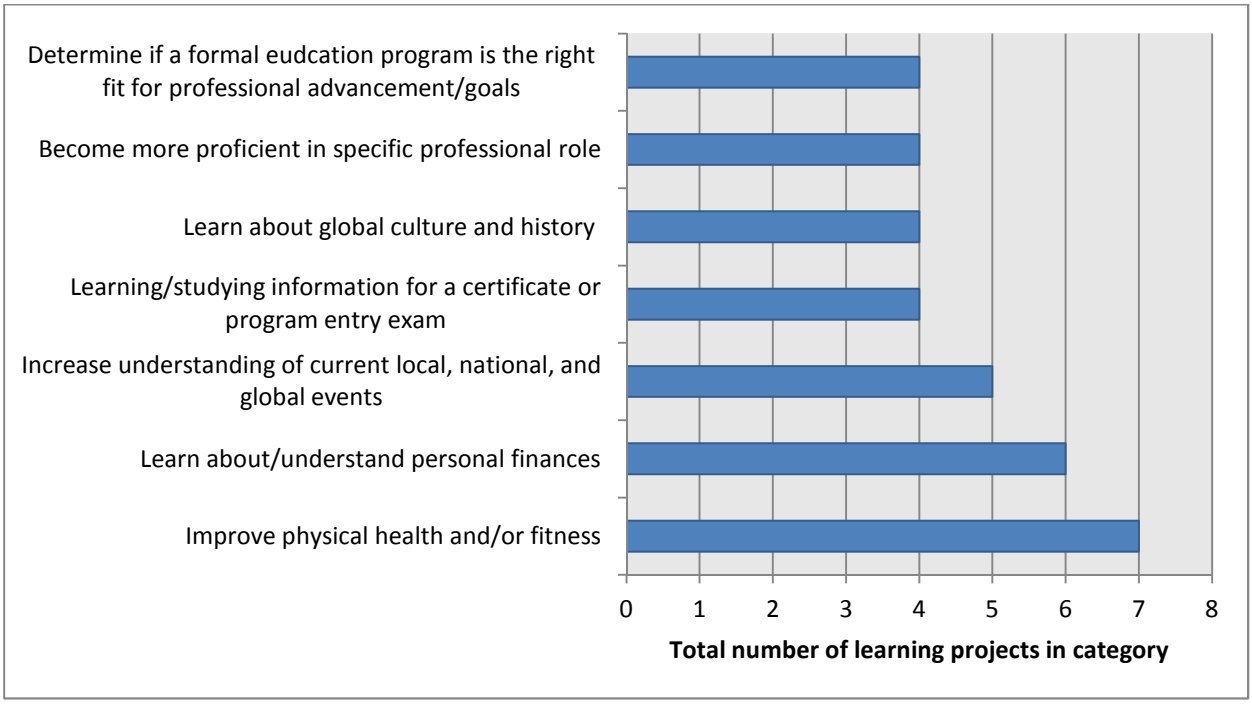

Figure 2: Top Seven Categories for Learning Project among the Researched Group

The attitude scale toward self-directed learning included three statements that specifically addressed the research question: Are young professionals intentionally using SDL as a means for enhancing personal and/or professional development? On a 5 point confidence scale, 1 being not confident at all and 5 being very confident, participants rated themselves according to each given

statement. Question 2 read as follows: Level of confidence that my ability to function as a self-directed learner will enhance my professional development. On average, participants rated their confidence with a 4.3, indicating confidence to complete confidence. Question 3 read as follows: Level of confidence that my ability to function as a self-directed learner will enhance my personal development. On average, participants rated their confidence with a 4.6, also falling between confidence to complete confidence. Question 4 read as follows: Level of confidence that becoming a better self-directed learner will enhance my ability to experience and learn new things. On average, participants rated their confidence with a 4.3, again falling between confidence and complete confidence. Figure 3 displays the total range of responses from all participants regarding questions 2, 3, and 4.

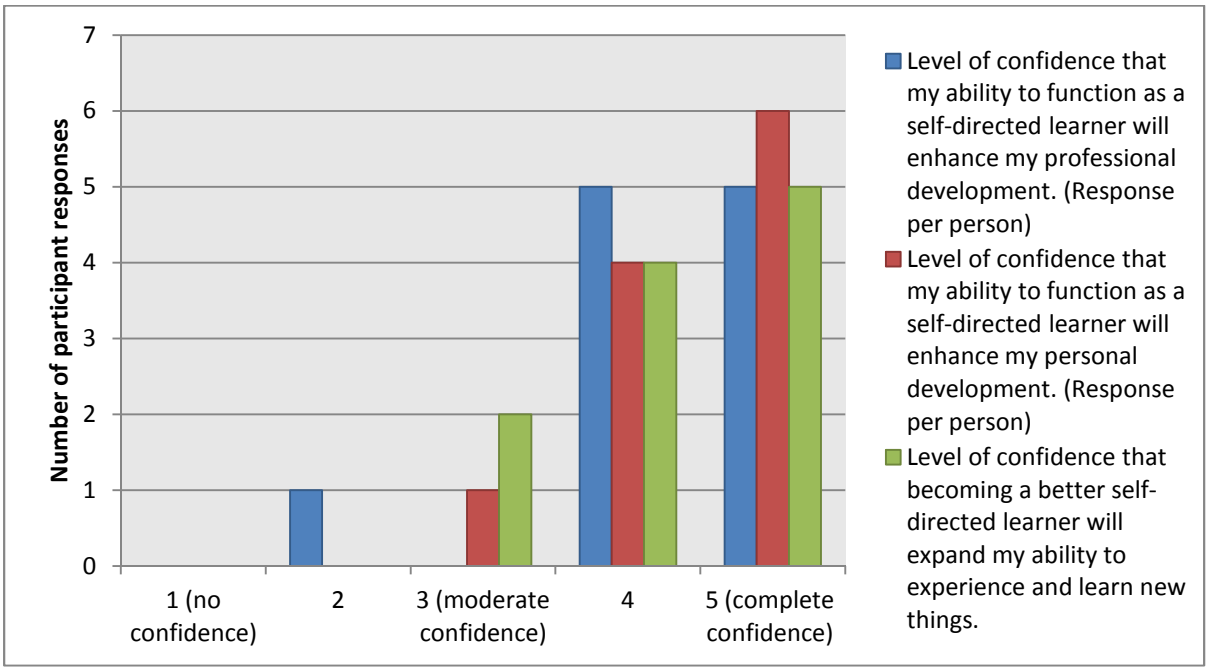

Figure 3: Levels of Confidence in SDL Relating to Personal and Professional Development

As indicated in Figure 1, the number of learning projects directly related to professional development were noticeably lower than those directly related to personal development. Similarly, the number of projects that were a combination of both professional and personal

development were less than those under only personal development. However, although there is a drop in the number of projects related to professional development, Figure 3 displays evidence that participants are confident to very confident that SDL could enhance professional as well as personal development. Furthermore, participants indicated that they are confident that SDL will enhance their ability to experience and learn new things which could subsequently contribute to personal and/or professional development.

During the one-to-one interview sessions, a few participants commented that their employers offered some type of reimbursement for taking courses related to their job. However, they admited that although they were encouraged to take advantage of this opportunity and at some point had put effort into researching available continuing education options, they have yet to take personal responsibility for pursuing further action. It could be inferred from this feedback that a stronger self-directed skill-set would be beneficial to these participants in helping them to take advantage of the educational opportunities and support offered through their companies.

A few other participants made comments that they wished their employer offered opportunities for continuing their learning outside of work. Three of the participants specifically remarked that they are dissapointed with the lack of enoucragement and support their company offers towards professional development and pursuing learning outside of the workplace. Two of these participants took personal inititive to find outside groups with like-minded individuals who shared similar professional and social interests. These groups would get together for activities such as networking events, speakers discussing topics of interest, and other outtings with a common theme. It appears that the researched young adult population wants to engage in learning, especially learning that contributes to their overall development. Finding support and encouragement from their organizational environments and both internal and external mentors

seems to be a key motivator in helping them reach learning goals through a self-directed approach.

Participants who noted that their employers valued LLL and promoted it in and out of the workplace had the highest number of learning projects contributing to both their personal and professional development. One participant explained that many of his personal interests overlap with his professional interests. Since he enjoys the industry that he works in, including the work that he does for his current employer and the future work he foreshadows himself doing, often, learning initiatives that he pursues for professional interest expand into more elaborate projects sparked out of personal interest. This is reflected in the destinations that he chooses for travel and vacation, the books he reads, the magazines and news articles he follows, and many of the individuals he finds himself connecting with both related and unrelated to work.

Another common example of this was mentioned by three of the participants who often find themselves speaking in front of groups of people ranging in size. Learning to become better public speakers to enhance their job performance and the way they are percieved in the work place was a learning goal that directly related to their professional development. While developing this skill-set, they simultaneously noticed an improvement in self-confidence, awareness of themselves as individuals, and ability to connect differently with other individuals outside of their professional environment. Each participant also valued this as a substantial contribution to their personal development.

The results from this section should be encouraging for employers when considering the degree to which they develop organizational values around lifelong and self-directed learning. Investing in the promotion of individual responsibility for continous learning among young

employees provides the opportunity for them to develop from multiple angles while making positive contributions to the overall organization.

In What Ways Have Rapid Technological Advancements and Globalization Influenced the Types of Resources and Rate at Which Adult Learners are Seeking New Knowledge?

Although some reported learning projects made use of more formal learning settings like on-site courses, there was a wide range of other resources mentioned. In most cases, multiple resources were used to complete learning projects. For almost all learning projects, participants said that they used Google as a searching tool to get started and determine other resources that could be obtained. Similarly, of the top five resources used, three of the categories were web based. Participants favored the instantaneous results that could be obtained through web based resources as well as the ease of being able to access these resources from a diverse range of locations and situations. Figure 4 provides a pie chart that includes all resources mentioned in learning projects and the number of projects that each resource was used in. The top five mentioned resources are labeled. In descending order these include Google searched websites, family, friends, and peers, experts and industry professionals, specific websites and blogs, and social media.

Based on the quantity of projects using Google to navigate websites, social media for quick updates and links to other resources, and predetermined websites, it appears that one major result of 21st century technological advancements and global connectedness is the adult learner's expectation and preference for having information available at their fingertips. It is also fair to say that based on the research from this study, the interviewed population enjoys the convenience of being able to access resources such as websites, blogs, search engines, and social media anywhere and for no predetermined amount of time.

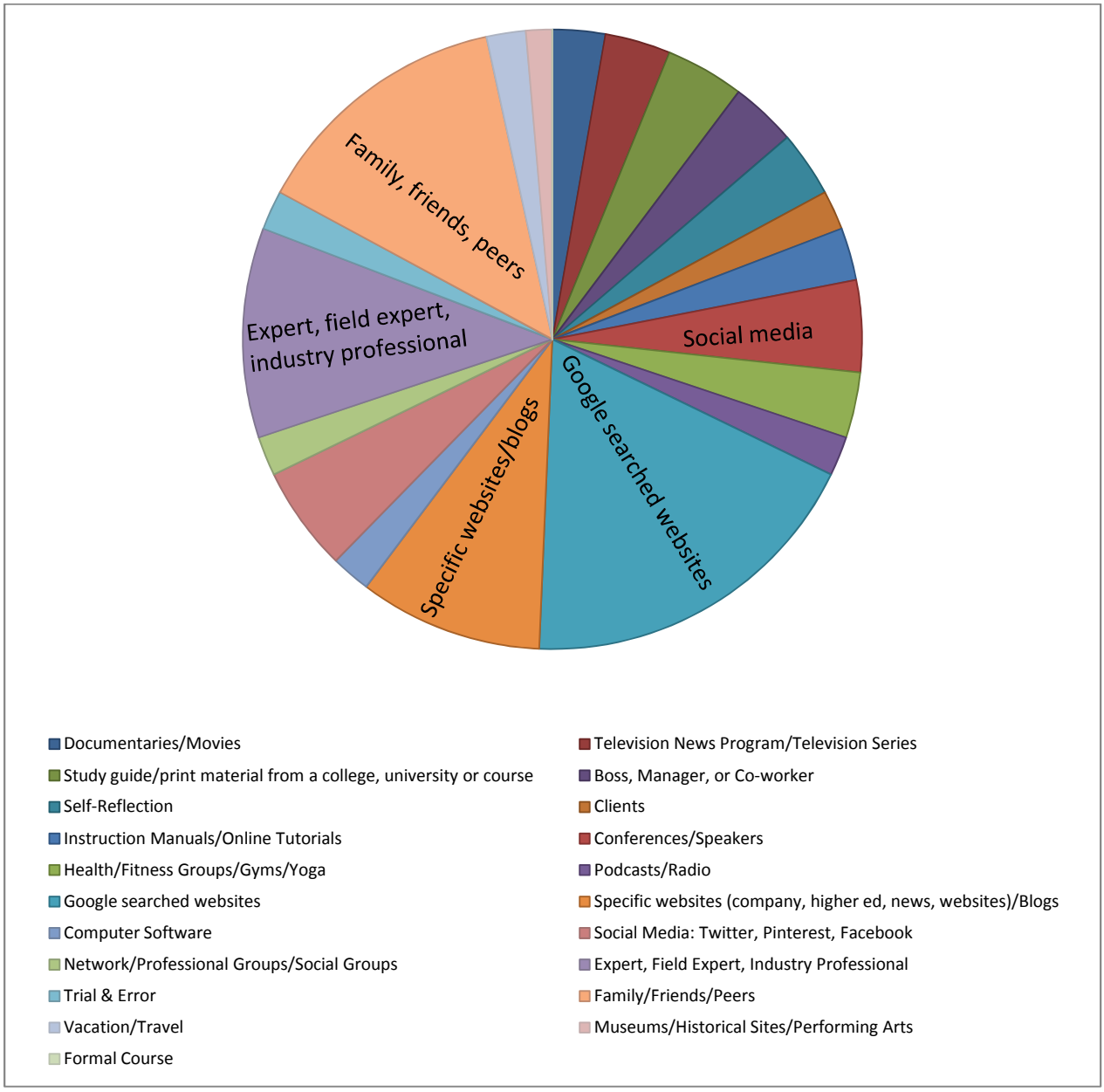

Figure 4: Resources Used by Participants to Complete Learning Projects

Participants were mainly using social media as a way to connect to other resources and information available on the internet. Participants who used this as a resource commonly had a general learning goal, for example, an interest in building their knowledge of current events or learning to become a better cook. In the example of using social media to increase their understanding and knowledge of current events, participants would follow a variety of news

sources through platforms like Twitter and Facebook. Specific posts generated through these platforms would link participants to articles on websites, blogs, or other information they would then pursue through different resources.

In the example of using social media to learn how to cook, a few participants explained that they used Pinterest and Instagram to search for different recipes or images of recipes that would connect them to the blogs and websites of more advanced cooking experts as well as nutritionists. They would then go directly to these websites and blogs. One participant even commented that once she made it to one of her favorite chef's websites, she found a book written by him with recipes, cooking tips, and techniques that she then purchased. This is a great example of how the researched population is utilizing web based resources to become familiar with other resources. Overall, participants appeared to favor electronic, online resources that provided quick bursts of information.

One area of resources relating to technological advancements and globalization that the specific researched population is minimally utilizing for SDL is free online courses and webinars as well as online courses and seminars that are offered at a price and accessible across the globe. Although some participants mentioned that they had considered using online courses to complete a graduate program or certificate program in the future, they were not currently using this as a form of SDL. Furthermore, some participants mentioned that they had experience using webinars or logging into virtual conferences at work, but had not yet accessed these resources as part of a SDL project. In figure 4, one of the top categories of SDL projects is becoming more proficient at a specific, current professional role. I asked some of these individuals why they had not taken advantage of virtual learning opportunities in the form of courses and webinars. The interviewees commonly admitted they had thought of utilizing such resources, but lacked the motivation to

follow through when they had other responsibilities to take care of at their job. Similarly, a few participants described the learning process they were going through to determine if a specific graduate program was the right fit for them. Many accomplished this by reading a variety of college and university websites, setting meetings with admissions staff, and in some cases, taking a course in their area of study at the school to see how they liked the content and managed the work load.

One interviewee was taking an accounting course offered at night through a state college. I asked him if he had thought about trying a free online course offered through a platform like MIT's Open Courseware (http://ocw.mit.edu/index.htm) or EdX (https://www.edx.org/) as a way to determine how he liked the coursework and managed the course load. He was not aware that full, free, online courses were offered from accredited and highly regarded institutions. After I briefly described the range of courses offered and how it worked, he became interested and we spent some time talking about how it could work for him. When considering implications for encouraging and strengthening SDL in undergraduate programs and organizational environments, asking students and employees to discuss the learning projects one another is engaged in or would like to plan is a way to facilitate the sharing of resources used for SDL by a range of adults. This type of open dialogue about learning projects could also help motivate others in the discussion to explore goals and resources used by peers.

Outside of resources that are a direct result of technological advancements and globalization, participants frequently noted that they sought information from family, friends, experts, and industry professionals. The researched population seemed to favor the style of one-to-one learning, especially when a connection could be made with an individual who was already in their social or professional network. Further research expanding on this would assist in

providing organizational environments and institutions of higher education with suggestions and best practices for encouraging SDL among the researched group.

Could Undergraduate Programs and Organizational Environments Better Encourage Young Professionals to Develop and Utilize SDL for Professional/Personal Development?

When participants were first reached out to regarding their involvement in this study, most were enthusiastic about their contribution to research specifically focused on the learning and development of both themselves and their peers. However, many participants also expressed concern that they had not engaged in SDL and their overall contribution to the study would be minimal. As each participant was taken through the interview protocol, two important realizations occurred. First, interviewees were surprised to find that they had in fact spent a substantial amount of time over the past year operating as self-directed learners while simultaneously experiencing personal and professional development. Second, interviewees vocally became aware of their ability to take personal responsibility for learning that would enhance their personal and professional development, admitted that their SDL skill-set was not as strong as they believed it could be, and expressed a strong interest in becoming more conscious of their self-directed efforts as well as improving them. These responses indicate that in many cases, both undergraduate programs and organizational environments could implement new or stronger strategies for facilitating and encouraging SDL.

As noted earlier, participants completed the attitude scale towards SDL following the interview. After participants reflected on the interview, they had the opportunity to consider their opinion of SDL as a benefit to their personal and professional development as well as their current strength in functioning as a self-directed learner. While considering their attitudes towards SDL, participants were asked to rate their confidence in their current ability to identify,

plan, and follow through with learning projects as well as their level of confidence that having developed a stronger SDL skill-set as an undergraduate student, their current SDL abilities would be stronger. Figure 5 reflects participant ratings.

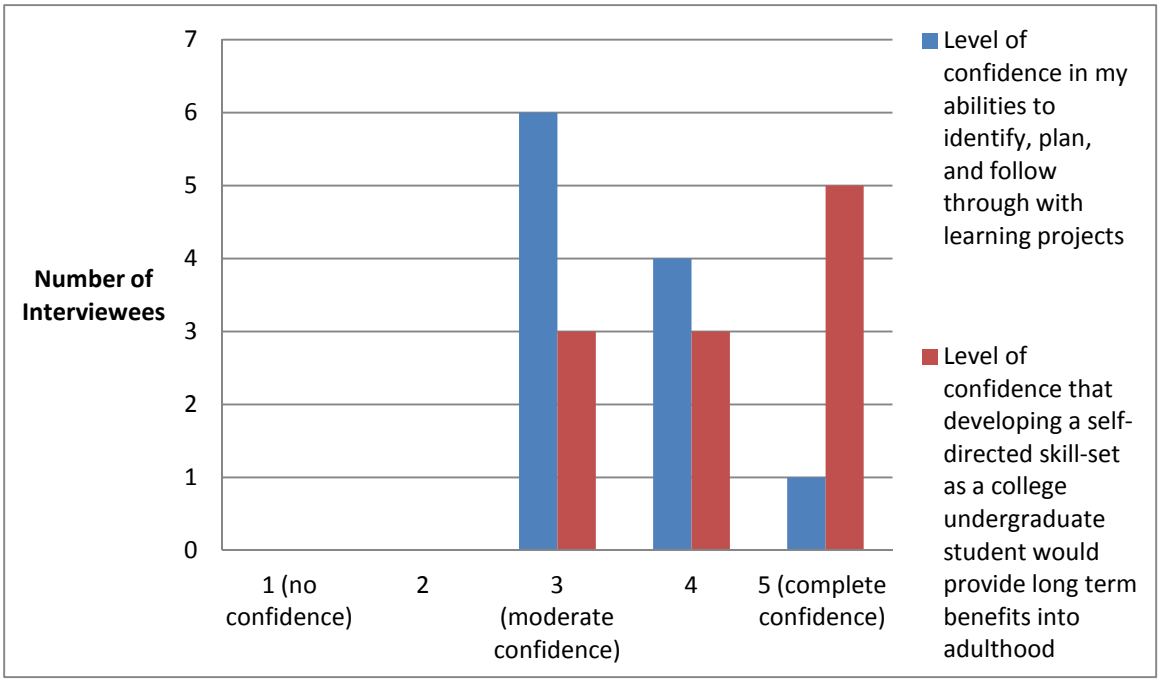

Figure 5: Attitudes toward Current SDL Skill-Set

On average, participants rated their confidence at 3.5, moderate confidence, when it comes to their abilities to identify, plan, and follow through with learning projects. This accurately represents the verbal feedback that participants gave throughout the interview process. Through most interviews, the interviewee recognized their potential to be a strong self-directed learner, but admitted that when it came to actually planning and following through with a given project, they were not as consistent or driven as they would like to be. When participants were asked to rate their level of confidence that developing a self-directed skill set as a college undergraduate student would provide long term benefits into adulthood, the average response was 4.2, displaying confidence.

At the inception of the interview, most participants were not familiar with SDL. The overall data from this study revealed that SDL was mostly used to explore areas of personal interest. Of the 87 total reported SDL projects, many were completed without participants realizing that they were implementing SDL. Once interviewees became familiar with the concept of SDL and understood how they were already using it to plan and execute learning goals, all discussed future projects they could initiate. Furthermore, after I discussed different ways that participants could and were already using SDL for professional development, the majority of interviewees took time to discuss beneficial, self-directed projects that would help them solve problems currently faced and enhance areas of their professional careers.

It seems that the young adult learners interviewed for this project consistently became more excited about taking personal responsibility for learning and were motivated to plan future self-directed projects as they recognized their full potential for planning and following through with learning goals. If undergraduate programs and organizational environments spend more time focusing on helping students and employees understand their potential for SDL and the associated benefits, it would help them to strengthen this skill-set at a quicker pace. Additionally, if facilitators of undergraduate courses begin using the term self-directed learning and talking about it as an expectation in their classrooms, students' awareness of their personal abilities to plan learning to fit their needs would be heightened.

In summary, the overall data gathered from this study indicates that the researched group of young professionals holding bachelor's degrees and ranging in age from 24-30 years old is utilizing SDL for personal and professional development to an extent. Many of the total reported learning projects were self-directed in nature, but were not intentionally initiated by the participant as a SDL project. Participants widely used SDL for personal development and

moderately used SDL for professional development. All participants agreed that developing a stronger set of SDL skills would be beneficial in enhancing their overall development as well as providing greater control over their adult navigation through the 21st century. Participants favored web based resources, primarily due to the ease and convenience of accessing them. Participants also valued learning from the correspondence, feedback and experiences of friends, family, and industry professionals. Lastly, participants agreed, for the most part, that undergraduate programs and organizational environments could be key influencers in helping to motivate and strengthen abilities in taking personal responsibility for learning initiatives. Chapter 5 discusses the implications for further research in SDL among the studied population and how this can be integrated into undergraduate programs and organizational learning environments.

Chapter V: Discussion

While 21st century technology and globalization continue to rapidly progress, our abilities to constantly acquire and apply new knowledge is being challenged. The individual adult's capacity for learning is expanding as a wide range of resources accompanied by flexible delivery is accessible nationally and globally. This, combined with increased longevity, has caused many adults to consider their personal and professional development, especially in how it has shaped their current and future life path. LLL has become a necessity for evolving in an ever changing society socially, personally, and professionally.

The underrepresented population researched in this study has emerged in the 21st century as young professionals and adult learners during a time of uncertainty, unpredictability, and constant change. Taking the initiative to utilize a strong self-directed skill-set in identifying and following through with learning goals is becoming increasingly more beneficial and crucial to this population. SDL provides the researched group with an opportunity to shape and control their personal and professional development. As discussed in the previous chapters, this will provide short and long term benefits, especially in helping individuals to meet obstacles with resiliency as they strive to recognize and achieve their full potential as adult learners.

Overview of the Study

Recent research has identified SDL as a feasible vehicle for navigating 21st century complexities; however, there is limited data on a specific population that includes the post-four-year undergraduate student. This study was focused on understanding the familiarity that the sampled group has with SDL and how learning styles are being incorporated into everyday lives as catalysts for personal and professional development.

The qualitative study was conducted using Allen Tough's Learning Project Interview Protocol (Tough, 1971) – it was designed to focus on individuals engaged in SDL and reveal the extent to which self-teaching projects are part of an individual's total range of learning efforts. The protocol included probing questions that helped a participant think across the span of 12 months about a variety of learning projects. Information such as the project's content, length, current involvement, reason for project, director (facilitator) of learning, and source of subject matter was noted. The intention of utilizing Tough's protocol was to determine if young professionals are taking a self-directed approach toward expanding their personal and/or professional development and to see if there is a trend across any aspect of the protocol's questions.

Accompanying the interview was a set of additional questions to further assess the attitudes that young professionals have toward the value of SDL in the 21st century. This included their readiness to be self-directed learners based on educational background, experiences, and work environment, as well as their views toward SDL in fulfilling future LLL goals.

Summary of Findings

The overall data gathered from this study indicates that the researched group of young professionals is utilizing SDL for personal and professional development to an extent. Although for the most part, participants were not familiar with the specific term, self-directed learning, many of the reported learning projects were self-directed in nature. As each interviewee began to understand how they were already using SDL as well as recognized their potential for being a stronger self-directed learner, many admitted they hoped to begin planning and executing SDL projects that would benefit some aspect of their life.

Participants widely used SDL for personal development and moderately used SDL for professional development. All participants agreed that developing a stronger set of SDL skills would be beneficial in enhancing their overall development as well as providing greater control over their adult navigation through the 21st century. Participants favored web based resources, primarily due to the ease and convenience of accessing them. Participants also valued learning from the correspondence, feedback, and experiences of friends, family, and industry professionals. Lastly, participants agreed, for the most part, that undergraduate programs and organizational environments could be key influencers in helping to motivate and strengthen abilities in taking personal responsibility for learning initiatives.

Several Conclusions

For the purpose of this study, it is important to note that prior to the interview, the majority of participants were not fully aware of the concept of SDL and how it is used in their daily lives. It was not until after most participants were engaged in the interview protocol that they understood some of their personal learning efforts as self-directed attempts to gather and understand information towards a particular goal. As I, the interviewer, listened to and noted the SDL projects that participants described, I pressed them to consider why they were engaged in each specific learning instance and if and how it contributed to their personal and/or professional development. As I encouraged interviewees to dig deep into their learning endeavors, it was then that they saw personal potential and found motivation or inspiration for future projects that would benefit their overall development. Additionally, while participants came to terms with these realizations, it appeared that a greater sense of self and self-fulfillment were associated with taking personal responsibility for learning.

I do believe that the participants who have gone through the exercise of Tough's interview protocol accompanied by an attitude scale towards SDL will continue to develop as self-directed learners. Additionally, I suspect that they will now consider SDL as a tool for navigating 21st century complexities. In essence, had these individuals not volunteered to participate in this study, would they eventually have appreciated their potential for functioning as self-directed learners and perceive this ability as a feasible way for enhancing their personal and/or professional development? It is possible, but perhaps at a slower pace.

In a recent TED Talk, clinical psychologist and specialist in adult development, Meg Jay (February, 2013), explains why the young adult who is in their "twentysomethings" are "dallying their ways through the most transformative and defining period of our adult lives." If the research is correct in proclaiming that this age group is at the brink of development and that their personal and professional exploration and curiosity will influence their existence in future decades, then why has the population who has been the focal point of this thesis project not been the subject of extensive research relating to SDL correlated with personal and professional development?

These questions set the precedent for recommendations shown in the next section. What can undergraduate programs and organizational environments do to enhance awareness of SDL and inspire motivation, confidence, and persistence among the population of post-four-year undergraduate students to utilize a SDL skill-set as a way to take greater control of their personal and professional development?

Recommendations

Throughout the past decade, I have frequently heard and seen words like "innovative," "creative," and "entrepreneurial spirit" used as a way to describe the new age culture that exists

within evolving organizational environments and institutions of higher education. Perhaps these repeated adjectives are a product of the technological advancements and globalization discussed in this very paper. The words that I have mentioned here do hold meaning for the researched population in this study. They are a reminder that 21st century innovations have provided young adults with an opportunity to be inventive with themselves, their future, and overall development. Taking responsibility for our abilities to learn and utilizing SDL to shape and reshape life courses provides an opportunity for the young adult learner to be an entrepreneur of their own life by taking ownership of their personal and professional development.

Both undergraduate programs and organizational environments can be key resources in helping the researched population gain awareness of SDL, strengthen their abilities to function as self-directed learners, and utilize SDL to enhance their overall development. As a result of the research from this study, here are three major recommendations that both undergraduate programs and organizational environments can begin implementing immediately and most likely, at no cost:

1. Facilitators and business leaders of institutions of higher education and organizational environments should familiarize themselves with the concept of SDL and the methodology behind it. One of the best ways for facilitators to help undergraduate students and young professionals/young adults increase their awareness of SDL is by having a thorough understanding of it themselves. As I have described, many of the participants came into this study having little to no familiarity with SDL, primarily using context clues to anticipate what would be asked of them. Once I gave an overview of the history behind SDL and why I adamantly believe it is a vital skill-set for adults to cultivate in the 21st century, participants were quickly able to identify areas in their own lives where they were using SDL as well as areas in

their lives where SDL could be a viable solution for solving problems, moving forward through barriers, or exploring and expanding new areas of interest. The empowerment that is affiliated with SDL can be contagious and once understood, it is a lifelong skill-set that can be used to unlock many personal and professional opportunities. Facilitators can ignite an awareness of SDL among the researched group by understanding it, discussing how they have used it in their own personal and professional development, and encouraging that it be used in and outside of both undergraduate coursework and the workplace.

2. Encourage undergraduate students and young employees to take responsibility for their own learning by urging them to identify personal/professional goals and determine the appropriate resources and time frames for achievement. Previous research has demonstrated that SDL readiness is highly individualized. In other words, adults of all ages, educational backgrounds, professional positions, and genders have varying strength levels when it comes to their abilities to function as self-directed learners. Some of the participants in this study pointed out that their companies were supportive in providing reimbursement and flexibility so that employees could pursue professional development opportunities through a multitude of avenues. Although participants appeared excited about this flexibility and had spent time identifying beneficial learning opportunities, they never took the initiative to follow through. By talking about and vocally encouraging SDL, facilitators can help in transferring the responsibility to initiate meaningful learning to the individual, in this case, the researched population.

During my graduate study, I took a few courses in which the professor (Dr. Roger Hiemstra) combined SDL into his teaching approach. Aside from always offering a variety of open-ended assignments, providing an opportunity for the student to individualize the

coursework to best meet their needs and goals, we were all required to create a learning contract during the beginning of the semester. Hiemstra (2011) explains that the intent of using a learning contract is to provide a vehicle that allows you to personalize the learning experience. Furthermore, he describes learning contracts as a means for negotiating a reconciliation between external needs and expectations and the learner's internal needs and interests. Mapping out my learning during each course required me to think about the what, why, and how behind each learning endeavor. Additionally, by assigning my own timeline for the pieces of each initiative, I quickly accepted responsibility for managing my written completion goals. The learning contract is not limited to the classroom setting; this is a great tool for managers to use as a way to guide young employees towards utilizing SDL for increasing their proficiency in the workplace while accelerating professional development. The implementation of tools such as a learning contract is a technique to help adult learners strengthen their SDL potential.

3. Connect and engage peers, colleagues, and classmates in a comfortable setting where they can discuss current and future self-planned learning projects. The data from this study suggests that the researched population frequently turns to family, friends, and peers in obtaining or expanding knowledge. This could be due in part to participants trusting the experiences and information coming from individuals they already know. By creating a safe group of like-minded individuals that are encouraged to share learning ideas and plans, young adults will most likely become increasingly comfortable exchanging ideas, motivating one another, asking questions relevant to their own learning goals, and finding inspiration for new learning endeavors.

While I was speaking one-on-one with each participant, I often would share learning projects that I had engaged in which were similar to those of the participant's or learning projects

of other interviewees that had similarities. This exercise was mutually beneficial as we both were able to exchange resources, experiences, challenges, and strategies. During this dialogue there was a great opportunity to enhance our own individual learning. Furthermore, the sharing of learning projects helped to build a stronger relationship between the interviewer and interviewee. Understanding the detailed interests and efforts of others creates a somewhat intimate bond. Since the interviews, I have kept in touch with many participants, either following up on learning projects that had sparked an interest for me or with resources that I had come across and thought would be appealing to them as well.

Facilitators, managers, and leaders of undergraduate programs and organizational environments can create these close-knit groups focused on self-teaching projects by simply implementing my first two recommendations, then connecting peers and colleagues to further explore their SDL efforts. Not only will this have a positive impact on the individual, but it could also have a positive impact on the organization or undergraduate program as a whole.

Limitations of the Study

Although there was an overwhelming number of individuals who met the participant criteria and were eager to assist with research that could provide solutions to the 21st century frustrations faced by many post-four-year undergraduate students, the extensiveness of Tough's interview protocol limited the number of participants involved. As the interviewer, I was under time constraints for conducting my research within a three month time frame, or an academic semester. The 11 individuals who were interviewed for this study provided enough data to create sufficient information for data analysis purposes; however, having had data from a larger pool of participants would have improved the accuracy of and further diversified the data. If this study

was recreated, it would be beneficial to extend the amount of time used for data collection and increase the number of interviewers to reach a larger group of the population.

In addition to this, the particular population researched seemed to be especially sensitive to the word "interview." Due to the fact that many are in the process of securing job opportunities, social opportunities, and even new relationships, participants are accustomed to feeling as if they are under scrutiny. Because of such feelings, the researched group appeared to be pleasers. When participants sat down to talk with me, they all made a range of remarks about hoping that they told me what I wanted to hear. In some cases, participants specifically asked what I wanted to hear so that they could provide me with what I needed. Others expressed concern that they were doing a poor job. Despite the number of times that I explained that there are no "right" or "wrong" answers for this study, participants still looked for reassurance that they were "passing" the interview. If this study were to be replicated, I would suggest using a word other than interview when asking candidates to participate in the study. I would also advise refraining from implying that there is a desirable outcome.

Final Thoughts

Twenty-first century, post-four-year undergraduate students are frequently working their way through young adulthood, focused on searching for a metaphorical ladder to climb, eventually hoping to reach the peak of their personal and professional success. Sheryl Sandberg (2013), Facebook COO and author of the #1 National Best Seller, *Lean In*, talks about this metaphorical ladder and discusses a new, more realistic metaphor:

> The most common metaphor for careers is a ladder, but this concept no longer applies to most workers. As of 2010, the average American had eleven jobs from the ages of eighteen to forty-six alone. This means that the days of joining an organization or

> corporation and staying there to climb that one ladder are long gone...ladders are limiting – people can move up or down, on or off. Jungle gyms offer more creative exploration. There's only one way to get to the top of a ladder, but there are many ways to get to the top of a jungle gym…The ability to forge a unique path with occasional dips, detours, and even dead ends presents a better chance for fulfillment. (p. 53)

Sandberg's metaphorical jungle gym is a fitting final thought for this thesis project. As it has been thoroughly discussed, strengthening one's SDL capabilities is a feasible way for both exploring and enhancing personal and professional aspects of one's life, including overall development. In order for the post-four-year undergraduate student to maximize their potential while avoiding limitations that can be created when trying to pre-determine a straight course to pursue through life; young adults should embrace the concept of SDL and use it as a vehicle to explore 21st century personal and professional opportunities with an open mind.

My Next Steps

Following the completion of my thesis study and Master of General Professional Education, I intend to continue serving as an advocate for LLL and SDL. Like the researched population I discussed in this paper, I too am using SDL to work my way through the challenges of being a young professional during an era of vast opportunities, competition, and uncertainties. It is my hope that as an extension of this project, I will draft a manuscript for publication in the *International Journal of Self Directed Learning* to spread awareness of this underrepresented population within the existing research on SDL. Both personally and professionally I plan to teach by example, leading and inspiring colleagues and peers to initiate new learning endeavors and constantly aspire to expand their overall development through SDL.

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Appendix A
Allen Tough's Learning Projects Interview Protocol

Sheet One

ID No. or Name _____

I am interested in listing the things you have tried to learn during the past year. When I say "learn" I don't just mean learning the sorts of things that people learn in schools and colleges. I mean any sort of deliberate effort at all to learn something, or to learn how to do something. Perhaps you tried to get some information or knowledge – or to learn new skills or improve your old ones – or to increase your sensitivity or understanding or appreciation. Can you think of any efforts like this that you have made during the past 12 months?

_____

_____

_____

_____

_____

_____

_____

_____

_____

(P) Try to think back over all of the past 12 months – right back to _____ of last year. I am interested in any deliberate effort you made to learn anything at all. Anything at all can be included, regardless of whether it was easy or hard, big or little, important or trivial, serious or fun, highbrow or lowbrow.

_____

(P) It doesn't matter when your effort started, as long-as you have spent at least a few hours at it sometime since last month or so.

(P) I want to get as complete a list as possible. It is thought that people make far more attempts to learn than anyone realizes. We can include any sort of information, knowledge, skill, or understanding you have tried to gain – just as long as you spent at least a few hours at it sometime during the past 12 months.

(P) Can you recall any other efforts to learn that were related to your home or your family? Anything related to your hobbies or recreation? Your job? Your responsibilities in various organizations, or clubs, or in a church or synagogue, or on a committee, or some other responsibilities? Anything related to some teaching, writing, or research that you do outside of your job?

(P) Going back over the past 12 months, can you recall any other times that you tried to learn something by reading a book? When you read newspapers or magazines, do you read certain topics or sections because you want to remember the content? Have you tried to learn anything else from booklets, pamphlets, or brochures? From memos, letters, instructions, or plans? From technical or professional literature? From material from a library? From workbooks or Internet and web-based instruction? From an encyclopedia or other reference source?

(P) Have you learned anything at all from a medical doctor? From a lawyer? From a counselor or therapist? From a financial or tax advisor? From a social worker? From a private teacher? From a specialist or expert? From individual private lessons?

(P) Have you learned anything from documentaries or courses on television? From TV news or some other TV programs? From radio? In a theatre? Have you tried to learn from conversations? Or from asking questions: that is, have there been any topics or areas that you have tried to learn about from your friends or other people? Have you deliberately sought to learn by seeking out stimulating individuals? Have you tried to learn anything from your spouse or other relatives? From a neighbor?

(P) Perhaps you have learned something in some group or other? Perhaps in some meeting or discussion group? From attending a conference? From a retreat or weekend meeting? From an institute or short course or workshop? From a committee or staff meeting? From taking a course? From attending evening classes, or lectures, or a speech? From a correspondence or online course? From attending a club or group meeting?

(P) Perhaps CD recordings or an Internet site or “a language lab” helped you learn something during the past year? Have you learned in a church or synagogue? In a college, university, or school? In some community organization? In a company or factory or office? In a government program? In an exhibition, museum, or art gallery? In some vacation spot?

Now I have a list of some of the things people learn (Sheet One). It may remind you of other things that you have tried to learn during the past 12 months. Take as long as you want to read each word, and to think about whether you have tried to learn something similar. (Give her or him the sheet, or read it aloud if necessary.)

OK, that gives us a fairly complete list. If you suddenly think of something else you have learned, though, please tell me.

ID No. or Name _____

Now I want to find out a bit more about each of your efforts to learn. Let's begin with the first one on the list. It was your efforts to learn _____ . Here is a sheet that will help us learn more about your efforts and estimate the number of hours that you spent at learning this, and the number of hours spent at planning and preparing for that learning. (Hand him or her second sheet – Sheet Two.)

(If possible, pin down and record just what the learning segments were. For example, you could ask, "How did you go about learning this? How was it learned? What did you do? Was there anything else you did to learn _____?" Examples that you might record to help understand the total effort are: Watched an expert, listened to a record, read, practiced, attended a meeting, etc. This list of activities is primarily for your benefit in helping the person estimate his or her time accurately: We do not need the data for any specific purpose other than it might help you later determine the subject matter source. In other words, don't make any special effort to get it or to record it, but on the other hand don't discard it either.)

(Ask for a time estimate in total number of hours. If the number of hours is below 14, check two criteria. First, "within some six-month period during the past year, did you spend at least five hours at the learning itself – that is, at the _____ learning effort." Second, "within some six-month period or shorter period during the past year, did you spend at least seven hours altogether on the learning effort?" If both criteria are met write "yes" and proceed; if both are not met write "no" and move to the next learning project.)

(Ask them to select whether they have been active or not active.)

(Determine their reason for undertaking the project. Ask, "in any of your efforts on the learning endeavor, was credit any part of your motivation? That is, did you hope to use any of your learning efforts for academic credit – towards some degree, certificate, diploma, or grade achievement? (Pause) Was any of your learning directed toward passing a test, examination, or course – or toward some license or a driving test? (Pause) Or was it toward some requirement or examination or upgrading related to a job? (Pause) Or

did you undertake the learning activity for your own enjoyment or self-improvement? Note: You will need to determine the primary reason.)

Now we are going to think about your learning effort and try to decide who or what was the director or leader. That is, who decided what you would learn – and how you would learn – whenever you spent some time trying to learn? Here is a sheet explaining what I mean (Sheet Three). (If no one resource was primarily responsible –51% or more – classify it as mixed. If he or she does not seem to understand, or if you feel doubtful about the response, ask who the particular director or leader was. If you anticipate difficulty or if the learner asks, say that we are interested in whom the leader was for the past 12 months rather than earlier.)

(Finally, determine the major source of subject matter. That is, what resource provided most of the content – a book, a pro ski instructor, a discussion group, a television broadcast, a web site, etc.)

(Repeat for each learning project, recording the appropriate data.)

That completes the interview. Thank you very much for your time and assistance. I think your efforts will help to make education more meaningful in the lives of many adults.

Some things that people learn about!

1. A sport or game; swimming; dancing; bridge
2. Current events; public affairs; politics; peace; biography
3. Sewing; cooking; homemaking; entertaining
4. Driving a car
5. Home repairs; woodworking; home improvement project; decorating and furniture
6. A hobby or craft; collecting something; photography
7. Raising a child; discipline; infant care; a child's education
8. Nature; agriculture; birds
9. Mathematics; statistics; arithmetic
10. Speed reading; effective writing; public speaking; vocabulary; literature
11. Science; astronomy; humans in space
12. Health; physical fitness; posture; clothes; appearance
13. History; geography; travel; some region, city, or neighborhood
14. Personal finances; savings; insurance; investing; purchasing something
15. Psychology; effective relationships with people; groups; leadership; socia1 skills
16. Word processing, web page work; mechanical skills
17. Some personal problem; mental health; an emotional problem; an illness or medical condition
18. Various careers; choosing an occupation; finding a job
19. Gardening; landscaping
20. Something related to a job or responsibility or decision
21. Musical instrument; singing; music appreciation
22. Professional or technical competence; sales skills; how to teach or supervise
23. Some aspect of religion; ethics; philosophy; moral behavior

24. Current changes in society; the future; problems in cities; pollution; sociology

25. Relationships with the opposite sex; manners; marriage; relationships within the family

26. Art; painting; architecture; the opera; movies; television; Internet/web pages/Facebook

27. Business management; economics; business ownership

28. Sensory awareness; human potential; communication; understanding oneself; personal efficiency

29. New techniques, a new way of doing something; an innovation

30. Spanish; French; some other language

Sheet Two

I need your best guess about the total amount of time that you spent at all aspects of this particular learning effort during the past 12 months. (Do this for each individual learning project)

Please include the time you spent reading – listening – observing – or learning in some other way – if your main purpose during that activity was to gain and retain certain knowledge or skill. In other words, we will include all the time during which at least half of your total motivation was to gain certain knowledge or skill, and to retain it until at least two days later.

In addition to the time you spent at the actual learning itself, please include all the hours that you spent, during the past 12 months, at deciding about the learning, planning the learning, and preparing and arranging for it. This can include any time spent at deciding what to learn – deciding how to learn – deciding where to get help – seeking advice about these decisions (from other people or from printed materials) – traveling to some of the learning activities, such as a meeting or practice session or library – arranging appropriate conditions for learning – choosing the right book or person for the actual learning – obtaining that book or reaching that person.

Of course, you cannot remember exactly how many hours, so just give your best guess. If you wish, just choose the closest number from the following list:

1 3 6 10 20 30 40 50 60 70 80 90 100 120 140 160 180 or more

2. Which of these following two answers best describes this particular learning effort at the present time:

(A) NOT VERY ACTIVE – that is, you have dropped it or completed it, or you have set it aside for a while (or you are spending much less time at it now than you were before)

OR

(B) DEFINITELY ACTIVE – that is, you are definitely continuing this learning effort right now, and you are spending about as much time as ever at it.

Sheet Three

There are four different sorts of learning efforts, according to who directs them. That is, a person's efforts to learn can be classified according to who was responsible for the day-to-day planning. We have to look at who planned or decided exactly what and how the person should learn at each session. For example, who decided what the person should read or hear, or what else he or she should do in order to learn?

1. Group-Planned Learning

In some learning projects, you may decide to attend a group and let the group (or its leader or instructor) decide what and how you learn during each session. A group may be of any size, with a minimum of five people. Examples might be lectures, study groups, workshops, small informal groups, or conferences.

2. One-to-one Learning

In some learning projects, the planning and deciding of what to learn and in what order is handled by one person, who helps the learner in a one-to-one situation. That is, there is one helper (or instructor, teacher, expert, or friend) and there is one learner. These two persons interact usually face-to-face, although it could be by telephone or by correspondence. Even if 2-4 learners were receiving individualized attention from one other person at the same time, it would be included here.

3. Material Resource Learning

In these learning projects, the major part of the detailed direction on what to learn and what to do at each session resides in some material resource, object, or nonhuman resource. Internet or web-based learning, a programmed instruction book, a set of audio tape, CD, or mp3 recordings, or a series of TV programs are examples: The learner follows the programs or materials and they tell him or her what to do next.

4. Self-Planned Learning

In other learning projects, the learner him or herself retains the major responsibility for the day-to-day planning and decision-making. He or she may get advice from various people and use a variety of

materials and resources, but he retains the responsibility for deciding what activities to try next, what to read, and what skill or knowledge should be next in the sequence. Instead of turning the Job of planning over to someone else, he or she makes the day-to-day decisions alone.

ID No. or Name _____

Learning project name or number _____

How was it learned? _____

Number of hours? _____ (criteria check – does it meet the requirements for including) _____

Not very active now _____ or Definitely active now _____

Reason for project _____

Director of learning _____

Source of subject matter _____

Do you consider this to be a self-directed project? ___Yes ___No

Would you classify this project as an effort towards personal or professional development?

_____

Learning project name or number _____

How was it learned? _____

Number of hours? _____ (criteria check – does it meet the requirements for including) _____

Not very active now _____ or Definitely active now _____

Reason for project _____

Director of learning _____

Source of subject matter _____

Do you consider this to be a self-directed project? ___Yes ___No

Would you classify this project as an effort towards personal or professional development?

_____

Learning project name or number _____

How was it learned? _____

Number of hours? _____ (criteria check – does it meet the requirements for including) _____

Not very active now _____ or Definitely active now _____

Reason for project _____

Director of learning _____

Source of subject matter _____

Do you consider this to be a self-directed project? ___Yes ___No

Would you classify this project as an effort towards personal or professional development?

_____

Learning project name or number _____

How was it learned? _____

Number of hours? _____ (criteria check – does it meet the requirements for including) _____

Not very active now _____ or Definitely active now _____

Reason for project _____

Director of learning _____

Source of subject matter _____

Do you consider this to be a self-directed project? ___Yes ___No

Would you classify this project as an effort towards personal or professional development?

_____

Learning project name or number _____

How was it learned? _____

Number of hours? _____ (criteria check – does it meet the requirements for including) _____

Not very active now _____ or Definitely active now _____

Reason for project _____

Director of learning _____

Source of subject matter _____

Do you consider this to be a self-directed project? ___Yes ___No

Would you classify this project as an effort towards personal or professional development?

_____

Learning project name or number _____

How was it learned? _____

Number of hours? _____ (criteria check – does it meet the requirements for including) _____

Not very active now _____ or Definitely active now _____

Reason for project _____

Director of learning _____

Source of subject matter _____

Do you consider this to be a self-directed project? ___Yes ___No

Would you classify this project as an effort towards personal or professional development?

_____

Appendix B

Attitudes Scale toward Self-Directed Learning

ID No. or Name _____

The following statements are intended to assess confidence towards aspects of self-directed learning. Indicate the degree of confidence you have in your ability to successfully perform the task described in the statement using the following scale:

1 2 3 4 5

No Confidence Moderate Confidence Complete Confidence

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1. Level of confidence in my abilities to identify, plan, and follow through with learning projects.

1 2 3 4 5

No Confidence Moderate Confidence Complete Confidence

2. Level of confidence that my ability to function as a self-directed learning will enhance my professional development.

1 2 3 4 5

No Confidence Moderate Confidence Complete Confidence

3. Level of confidence that my ability to function as a self-directed learning will enhance my personal development.

1 2 3 4 5

No Confidence Moderate Confidence Complete Confidence

4. Level of confidence that becoming a better self-directed learner will expand my ability to experience and learn new things.

1	2	3	4	5
No Confidence		Moderate Confidence		Complete Confidence

5. Level of confidence that developing a self-directed skill set as a college undergraduate student would provide long term benefits into adulthood.

1	2	3	4	5
No Confidence		Moderate Confidence		Complete Confidence