Exploratory study of the Structured Self Development experience of enlisted soldiers in the
Kansas Army National Guard

by

Brent A. Anders

B.S., Kansas State University, 2000
M.Ed., University of Nebraska at Kearney, 2008

AN ABSTRACT OF A DISSERTATION

Submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Educational Leadership
College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2018

Abstract

This exploratory phenomenological research study describes the experiences of U.S. Army soldiers going through the mandated Structured Self Development (SSD) online courseware. Multiple findings are presented covering soldier participants' experiences with the process, content, and culture/environment of SSD. Additionally, findings dealing with soldiers' motivations and self-described impediments while going through SSD are presented.

Four Army enlisted soldiers (two male, two female) were purposefully selected for this study, each one representing a different level of SSD (Levels 1-4). Participant soldiers for this study were selected from throughout the Kansas National Guard and each one possessed a different duty military occupational specialty within the Army.

The findings of the research study indicate that there are multiple aspects of SSD that soldiers experienced in a negative way. Areas such as frustration with the system, cheating, poor instructional technique, low retention of information, cognitive overload, and poor leader/peer perceptions were identified through soldier participant interviews. Motivational issues dealing with negative feelings of relevancy and boredom with the instruction were also acknowledged. Additionally, difficulty in accessing the SSD system by soldiers, and over assumptions of soldiers' levels of self-directed learning were also identified. This research contributes to the ongoing research needed dealing with soldier improvement through online learning.

Exploratory study of the Structured Self Development experience of enlisted soldiers in the
Kansas Army National Guard

by

Brent A. Anders

B.S., Kansas State University, 2000
M.Ed., University of Nebraska at Kearney, 2008

A DISSERTATION

Submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Educational Leadership
College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2018

Approved by:

Major Professor

Sarah Jane Fishback, Ph.D.

Copyright

BRENT A. ANDERS

2018

Abstract

This exploratory phenomenological research study describes the experiences of U.S. Army soldiers going through the mandated Structured Self Development (SSD) online courseware. Multiple findings are presented covering soldier participants' experiences with the process, content, and culture/environment of SSD. Additionally, findings dealing with soldiers' motivations and self-described impediments while going through SSD are presented.

Four Army enlisted soldiers (two male, two female) were purposefully selected for this study, each one representing a different level of SSD (Levels 1-4). Participant soldiers for this study were selected from throughout the Kansas National Guard and each one possessed a different duty military occupational specialty within the Army.

The findings of the research study indicate that there are multiple aspects of SSD that soldiers experienced in a negative way. Areas such as frustration with the system, cheating, poor instructional technique, low retention of information, cognitive overload, and poor leader/peer perceptions were identified through soldier participant interviews. Motivational issues dealing with negative feelings of relevancy and boredom with the instruction were also acknowledged. Additionally, difficulty in accessing the SSD system by soldiers, and over assumptions of soldiers' levels of self-directed learning were also identified. This research contributes to the ongoing research needed dealing with soldier improvement through online learning.

Table of Contents

List of Figures

List of Tables

Acknowledgements

To my wife Nelli who has encouraged me, believed that I could accomplish anything, and believes that I have so much more to offer the world.

To the greatest adviser period: Dr. Jane Fishback. She is a true mentor, friend, distinguished educator, and all around role model for so many people. I want to be like her when I grow up.

To the entire faculty of the College of Education, Adult Learning and Leadership. The different classes I've taken have greatly enhanced my understanding and appreciation for education in all of its many forms.

To my mother, father, sister, brother, and grandparents who have supported, believed in me, and never doubted that I would succeed in all of my educational endeavors. Muchas gracias mi familia y que Dios te paga.

To the U.S. Army for instilling in me the discipline and desire to be a *life-long learner*. Additionally for providing me with the GI bill and means to continue my education.

To Kansas State University for giving me a great education and employment along with some great bosses and employees.

Dedication

I dedicate this to my beautiful best friend and wife Nelli, as well as to my two beautiful daughters Eva and Lileth. This is for all for you. I also dedicate this to all of my family both in the United States and in Armenia. I hope that this accomplishment serves as an example of the importance of education and as a model for what all of you can achieve. My other family, the U.S. Army is, of course, also part of my dedication. Having spent most of my life within it, it is also an important part of me. Thank you to all officers and NCO leaders who have taken the time to mentor me and helped me to always try and improve myself. Thank you to the Airborne Infantry in Fort Bragg, NC, the Regional Training Institute in Salina, KS, the Public Affairs Detachment in Topeka, KS, and the Combined Arms Battalion in Kansas City, KS.

I also could not have accomplished any of this without the help of God. I give thanks for all that I have achieved through His support and guidance. "Gold there is, and rubies in abundance, but lips that speak knowledge are a rare jewel," (Proverbs 20:15).

Chapter 1 - Introduction

Overview

This exploratory research examined the phenomenon of what four different enlisted soldiers in the U.S. Army experienced in going through the mandated online training referred to as Structured Self Development (SSD). The U.S. Army (includes Active Duty, Reserves, and National Guard) must continually train and educate its combined 1,031,022 officer and enlisted soldiers (Defense Manpower Data Center, 2016) in order to be ready to meet the complex and always changing demands of current and future operations (Polson, 2010; TRADOC Pamphlet 525-8-2, 2011; 2017). As technology and instructional skills have evolved, the U.S. Army now fully endorses facilitated learning through the Army Learning Model/Concept (ALM), (TRADOC Pamphlet 525-8-2, 2011; 2017). The Army Learning Model (ALM) established the increased use of a "blended learning approach that incorporates virtual and constructive simulations, gaming technology, or other technology-delivered instruction" (TRADOC Pamphlet 525-8-2, 2011, p. 25).

The Army uses online instruction in that it "leverages technology and curriculum design to provide cost effective and efficient learning content" (TRADOC Pamphlet 350-70-12, 2013, p. 8). This then correlates with the establishment of the U.S. Army specific online training enlisted soldier curricula known as Structured Self Development (SSD). The SSD program was designed to reinforce what should be learned through resident institutional training as well as operational training that would be learned through operational assignments (United States Army Sergeants Major Academy, 2015). Army enlisted soldiers must complete different levels of SSD before they can attend different levels of Non-Commissioned Officers Education System (NCOES) courses needed for advancement and promotion (United States Army, 2013).

Background

To understand the entirety of Structured Self Development (SSD) it is important to look at all aspects of the experience to include *process, content*, and *environment (*or *SSD learning culture)*. The *process* of going through and using SSD is comprised of items such as the necessary security requirements (requires a special government card and reader to access the website), ease of use (usability and ease of logging on), accessibility (can the system be accessed from all types of computers to include desktops, laptops, tablets, smartphones), system availability (how often is the SSD system down for updates and/or maintenance), and time requirements (how much time is needed to complete the SSD course as well as is this personal time or on-duty time). The *content* aspect of SSD deals with the relevancy of information presented, the andragogical /pedagogical instructional designs used. The final aspect deals with the *environment or SSD learning culture* in regards to the perceived command/leadership climate surrounding SSD, as well as the self-efficacy, motivation, and mindset of those going through and taking SSD given the way the system is presented and viewed by those around them.

Initially this study might be viewed as simply another observation of adult online learning, but in this case there are many factors that are different and not fully addressed within the current literature. Key issues involving soldier motivation, instructional process and content, as well as educational culture dealing specifically with enlisted soldiers (as opposed to officers) through Structured Self Development is virtually non-existent in academic literature. This research will help to address this issue to better understand this large area of education (SSD) effecting over 800,000 enlisted U.S. Army soldiers (Defense Manpower Data Center, 2016).

Soldiers going through SSD are over eighteen years of age, so they are chronologically adults, but andragogy (the teaching of adult learners) does not define an adult by a chronological age, but by cognitive capability to be self-directed, "one who has arrived at a self-concept of

being responsible for one's own life, of being self-directing" (Knowles, 1984, p. 9). The SSD

level that a soldier must go through is based solely on rank, not age, cognitive development, or

experience. Additionally, although called Structured Self Development, soldiers are required to

go through it, often using their own time and finding their own suitable place to go through the

process (not all soldiers receive enough or, any time to complete their SSD while on duty at a

U.S. Army or National Guard facility). This type of education connotes the term *self-directed*

learning, but in using this phrase it is important to fully define it due to its multiple

interpretations by researchers (Confessore & Confessore, 1992).

Self-Directed Learning

Houle (1961) described three different motivations for adult self-directed learning: goal

orientation (directed toward a specific goal/objective), a learning orientation (initiated a desire to

learn – for pleasure), and activity orientation (engaged in due to a desire for social contact).

Influenced by Houle, Tough (1967), interviewed adults about their self-directed learning

activities and focused on the processes they used to accomplish it. A major aspect of Tough's

research claimed that it was when the adult learner assumed responsibility for their learning that

the learning became *self-directed* (1967).

Tough, known as a leader in self-directed learning, additionally focused on the process

and motivations of adults in their self-directed learning efforts (1978). His research identified

many different motivating factors across different situations and scenarios that affected why

adults would chose self-direction to accomplish their educational needs (1978).

Dr. Malcom Knowles (1975) described self-directed learning as an andragogical

technique of instruction that is problem/task based. Knowles (1975) further described self-

directed learning as having internal motivational characteristics and applicability to both

individual and group learning in independent formal or informal educational settings. Knowles

(1975) additionally added to his definition by incorporating self-directed learning as not only a technique, but also a frame of mind:

> If self-directed learners recognize that there are occasions on which they will need to be taught, they will enter into those taught-learning situations in a searching, probing frame of mind and will exploit them as resources for learning without losing their self-directedness. (p. 21)

Knowles (1975) also stated that other labels used to describe self-directed learning included: "self-planned learning, inquiry method, independent learning, self-education, self-instruction, self-teaching, self-study, and autonomous learning" (p.18).

Mocker and Spear (1982) found that many different researchers identified and defined self-directed learning in different ways. For Mocker and Spear (1982) self-directed learning "represents the ultimate state of learner autonomy, i.e., the learner exercises control over and major responsibility for choosing both the goals and the means of the learning" (p. 10). Within Mocker and Spear's (1982) explanation of self-directed learning they also added that the learner is not only responsible for selecting what is to be learned, but can also add, reject, or change resources, terminate the learning process, as well as personally decide on the level of satisfaction and adequacy of the learning outcome. The full level of control and management at all levels and in all ways is what separates Mocker and Spear's explanation of self-directed learning from most other more accommodating definitions.

Philip Candy (1991) described self-directed learning as encompassing both a method and a goal. Self-directed learning as a *method* was described as something different than just an instructional technique that a teacher can choose to use for a given class or assignment (Candy,

1991). The issue of control was a major factor in understanding self-directed learning as a method when comparing it to instructional techniques (Candy, 1991).

Candy's *goal* aspect of self-directed learning dealt with the internal development of the learner (1991). Candy identified four main aspects of self-directed learning that are important in the development of a learner's ability to develop self-directedness. The self-directed learner developmental goals listed by Candy are: personal autonomy, self-management in learning, the independent pursuit of learning, and learner-control of instruction (1991).

Candy (1991) also stipulated that self-directed learning was education that was more aligned beyond the end of more formal schooling (p. 15) but could also relate to pursuits within institutional education.

Grow (1991), introduced the *Staged Self-Directed Learning Model* (see Table 1.1). Through the Staged Self-Directed Learning Model (SSDLM), Grow (1991) focused on self-directed learning as a characteristic level of the learner while also correlating different levels of self-directive instructional methodologies. Grow also expressed the importance of a properly aligned relationship, "Every stage requires balancing the teacher's power with the student's emerging self-direction" (p.140).

Table 1.1

Staged Self-Directed Learning Model

Stage	Student	Teacher	Examples
Stage 1	Dependent	Authority Coach	Coaching with immediate feedback. Drill. Informational lecture. Overcoming deficiencies and resistance.
Stage 2	Interested	Motivator, guide	Inspiring lecture plus guided discussion. Goal-setting and learning strategies.
Stage 3	Involved	Facilitator	Discussion facilitated by teacher who participates as equal. Seminar. Group projects.
Stage 4	Self-directed	Consultant, delegator	Internship, dissertation, individual work or self-directed study-group

Note. Reprinted from "Teaching learners to be self-directed," by G. O. Grow, 1991, Adult Education Quarterly, 41, 125-149.

In Grow's (1991) model. the instructor not only uses the instructional technque based on the student's level of self-directedness, but also works to increase the students self-directedness by challenging the student and facilitating their growth and comfort with more self-directed learning. Grow (1991) points out that a student isn't at the same stage within the SSDLM for every topic. Different students could be at different stages within the model based on their knowledge of the material and level of confidence within their capabilities; knowledge level and capabilities would fluctuate based on the different subjects to be learned.

Confessore and Confessore's book, Guideposts to Self-Directed Learning (1992), reviewed twelve primary published works from multiple leading authors such as Candy, Houle, Long, Knowles, Bonham, Kasworm, Tough, Spear, Mocker, Hiemstra, and Brookfield, dealing with self-directed learning, its definitions, and educational implications. Confessore and Confessore provided a general definition; trying to synthesis the many works reviewed, of self-directed learning as learning beyond just formal education, outside the bounds of the regular curriculum, and/or prescribed programs of instructions, goals, procedures, and standards of

learning. Confessore and Confessore (1992) explained that self-directed learning required drive, initiative, resourcefulness, and persistence in order to accomplish one's necessary or desired educational goals, which could be in a formal or informal education setting as well as within a family/social realm or employment environment.

Two other researchers in the field of self-directed learning, Hiemstra and Brockett (1994) addressed the conflicting descriptions of what constituted self-directed learning. Hiemstra and Brockett (1994) defined self-directed learning as a teaching and learning process, while using the term *learner self-direction* to address a learner's internal individual characteristics. The interaction between self-directed learning and learner self-direction is described as another concept referred to as *self-direction in learning (*Hiemstra & Brockett, 1994). Unlike Candy (1991) or Brookfield (1993), who believed that social context was the starting point in understanding self-directed learning, Hiemstra and Brockett (1994) believed that understanding the individual learner was the key starting point for fully understanding self-directed learning and even created a Personal Responsibility Orientation (PRO) model that has been used in studying self-direction in Army soldiers (Carlisle & Fishback, 2015). Additionally, Hiemstra and Brockett (1994) addressed the issues of self-concept and self-awareness as important factors for the successful implementation and use of self-directed learning.

The Army views self-directed learning (which the Army often refers to as *self-learning*) with regards to soldiers as "Self-learning skills are essential in the Army's evolving training and professional development environment" (Wisecarver, Foldes, Ferro, Cullen, Graves, Rauchfuss, Wolfson, & Kraiger, 2012, p. v). The Army derives its definition of self-directed learning from a multiple of sources to include the work of Knowles (1975) and Tough (1971), research conducted on military leaders (Boyce, Zaccaro, & Wisecarver, 2010), and research dealing with

7

lifelong learning (Kraiger & Wilson, 2011). The Army's concept of self-directed learning claimed that learning was directed by an individual but not done necessarily on his or her own. So this could include a course that the soldier must complete (ordered by military leadership), but allowed to complete on their own time, either during work hours or outside of work hours and at their own pace (Wisecarver, et al., 2012). The "Self-learning skills" that the Army lists as needed include: self-motivational beliefs, self-efficacy for learning, goal orientation, intrinsic interest in material, self-reflection, ability to identify needed current and future competencies, self-control strategies, task-based strategies, self-monitoring of learning, and self-modifying strategies (TRADOC Pamphlet 525-8-2, 2011; Graves, Rauchfuss, & Wisecarver, 2012; Wisecarver, et al., 2012). In exemplifying this point, the first level of Structured Self-Development actually contains a class on the topic of *Self-Directed Learning Principles* (United States Army Sergeants Major Academy, 2016).

As the Army uses more and more online learning mechanisms "There is an assumption with DL [Distributed Learning] that students are self-directed and self-motivated and are comfortable with learning without an instructor/facilitator or other students" (TRADOC Pamphlet 350-70-12, 2013, p. 19). This implies that regardless of age or cognitive development, the Army views all of its soldiers as adult learners. The Army's own Research Institute for the Behavioral and Social Science published an article that recommends maintaining "a learning climate that is conducive to self-directed learning by providing encouragement, time, information, resources, rewards, and models of self-learning to Soldiers" (Wisecarver, et al., 2012, p. 23).

The Army derived definition of self-directed learning based mainly on Knowles (1975) will be used for the purposes of this document and addressing the subject of structured self-development.

> …a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulate learning goals, identify human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluate learning outcomes. Wisecarver, et al. (2012, p. 18),

Structured Self Development

Structured Self Development (SSD) is defined by the Army as online instruction "to bridge the operational and institutional domains and set conditions for continuous growth. SSD will ensure learning is continuous and enduring not sporadic and transitory" (ALARACT 288, 2010). This definition was then more formally expanded to

> …required learning that continues throughout a career and that is closely linked to, and synchronized with, classroom and experiential learning. SSD sets the conditions for continuous growth both as a Soldier and a leader. SSD is both an individual and first line leader responsibility executed at the individual's pace but under the supervision of the first line leader…The implementation of SSD will improve Army readiness by integrating self development into a life-long learning approach that fosters continuous learning. SSD is a prerequisite for attendance to NCOES [Non-Commissioned Officer Education System] courses. (Army Regulation 350-1, 2014, p. 83)

The problem with these formal explanations are that they define what SSD is for, but does not provide a full description of what it is.

Structured Self Development (SSD) consists of online courseware that has five different levels which corresponds to five different levels of Noncommissioned Officer rank (NCO), E5

Sergeant to E-9 Sergeant Major. Soldiers must go through this online courseware before they can then attend the face-to-face (residency) portion of their instruction in order to then be promoted (United States Army, 2013).

In order to log into the SSD courseware a soldier must use a computer with a CAC (Common Access Card) reader or have created a special username and password consisting of ten case sensitive characters that contain at least two special characters, two numbers, two uppercase and two lower case letters, and not be a password that has ever been previously used on the system. Additionally the soldier has to assign a new password every thirty days or every 150 days if they use their CAC (AESD, 2016). Proper security settings and levels of java must also be appropriately set within a student soldiers' Internet browser in order for the soldier to use any given computer to access the SSD courseware (AESD, 2016).

As online instruction has continued to gain acceptance and credibility (Johnson, Aragon, Shaik, & Palma-Rivas, 2000; Allen & Seaman, 2007) and due to its monetary efficiency (Zhang, & Nunamaker, 2003; Graham, 2006; TRADOC Pamphlet 350-70-12, 2013), the Army continues to move more and more instruction online. In 2016 the U.S. Army completed its move of all first phase NCOES's (Non-Commissioned Officer Education Systems) into the SSD environment (ALARACT 216, 2012; ALARACT 126, 2014; Tice & Tan, 2015). This means that soldiers no longer go to a first phase NCOES non-Military Occupational Specialty (MOS) specific course for their rank level and instead gain this instruction and "experience" completely through the required SSD (Structured Self Development) level.

Problem

Structured Self Development is an important bridging educational requirement for all enlisted personnel in order to attend advanced training and receive promotion. Yet there are no phenomenological studies conducted to better understand how soldiers overall experience SSD.

In 2015 the Kansas National Guard only had a 56.76% SSD graduation rate averaged across all SSD levels (information extracted from the Kansas National Guard Director's Personnel Readiness Overview online database, February 2016). The reasons for this low SSD graduation rate with the Kansas Army National Guard are not fully known or clearly understood. Since there are no research studies that have examined the process, content, environment, motivation, and impediment aspects as to why soldiers don't fully complete SSD, this phenomenological study is needed. Completion of SSD is vital for soldiers' development as well as advancement through the Army's rank structure.

Purpose

The purpose of this research was to gain an understanding of what Kansas Army National Guard soldiers experience in going through the Army mandated Structured Self Development (SSD) online learning system. Soldiers' experiences and feelings were obtained as to their overall process, content, and environmental perceptions dealing with Structured Self Development.

Research Questions

1. What are the perception of experiences of soldiers that are going through or have gone through SSD?

    a. What are the described experiences and perceptions dealing with the SSD process?

    b. What are the described experiences and perceptions dealing with the SSD content?

    c. What are the described experiences and perceptions dealing with the SSD environment?

2. How do soldiers describe their motivation as they progress through SSD?

11

3. How do soldiers describe any impediments with their progression through SSD?

Methodology

This exploratory phenomenological qualitative research study used various methods in collecting data to include researcher's field notes, procedural observations, and in-depth interviews (conversational, semi-structured/open-ended techniques, and self-expressed participant-produced drawings were used). The main data collection technique used were in-depth interviews that were conducted with four different soldiers over the course of one college semester. Interviews were captured via audio means, and transcoded into transcripts for coding of themes and analysis.

Interviews were conducted at the soldiers' armory or other place of military work in a private, relaxed setting, to put the soldier at ease and in a relaxed state. The soldiers were asked interview questions to obtain their specific perceptions of experiences as they progressed through the SSD process, identifying any difficulties or areas where the process, content, or environment could be improved upon.

Population

As of the writing of this manuscript, there are approximately 7,000 male and female soldiers within the Kansas Army National Guard (Kansas Adjutant General's Department, 2016). As of February 2016 there were 1,298 Kansas Army National Guard soldiers (E4s) that were either in SSD Level 1 or had recently graduated from SSD Level 1 (extracted from the Kansas National Guard Director's Personnel Readiness Overview online database, February 2016). During the same time period as previously mentioned, there were approximately 2,011 male and female soldiers in the Kansas Army National Guard who were either in SSD Level 2, 3, or 4, or had recently graduated from SSD Level 2, 3, or 4 (extracted from the Kansas National Guard

Director's Personnel Readiness Overview online database, February 2016). This represents the population for this research study.

This Kansas Army National Guard population was used for the purposes of this exploratory phenomenological research study. This population was able to answer interview questions that addressed the expressed research questions for this study, and provided a unique experience point of view from each of the four main levels of SSD from soldiers currently serving in the Kansas National Guard.

Sample

Three soldiers were selected for each level of SSD and then one soldier from each level was randomly selected. Four soldiers were purposely selected as convenience samples for this research study that were either going through their level of SSD or had recently graduated (within a year). One soldier was an E4/E5 (SSD 1), one soldier was an E5/E6 (SSD 2), one soldier was an E6/E7 (SSD 3) and a final soldier was an E7/E8 (SSD 4). Overall there were two female soldiers and two males soldiers used for this research study.

Limitations of this Study

Limitations of this study are that only four National Guard soldiers were interviewed. These soldiers were each of different ranks and had different levels of prior involvement with the SSD system based on time of service within the military. There are five different levels of SSD, and only four levels were evaluated in that the vast majority of soldiers will need to go through the first four SSD course within their time in the Army. This research was conducted on four soldiers' different ranks, experience levels, and MOS's (Military Occupational Specialty) to obtain a broader spectrum of soldier experiences. While exploratory, deep meaning understanding of these four soldiers' experiences may be transferable to how other soldiers could

experience the SSD process, additional research would be needed to add more academic rigor to that assertion.

Subjectivity Statement

As a First Sergeant in the Kansas Army National Guard, I as the researcher, am very familiar with the SSD issues within the Army. Having served for four years on active duty and another 17 years within the Kansas Army National Guard, I have seen many different Army online educational initiatives and iterations. Additionally, I have served the last ten years in the military as an official military instructor. Having dedicated a lifetime to Army service and specifically to military instruction, these are important subjectivities to note. These personal connections to the subject matter also make me more of an insider in that I have had to personally go through SSD and have had to ensure that the soldiers I am in charge of successfully complete the SSD online courseware.

In an effort to address any effect that my displayed rank may cause when interviewing soldiers, I conducted the interviews wearing civilian attire as opposed to being in official military uniform. Soldiers were also informed that the information they provided me would not be directly connected to them by name. This allowed the soldiers to open up more and provide more direct thoughts and feeling with regard to their observations dealing with the process and educational environment/culture associated with SSD. In a similar fashion, questions were not asked of the soldiers directly that could potentially cause them to violate any Army values or specific Army policies.

Additional mitigation for the subjectivities listed were addressed through academic advisor review and additional reflection to ensure full academic rigor was obtained. Military and academic advisors were also consulted to ensure that proper procedures were utilized.

Assumptions

The assumptions made for this research study deal with the positive merit of the

qualitative research methodology (Creswell, 2007). The nature of reality was assumed to be a

shared experience, although not necessarily experienced in the exact same way. "Realities are

thus treated as pure 'phenomena' and the only absolute data from where to begin" (Groenewald,

2004, p.4). The idea that the phenomenon being studied is unique to the individual, but can be

understood though proper description and explanation of the language is a fundamental

assumption as well (Creswell, 2007). Additionally it was assumed that the soldiers interviewed

were honest in expressing their lived experience with SSD.

Definitions

1. *Structured Self Development (SSD)*: SSD is different than the regular yearly

   online training (example: suicide prevention, sexual harassment and assault

   response program, operational security) that all soldiers in the U.S. Army must go

   through. SSD is a rank specific online curriculum that soldiers must successfully

   complete before they can go to the appropriate NCOES (Sergeants school) in

   order to progress in rank (United States Army Sergeants Major Academy, 2015).

   SSD level 1 must be completed before a soldier can attend Basic Leaders Course

   (BLC: first level Sergeants school). SSD 2 must be completed before a soldier can

   attend Advanced Leaders Course (ALC: second level Sergeants school). SSD 3

   must be completed before a soldier can attend Senior Leaders Course (SLC: third

   level Sergeants school). SSD 4 must be completed before a soldier can attend

   Master Leader Course (MLC: fourth level Sergeants school). SSD 5 must be

   completed before a soldier can attend Sergeants Major Course (SMC: fifth and

highest level Sergeants school), (Army Regulation 600–8–19, 2015, Sheftick, 2015).

2. *Motivation:* This refers to a multiple of aspects within SSD (motivation to start/complete SSD, to learn the materials within the course, as well as based on the general culture surrounding SSD). The main motivational theory used will be Keller's (1987/2004) ARCS model identifying four different major aspects of motivation: Attention, Relevance, Confidence, and Satisfaction. Each motivational aspect would be addressed within the context of soldiers' experiences dealing with the online SSD.

3. *Instructional Content:* This refers to the actual informational material to be learned by soldiers within any particular SSD level. Instructional information is described as helping "…to prepare Soldiers in meeting challenges of the Contemporary Operational Environment (COE) and assists in developing effective, adaptive, agile, and critical thinking Soldiers for the Army Force Generation (ARFORGEN)" (United States Army Sergeants Major Academy, 2015, pa. 1). The content of SSD is described as engaging "Soldiers cognitively by providing a blended learning environment for enlisted Soldiers. SSD provides IMI [Interactive Multimedia Instruction] courseware Soldiers can use anytime and anywhere in the world" (United States Army Sergeants Major Academy, 2015, pa. 1).

4. *Instructional Process:* This refers not only to the actual overall process of physically going through SSD: logging-in process, general heuristics/usability, accessibility and availability of the content/system, and time requirements.

16

5. *Educational Environment/Culture:* This refers to the assumed importance and value of SSD from the perception of enlisted soldiers as well as what their view points are on the value that higher leadership places on SSD. Issues of self-efficacy, motivation and mindset are also part of this aspect. Additionally, Educational Environment/Culture deals with how SSD is integrated within the overall Army education construct, its overall value, importance, and impact.

6. *Self-efficacy:* This is an internal mental process that works to "determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences" (Bandura, 1977).

7. *Mindset:* This deals with internal psychological beliefs similar, but broader than self-efficacy. People have one of two different *mindsets*, fixed or growth (Dweck, 2006). A *fixed mindset* believes that one's qualities are permanent. This type of person believes that moral, behavior, intellectual, and personality aspects cannot be improved upon or changed. The *growth mindset* views things in the exact opposite way and believes that these qualities can be cultivated and modified (Dweck, 2006).

8. *Self-directed Learning:* the main definition of this term is taken from Knowles (1975) …a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulate learning goals, identify human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluate learning outcomes (p.18).

9. *Andragogy:* this refers to adult learning instruction that defines adult learners as having more developed ideas of self-concept, with a greater amount of

experience, a readiness to learn, and an orientation or motivation to learning (Knowles, 1973).

Significance

The information gleaned from this exploratory research provided a richer understanding of soldiers' experiences and served as a first step for follow on research to those in higher Army leadership at the O6/O7 level (Colonels and Generals) and TRADOC (US Army Training and Doctrine Command) personnel responsible for insuring effective U.S. military online instruction. Research information derived from this study provides assistance to those military agencies in enhancing and evolving the SSD system to better serve soldiers and to establish the proper educational environment. Having stated the significance/benefits, this study was accomplished with the permission of the Army, not specifically for the National Guard, but explicitly for research purposes.

This specific research dealing with soldier experiences with Structured Self Development (SSD) is needed in that there is a large gap in academic research. As noted by other researchers in the field of soldier online learning, more study dealing specifically with online military learners and instruction is needed. "The significant lack of research examining online military learners limited further comparative analysis" (Ford, & Vignare, 2014). This exploratory study sought to address this research gap by gaining a deep understanding of what four differently ranked soldiers experienced as they went through the online SSD instruction.

Summary

This chapter has presented an overview of Structured Self Development as used by the U.S. Army. Issues dealing with soldiers' experiences accessing the system, going through the system, learning the content, time allocations, and educational culture/leadership views were all

18

identified as research areas. Interpretivism and phenomenology were used as the theoretical framework that guided the analysis of the experiences obtained from the soldiers interviewed.

Self-directed learning was presented as an overall concept pertaining to the Army's Structured Self Development (SSD), however multiple research definitions of self-directed learning were descried along with the Army's own definition which mainly focused on Knowles' interpretations of andragogy (Wisecarver, et al, 2012). The Army mandated SSD online instruction was fully explained along with its importance to training soldiers in preparation for the residency portion of their noncommissioned officer course and future missions. This exploratory phenomenological study's population of 7,000 Kansas Army National Guard soldiers along with the convenience sampling procedures of four soldiers from different SSD completion levels, ranks, sex, and duties were described. Limitation of the study with a subjectively statement and mitigation procedures were also presented. Assumptions of phenomenological reality as well as honesty from interviewees were expressed along with definitions of the main terms used within this study. Finally, significance of this research providing a richer understanding of soldiers' experiences in online learning was described to enhance the research at large as well as to directly provide the U.S. Army with information to continually improve in educational methodologies.

Chapter 2 - Review of the Literature

Introduction

This review of the literature summarizes the main elements that this research addresses. This chapter is presented in three main sections: self-directed learning, online-learning, and Structured Self Development (SSD). The first section deals with the major theoretical framework of this study, self-directed learning, and will address the different viewpoints presented by various researchers as well as how the U.S. Army views this educational component. Additional aspects of self-directed learning will also be addressed to include motivational aspects, reflection, self-efficacy, and mindset (fixed versus growth). The second section and additional theoretical framework of this study will address the issue of online learning. This section will review online learning's development, effectiveness, and researched-based implementation techniques. The final section culminates in defining and expressing the importance of the U.S. Army's mandated Structured Self Development (SSD) online instructional program for all enlisted soldiers.

The National Guard is a component of the U.S. Army, but structurally different in that it is made up of citizen soldiers and not fulltime service men and women. Therefore it is a unique and important component of the U.S. military. Originally founded in 1636 as a citizen militia to protect families and townships from various types of attacks, the National Guard of today works directly with and is a part of the U.S. Army. National Guard soldiers have civilian jobs and/or attend college while also maintaining their military training part time. These soldiers are always prepared to leave their civilian lives to help and defend the United States in the event of an emergency, local or overseas (National Guard, 2016). Most, if not all, of the literature dealing with learning and the U.S. Army deal with full time active duty soldiers (generally officers) as

opposed to National Guard enlisted soldiers that typically only participate in military training once a month and two weeks in the summer. This makes research in this area all the more necessary and important in that the context of the learning in which National Guard soldiers experience is different on a multitude of levels.

Self-Directed Learning

Self-directed learning as an educational concept has been viewed and interpreted in different ways by many researchers (Houle, 1961; Tough, 1967; Knowles, 1975; Mocker and Spears, 1982; Candy, 1991; Grow, 1991; Confessore & Confessore, 1992; Hiemstra & Brocket, 1994). While some researchers (Houle, 1961; Tough, 1967) have viewed it as an internal learner process, others (Knowles, 1975; Mocker and Spears, 1982; Candy, 1991; Grow, 1991; Confessore & Confessore, 1992; Hiemstra & Brocket, 1994) have viewed it as a mixture of both an internal process and an instructional method with different levels of utilization and impact. Understanding the concept of self-directed learning is of great interest to the U.S. Army in that they rely on soldiers to continue with training and education on their own (TRADOC Pamphlet 525-8-2, 2011; 2017). This section will present the main literature views of self-directed learning and additionally express the U.S. Army's concept of self-directed learning and how it applies to its soldiers and their ongoing learning.

Houle (1961), an early contributor and a founding father of self-directed learning created an influential book The Inquiring Mind that viewed self-direction in learning as an orientation towards learning. Houle (1961) viewed the self-directed learner as an adult learner in a chronological sense (someone over 18 years of age), not as a cognitive development stage (1961). The adult-learner as defined by Houle (1961) was driven to edification due to one of three different motivational orientations: *goal* orientation, *learning* orientation, and *activity* orientation.

21

Goal orientated learners had a very specific educational objective, which was practical

utility (Houle, 1961). An example would be taking a course on public speaking because one has

a specific public speaking event coming up or an increasing need for this type of skill in one's

job. This type of self-directed learner is driven by specific wants and needs for certain

information needed for specific events or situations (goals). Houle viewed self-directed learning

not as an isolated endeavor, but as an educational motivational process that can take many

different forms (1961). Houle further described this orientation as people with "confident

acceptance of adult education as a way to solve problems or to pursue particular interests" (1961,

p. 35). Motivationally this is an important aspect of the goal orientated self-directed learner in

that if relevancy of what is being learned is not made evident in terms of a problem or interest

then impatience and/or frustration can set in (Houle, 1961, p. 35). Houle (1961) noted that these

types of self-directed learners tended to adopt this orientation starting in their mid twenties.

Activity orientated learners were less interested in the educational content and more

interested in the social act of participating in the learning group (Houle, 1961). These self-

directed learners viewed the act of learning as an effective way to engage with others and belong

to a social group. The motivations for these self-directed learners dealt less with content but

more with the pleasure of belonging and socially interacting. Houle expressed that these social

groups serve "a kind of preventive psychiatric role" and are also used by some self-directed

learners as a means to find a life partner for continued social engagement (1961, p. 19). Other

self-directed learners in this orientation sought to escape their current social world (current

wife/husband, parent, job) and chose to engage in a learning activity where they would be around

completely different people. Motivationally this group would not appreciate a course where

learning is done in isolation without any student-to-student engagement. Houle (1961) noted that these types of self-directed learners tended to be of this orientation starting in their late twenties.

Learning orientated learners were fundamentally driven to learn for the enjoyment as well as the internal need to acquire more knowledge. Houle (1961) described this orientation as "these people have *cacoëthes studendi*, the itch to learn" (p. 25). This self-directed learner orientation is easily self-motivated in that they are always curious and want to learn new content; this orientation often describes the need for learning "because it is good in and of itself" (Houle, 1961, p. 30). Houle also noted that these types of self-directed learners tended to be of this orientation all of their life, with an almost always present quest for knowledge, an inquiring mind (1961).

In describing these three different self-directed learning orientations, Houle pointed out that there was an overlap and not everyone was strictly of one orientation (1961). Additionally, self-directed learners were influenced by their internal views and by views of those around them (friends, teachers, bosses, spouses). Students' exposure to higher education was noted as an positive influence in understanding the importance of continuing education and self-directed learning later on in life (Houle, 1961). Houle concludes by expressing that "the desire and the ability to learn are not shared equally by everyone, both can be fostered by good teaching, by careful guidance, by building and enlarging sympathetic enclaves, and by providing a range of educational opportunities" (1961, p. 82).

Houle's (1961) work continues to influence modern educational research (Mantie, 2012; Conradie, 2014). Mantie (2012) used Houle's ideas and concepts in reviewing and identifying the different reasons why adults continue with education beyond simply *learning for learning sake* such as to better appreciate a subject or to improve/master a skill. Conradie (2014) used

Houle's writings in understanding how to successfully support self-directed learning through connectivism and personal learning environments which resulted in improved learner motivation, engagement, collaboration and self-actualization..

Tough (1967), a student of Houle's, gained recognition for conducting research on the process of what adults actually go through when in the activity of self-directed learning (referred to as self-teaching by Tough). Tough defined the self-directed learner as someone who "assumed the primary responsibility for planning, initiating, and conducting the learning project" (1967, p. 3). The learning project was defined by Tough as deliberate action by the learner to gain specific skill(s) or knowledge and which consisted of at least eight hours worth of effort within the preceding year (1967).

Tough interviewed 40 adults who fell within his classification of self-directed learner and extracted information on how they executed learning projects. He detailed 12 different steps: 1) the process of choosing the learning goal, 2) deciding the different activities needed to achieve the learning goal, 3) how to obtain printed materials and other instructional resources, 4) the estimating of one's own current level of knowledge and skill(s), 5) how to deal with the difficulty in understanding, 6) choosing when to actually spend time learning, 7) deciding on the location to learn, 8) deciding how much money to invest in the learning project, 9) how to deal with motivational issues in achieving the learning goal, 10) how to deal with undesirable activities needed to achieve the learning goal, (11) dealing with internal doubts and worries about being able to succeed, and 12) deciding whether or not to actual continue with the learning project (1967). Tough's research revealed additional processes that self-directed learners went through to include "developing, regaining, or maintaining certain learning skills, such as

concentrating, understanding new material, and remembering" as well as the ability to apply the knowledge learned to real-life situations (1967, p. 70).

Later (1978), Tough combined data from his 1967 research with other researchers' findings on the learning efforts of adult self-directed learners. In summarizing the different research, Tough used the same definition for both self-directed learners and learning projects with the slight modification that learning projects required seven hours of effort within a year instead of the previous eight hours (1978). Tough found that 70% to 100% of interviewees had conducted at least one learning project within the previous year (1978). Tough research review also highlighted that in any given year 70% of American adult self-directed learner conducted at least one learning project (1978). The typical self-directed learner was identified as having completed five different learning projects per year at 100 hours per project (Tough, 1978). Of those learning projects, 20% were planned by a professional, meaning someone specially trained and/or paid in a one-on-one, group, or programed instruction such as a television environment (Tough, 1978). The vast majority of the learning projects (80%) was planned by either the learner themselves (73%), a friend (3%), or a group peer (4%), (Tough, 1978). These figures revealed that although most instruction was focused on professionally-guided learning, a vast majority of adult learning (80%) was occurring without professional help (Tough, 1978). Tough stated "implications arise for fresh services and for our professional practices" (Tough, 1978, p. 7).

Tough additionally studied the motivations associated with why adult self-directed learners took on learning projects and why they utilized self-directed learning (Tough 1978). Tough found that the main motivation for self-directed learners to embark on a learning project was due to a perceived need for a new skill or knowledge set that would be used in the

perceivable future (1978). As to other reasons for a learning project, Tough (1978) found that it was much less common (1% to 15% with a general average of 5%) for self-directed learners to learn due to simple curiosity/puzzlement or just wanting to learn for its own sake. Additionally, Tough found that it was also much less common for an adult self-directed learner to engage in a learning project due to seeking credit towards a degree, or some type of certificate (1978).

In identifying specific motivations for why adult learners would use self-directed learning for their learning projects, Tough (1978) referenced work done by Penland that stated these motivations in rank order:

…desire to set my own learning pace; desire to put my own structure on the learning project; desire to use my own style of learning; I wanted to keep the learning strategy flexible and easy to change; I wanted to learn this right away and couldn't wait until a class might start; I didn't know of any class that taught what I wanted to know; lack of time to engage in a group learning program; I don't like-a formal classroom situation with a teacher; I don't have enough money for a course or a class; transportation to a class is too hard or expensive. (p. 10)

Tough was also known for pushing other researchers to do more in understanding the wants and needs of the self-directed adult learner (1978). As part of Tough's future directions section, he wrote "Hopefully adult educators will respond by adopting a fresh, broader purpose: to foster the entire range of major learning efforts, not just group instruction and pre-programmed courses" (1978, p. 19).

Another highly regarded researcher who was influenced by Houle, Malcom Knowles (1975), described self-directed learning in terms of an andragogical (adult learning) instructional technique in conjunction with an overall orientation of *self-directedness*. Knowles defined self-

directed learning as deriving from "our natural processes of psychological development" (p. 14) and applying to both individual and group learning in independent formal and/or informal educational settings (1975). In viewing self-directed learning as a process and an instructional technique, Knowles expressed how the self-directed learner could go in and out of different types of instructional environments with different levels of independent self-directed learning based off of the current need of the learner. In this way the learner's level of self-directedness would be derived from their knowledge and comfort level with the material to be learned. So the learner would still have an internal view/orientation of self-directedness even if they could be in a very traditional teacher-directed class environment (Knowles, 1975).

Knowles (1975) also provided other terms used by researchers to describe self-directed learning: "self-planned learning, inquiry method, independent learning, self-education, self-instruction, self-teaching, self-study, and autonomous learning" (p.18). Knowles expressed that these were all the same thing just labeled differently.

Knowles (1975) further identified the self-directed learner through his learning resource creation: Competencies of Self-Directed Learning: A Self-Rating Instrument (see Table 2.1).

Table 2.1

Competencies of Self-Directed Learning: A Self-Rating Instrument

Competencies of Self-Directed Learning: A Self-Rating Instrument		I possess these competencies to the following degree:			
		None	Weak	Fair	Strong
1	An understanding of the differences in assumptions about learners and the skills required for learning under teacher-directed learning and self-directed learning, and the ability to explain these differences to others.				
2	A concept of myself as being a non-dependent and a self-directing person.				
3	The ability to relate to peers collaboratively, to use them as resources for diagnosing needs, planning my learning, and learning; and to give help to them and receive help from them.				
4	The ability to diagnose my own learning needs realistically, with help from teachers and peers.				
5	The ability to translate learning needs into learning objectives in a form that makes it possible for their accomplishment to be assessed.				
6	The ability to relate to teachers as facilitators, helpers, or consultants, and to take the initiative in making use of their resources.				
7	The ability to identify human and material resources appropriate to different kinds of learning objectives.				
8	The ability to select effective strategies for making use of learning resources and to perform these strategies skillfully and with initiative.				
9	The ability to collect and validate evidence of the accomplishment of various kinds of learning objectives.				

Note. Reprinted from "Self-directed learning: A guide for learners and teachers," by M. Knowles, 1975, p. 61, Copyright 1975 by Malcolm S. Knowles.

The "Competencies of Self-Directed Learning" instrument provided both the learner and instructional facilitator with an understanding of the learner's self realized level of self-directedness. Additionally, Knowles pointed out that by knowing these different competencies a learner could work to improve their own self-directedness and capabilities within a self-learning environment (1975, p. 64).

Knowles expressed his belief in the importance of self-direction, "The problem is that the culture does not nurture the development of the abilities required for self-direction, while the need to be increasingly self-directing continues to develop organically" (Knowles, 1973, p. 44). Knowles words seem prophetic given that employers want new hires to be self-directed learners (Ryan, 2016; AARP, 2016).

Mocker and Spears (1982) addressed the issue of inconsistency with regards to defining self-directed learning. Different researchers have identified self-directed learning in very different ways and for very different purposes. Mocker and Spears claimed self-directed learning had the highest state of control by the learner on both the goals and the way that the learning would be conducted (1982). This self-directed learning description correlated with their Lifelong Learning Model (see Table 2.2) in which the "adult" learner has maximum control of both the objectives and means with regard to learning (Mocker and Spears, 1982, p. 4).

Table 2.2

Lifelong Learning Model

		WHAT (Objectives)	
		Institution	Learner
HOW (Means)	Institution	Formal Learning	Nonformal Learning
	Learner	Informal Learning	**Self-Directed Learning**

Note. Reprinted from "Lifelong learning: Formal, nonformal, informal, and self-directed," by D. W. Mocker, & G. E. Spear, 1982, p. 4, *Information Series* No. 241. Copyright 1982 by The National Center for Research in Vocational Education, the Ohio State University.

Mocker's and Spear's Lifelong Learning Model described the types of learning that an individual was exposed to and could also choose from throughout their life. Formal learning was described as official degree and certificate programs such as those offered by universities. Additional examples would include things such as a cosmology academy, a General Educational

Development (GED) school, as well as most parts of the military. With this type of learning the learner has no control over the learning objectives or the ways (means) in which they learn (Mocker and Spear, 1982).

Nonformal learning was described as the type of learning that stems from when a person decides that they want to learn a particular topic and then choose a class or course that specifically addresses the topic of interest. Mocker and Spear (1982) provide the example of a woman that is unhappy with her current employment. Her interests lie in accounting so she chooses to enter into a program with a local vocational school to become a bookkeeper. With nonformal learning the learner does control the actual objectives or goals of their learning, but not the way (means) in which they learn (Mocker and Spear, 1982).

An additional note dealing with nonformal learning was that Spear and Mocker (1981) found through their own research that when given a choice, learners tended to choose formal learning instead of nonformal learning. Spear and Mocker (1981) found this to be most evident with adult learners that had less than a high school education. Mocker and Spear stated that this suggested that there was an important role for the adult educator (1982). Similarly, a more recent 2013 study also found a small majority of the learners (73 respondents consisting of active postgraduate students in human resource management) chose formal learning instead of nonformal learning in order to improve or gain needed competences (Popovski, Topuzovska, & Popovska, 2013).

With informal learning the learner is in control of the way in which the material will be learned (means) but is not in control of the goals or objectives. As an example, research done by Himmel (1970), evaluated thirty studies that dealt with undergraduate psychology courses. It compared classes with traditional (formal) instruction to classes that were informal and allowed

the students to control how they learned the material (meaning both content acquisition and time management). The results indicated that achievement results were equal to that of formal learning but were preferred by 33% of the students with no preference for the lecture method (Himmel, 1970).

Mocker and Spear (1982) noted that there was a fair amount of research dealing with this type of informal learning although it was often referred to as self-directed learning by other researchers. Additionally, in addressing the importance and rational of this type of informal learning strategy, Mocker and Spear (1982) stated that:

More persuasive reasons for installing the informal approach are instructor preference, learner preference, and the larger philosophical belief that the individual develops beneficial competencies through the exercise of autonomy and freedom. This latter belief, while not demonstrated conclusively, is widely held and is the most frequent justification for using the informal instructional approach; that is, an approach that places responsibility of deciding the means on the learner. (p. 9)

Mocker and Spear (1982) described self-directed learning as the learner controlling (and having responsibility for) both the way (means/environment) and goals (objectives) of the learning. "Self-directed learning, as defined here, represents the ultimate state of learner autonomy" (Mocker and Spear, 1982, p. 11). Mocker and Spear (1982) further define self-directed learning by expressing that in this mode of learning the learner selects and also rejects, adds, and changes the learning recourses. The learner was also the one that decides to continue or end the learning and makes the final determination with regards to satisfaction or outcome of learning.

In formalizing this mode of learning and defining self-directed learning, Mocker and

Spear (1982) addressed the problems associated with terminology and consistency of meaning by

various other researchers in the field; Tough, Penland, Brookfield, and Cross were all listed as

using many different terms when dealing with self-directed learning (Mocker and Spear, 1982).

Other terms for self-directed used include self-planned learning, self-teaching, self-initiated,

individualized learning, autonomous learning, autodidactic activity, and isolated learning

(Mocker and Spear, 1982). Understanding and properly defining these different learning modes

were described as vital elements in properly creating a usable educational theory to improve

adult learners life long learning efforts (Mocker and Spear, 1982).

Later, in 1991, Philip Candy pushed for an understanding of self-directed learning as

encompassing two different things, a method and a goal. When defining self-directed learning

(which Candy refers to as autodidaxy) as a method, Candy initially made a comparison to

independent study to explain the possibilities of how a learner would have the independent

capabilities to access and learn information. This was used in that independent study was

described as the instructional technique with the highest level of learner control (see figure 2.1).
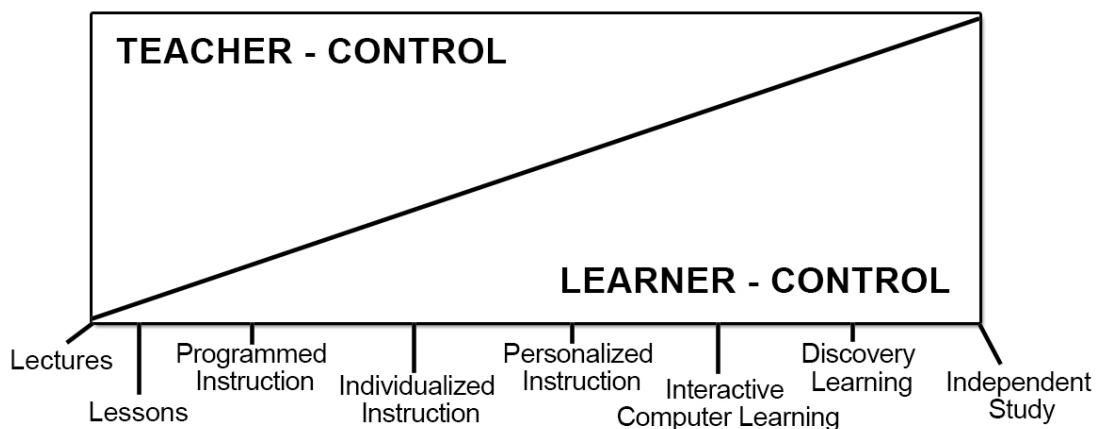

Figure 2.1 Learner-Control Continuum showing where greater control lies within different instructional strategies.
Reprinted from *Self-direction for lifelong learning: A comprehensive guide to theory and practice* (Candy, 1991).

Ultimately Candy expressed that self-directed learning was different than independent study in that self-directed learning had a greater sense of "ownership" that tied in with learner control (Candy, 1991, p. 17). Although both independent study and self-directed learners could choose different levels of assistance and guidance from an instructor/guide, self-directed learners always had more control. This was due to the instructor having a degree of control/ownership of the instructional interaction and evaluation within an independent study scenario. Candy (1991) therefore argued that in this way independent study was a technique of instruction whereas self-directed learning was a method where the learner was in full control, choosing the interactions and final decision of satisfactory comprehension or evaluation. The two (independent study and self-directed learning) could over lap in characteristics and process, but were very different with respects to control and ownership. This difference in control and ownership tied in with learners' internal view (Candy, 1991, p. 19). Candy (1991) specifically states "autodidaxy [self-directed learning] is not a method of instruction that can be called on by an educator" (p. 16). It was instead a method of learning that the learner personally utilizes when they are capable and choose to use it (Candy, 1991).

Candy described the goal of self-directed learning as the embodiment of personal autonomy, self-management in learning, the independent pursuit of learning, and the learner-control of instruction (1991). Through the embodiment of personal autonomy, self-directed learning was a means of self-rule. One was in control and able to conceive goals and plans, exerce freedom of choice, use rational reflection, have an ability to follow through, exercise self-restrain/self-discipline, and viewed themselves as autonomous (Candy, 1991, p. 125).

The second goal aspect mentioned by Candy dealt with self-management in learning.

Candy (1991) stated that the self-management aspect was maximized within a learner who was:

- Disciplined
- Logical/Analytical
- Reflective/Self-aware
- Has curiosity and motivation
- Flexible
- Interpersonally competent
- Persistent and responsible
- Venturesome and creative
- Confidence and positive self-concept
- Independent and self-sufficient
- Information-seeking skills
- Skillful learning
- Abel to evaluate learning

Candy (1991) expressed a positive view of the list derived from an examination of twenty research articles dealing with self-directed learning, but also criticized the list in that it could be biased based on class and gender as well as not taking the importance of situational variability fully into account.

Candy (1991) stated that another important aspect of self-management within self-directed learning dealt with the issue of learner self-confidence. As an example, Smith (1986) asked librarians to describe their interactions with self-directed learners. The research concluded that self-directed learners had a willingness to learn but that there were two types of learners: timid and confident. The timid self-directed learners were described as appearing lost, inarticulate, and reluctant to ask for help. The confident learners were described as skillful, capable with a strong sense of purpose, and willing to ask questions when needed (Smith, 1986). The difference in confidence would directly relate to self-directed learners' ability to self-manage their learning (Candy, 1991).

The third goal aspect described by Candy was that of the independent pursuit of learning. Candy expressed that this goal aspect specifically meant the "intentionality" of learning (1991, p. 158). A self-directed learner was intentional in their actions and functions within a community of learning. Candy expressed that societal settings of the self-directed learning could have important effects on the learners outcomes, so establishing good productive relationships was important (1991).

The final aspect of Candy's goal aspect of self-directed learning was that of learner control of instruction. By this Candy described the importance of learner control with regards to self-directed learning and the explanation that learner control was multifaceted and included being in control even when allowing an instructor to use controlling instructional methods (Candy, 1991). Candy's (1991) view on learner control was derived from Cottingham's (1977) six different types of control held by the self-directed learner: 1) Learner-control of the instructional event, 2) Learner-control of evaluation (achievement/progress), 3) Learner clarification of goals (standards), 4) Learner-control of diagnosis (performance levels and/or problems), 5) Learner-control of prescriptive decisions (managing instruction), and 6) Learner-control of motivation (clarifying consequences).

Ultimately, Candy's view of self-directed learning was that "self-directedness is a product of the interaction between a person and a situation rather than a quality that inheres in either the person or the situation independently" (1991, p. xix). Candy also stressed the importance of critical thinking skills in order to be able to properly build a learner's self-directed capability. This importance correlates with work done by Brookfield (1985) and Mezirow (1985) that also championed the significance of critical thinking with regards to self-directed learning.

Familiarity with the subject to be learned and general learning competence was also listed as key components in a learner being confident enough to utilize self-directed learning (Candy, 1991).

Another self-directed learning researcher, Grow, built upon Candy and other's previous work by creating the Staged Self-Directed Learning Model (see Table 2.3) and expressed that in addition to the learner's efforts, the instructor could also assist or hamper the self-directed learners' development (1991).

Table 2.3

Staged Self-Directed Learning Model

Stage	Student	Teacher	Examples
Stage 1	Dependent	Authority Coach	Coaching with immediate feedback. Drill. Informational lecture. Overcoming deficiencies and resistance.
Stage 2	Interested	Motivator, guide	Inspiring lecture plus guided discussion. Goal-setting and learning strategies.
Stage 3	Involved	Facilitator	Discussion facilitated by teacher who participates as equal. Seminar. Group projects.
Stage 4	Self-directed	Consultant, delegator	Internship, dissertation, individual work or self-directed study-group

Note. Reprinted from "Teaching learners to be self-directed," by G. O. Grow, 1991, p. 129, *Adult Education Quarterly, 41, 125-149.* Copyright 1991 by Adult Education Quarterly.

Grow's construct of self-directed learning focused on learner control and the ability of the student to "self-direct" to a proper level of assistance when needed (1991). Additionally, Grow viewed self-directed learning as existing in any type of environment whether formal or informal, in an educational institution or outside of one (1991). Grow focused on what teachers could personaly do (guidance/instructional scaffolding) to influence this self-direction capability within an adult learner and not about self-directed learning as a theory (1991, p. 128).

In the first stage of Grow's model the student was very much a dependent learner and looked to the instructor (expert/authority) for teacher-centered direct instruction (1991). It is

important to note that a student could be in different stages of self-direction depending on the subject matter being learned. A student could be in stage one within mathematics, but in a much higher stage within a class that they were more familiar with such as a literature class (Grow, 1991).

In this stage (1) Grow addressed the need for the instructor to fully establish their credibility, provide clear objectives, use straightforward techniques (such as lecture), and expect high discipline (1991). Grow also stressed that this stage used mainly one-way communication (teacher to learner) with frequent and timely feedback. Grow expressed that this was just stage 1 of the process in actively developing a learner to be self-directed (1991). This correlates with Pratt's (1988) statement "there is nothing inherently demeaning or destructive in pedagogical, temporarily dependent, relationships" (p. 168). Similarly, and more recently, Pratt (1993) again emphasized the importance of authority and relationship with regards to self-directed learning for adults.

Within stage one of Grow's model the instructor themselves served as the constant motivating factor by pushing students to achieve most often by the use of power dynamics, threats of discipline, or additional physical work (1991). Prime examples of instructors within this portion of the Staged Self-Directed Learning Model are: coaches, karate instructors, and drill sergeants (Grow, 1991).

Within stage two of Grow's model the student learners were more interested in the topic to be learned. They were more willing to do the work and were motivated by the instructor through their clarity of relevance, energy, and excitement for the learning material. As Grow put it "learners at this stage go along if they understand why and the instructor provides direction and help. Or they will go along because they like the teacher" (1991, p. 131).

37

Stage two was still somewhat direct in its approach but does have more two-way communication (Grow, 1991). Instruction would now have more class discussions (teacher-led) and demonstrations followed by guided practice (Grow, 1991). Additional examples provided by Grow include a highly interactive computerized drill program and a mother teaching a child to talk (1991).

Grow argued that this second stage was the best time to start to prepare students to be more self-directing (1991). Goal setting was an important skill that was to be taught at this stage as well as a gradual shift from extrinsic motivation (praising) to more intrinsic motivation (encouragement). Students in this stage were built up with greater confidence and ownership of their own learning abilities (Grow, 1991). "The teacher's enthusiasm carries students until they have learned enough to become self-motivated" (Grow, 1991, p. 132). Grow provided an example of that last statement in the movie *Dead Poets Society* (1989) where the lead character, Robin Williams, served as a motivating lecture performer. The students became motivated and learned the poetry being taught. The students then created their own poetry club (Dead Poets Society) and were actually moving into stage three of Grow's *Staged Self-Directed Learning Model* (1991).

The third stage was described as students having skill, knowledge, and purposely participating in their own education (Grow, 1991). These students might read additional books or resources on what was being learned even though it wasn't required. The learners in this stage had greater confidence in themselves yet still needed more as well as additional guidance on developing critical thinking skills, and how to learn by themselves and with others (Grow, 1991).

In this stage much more group work was done with the instructor serving less as a direct teacher and more as a participant and guide when needed (Grow, 1991). Students should be

38

given more ownership and options in this stage to further develop their self-directedness. Assignments such as student-developed group projects (with much less instructor supervision) were cited as examples of possibilities within this stage (Grow, 1991). Another key element in this stage was that the students themselves provided the motivation and no longer relied on the teacher for inspiration (Grow, 1991). Grow cited the work of Paulo Freire (1968) in that critical pedagogy could be appropriately used in this stage in that it would involve taking greater responsibility for one's own learning and greater understanding of society and themselves (1991).

The fourth and culminating stage in Grow's *Staged Self-Directed Learning Model* described students as fully self-directed learners who fully set their own goals (1991). These students used a multiple of different resources to include experts and teachers to accomplish their educational pursuits whether in formal or informal setting and whether alone or with others (Grow, 1991). These students have developed through the help of teachers in the previous stages to succeed as self-directed learners. They would now have skills in time/project management, goal setting, peer critique, information gathering, use of educational resources, and an understanding of the learning process (Grow, 1991). A greater sense of control, ownership, and responsibility were key aspects of this stage (Grow, 1991).

In this final stage the teacher functioned to help the student's ability to learn in that the focus has been moved from the subject matter to the learner themselves (Grow, 1991). The instructor assisted by holding regular meetings to discuss aspects of the student's progression and any problems that may have arisen (Grow, 1991). In this way the instructor functioned as a monitor and only really steps in when necessary or needed. A prime example of this stage would be the relationship between an academic advisor and their PhD student (Grow, 1991).

Grow also addressed the dangers that can arise from a mismatch between an instructor that teaches at a certain stage and a student who has developed to a certain stage within that subject matter (1991). "Every stage requires balancing the teacher's power with the student's emerging self-direction" (Grow, 1991, p. 140). When a student is not developed enough, the key is to understand the learner and help that student to move to more self-directed capabilities through phased progression in instructional style (Grow, 1991). Yet the situation could also be reversed,

> Adults who return to college may find themselves faced with a similar mismatch. Their life experiences and learning skills enable them to learn at the S3 [Stage three] or S4 [Stage four] level in many subjects, but at many colleges they find faculty accustomed to using S1 and S2 methods on adolescents. Furthermore, after many years of responsibility, adults may experience difficulty learning from S1 teachers. (Grow, 1991, p. 138).

Grow pointed to the *Staged Self-Directed Learning Model* itself as a solution to help all instructors to address the issues associated with the mismatch (1991). Multiple researchers such as Fisher, King, & Tague (2001), Rovai (2002), Premkumar, Pahwa, Banerjee, Baptiste, Bhatt, & Lim (2013) have used Grow's Staged Self-Directed Learning Model (1991), with positive results, in studying various different areas such as nursing, building a sense of community in a distance education environment, and medical training. Fisher, King, and Tague (2001) found that they were able to create a self-directed learning readiness scale to assist with implementing teaching strategies to best suit individual nursing students. Rovai (2002), noted in identifying needed components in establishing a sense of community at a distance online, "good teaching is situational and requires that the online instructor design and facilitate an online course that accommodates the needs of all learners, regardless of their stage of learning [self-direction]."

Premkumar, Pahwa, Banerjee, Baptiste, Bhatt, and Lim (2013) described how in comparing students self-directed learning readiness before medical training and after, levels seem to drop, indicating a need to review the current curriculum to enhance self-directed learning.

Confessore and Confessore (1992) provided additional insight on self-directed learning with their review of a multiple of published research works from leaders in the field. From this review Confessore and Confessore defined self-directed learning as learning that was more than regular (formal) education and something that generally transcended a normal curriculum (1992). Confessore and Confessore explained that self-directed learning was tied to personal goals and standards. Additionally, in reviewing the research, Confessore and Confessore identified the common aspects of drive, initiative, resourcefulness, and persistence as pertaining to those capable of self-directed learning (1992).

Confessore and Confessore (1992) also described that self-directed learning had always been part of the human condition. Additionally self-directed learning could exist in virtually any setting to include formal and informal education as well as within the workplace or family and social realms (1991). An important note brought out by Confessore and Confessore (1992) was that the different types of research reviewed identified self-directed learning as both a process of learning as well as a capability within the individual learner that could be developed. Psychological aspects were also described as being important elements for self-direction in that educated adults were generally viewed as more cognitively capable/developed to go through that process (Confessore & Confessore, 1992).

Hiemstra and Brocket (1994) addressed what they have described as various misconceptions. Two main misconseptions addressed were: 1) that self-directed learning must be an all or nothing type of concept, and 2) that self-directed learning was just a teaching method or

just a learning method (1994). Hiemstra and Brockett expressed that there are many different

levels and components of self-directed learning that adult learners could use in different ways

and to different extents (1994). With regards to self-directed learning *only* being a teaching

method or *only* a learning method, Hiemstra and Brockett created their Personal Responsibility

Orientation (PRO) model (see figure 2.2) to explain the distinction of how *both* are part of self-

directed learning in what they refered to as *self-direction in learning* (Brockett and Hiemstra,

1991).
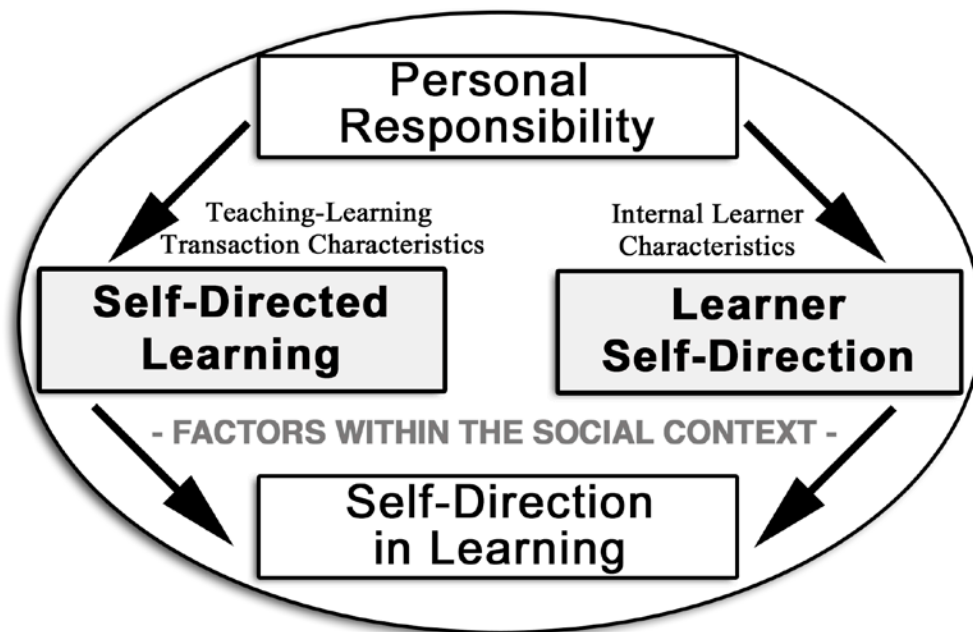
Figure 2.2 Personal Responsibility Orientation (PRO) Model. Reprinted from *Self-direction in adult learning: Perspectives on theory, research, and practice. Routledge series on theory and practice of adult education in North America* (Brockett & Hiemstra, 1991)

The central aspect to the PRO model was in identifying the difference between *self-*

directed learning and *learner self-direction* (Hiemstra and Brockett, 1994). Where as *self-*

directed learning dealt with external characteristics of the teaching-learning transaction process,

learner self-direction focused on the learners' internal characteristics (Hiemstra & Brockett,

1994). In Hiemstra and Brockett's PRO model, personal responsibility served as the important

linkage between the stated factors contributing to overall self-direction in learning (1994).

Brockett and Hiemstra (1991) identified the internal learner characteristics of the self-direction as steming from "a positive view of human nature and the belief that human potential is virtually unlimited [and] serve as cornerstones to the concept of personal responsibility" (p. 128). The internal learner characteristics of the self-directed learner were identified as: 1) an understanding that the locus of control is within the learner, not the instructor/institution, 2) a focus on a specific topic, 3) a need to use the skill/knowledge to be learnered in an relative immediate matter, 4) an internal motivation to succed in the area of study, 5) a feeling of accomplishment when completing a learning project, 6) using previous experience, interests, and abilities in selecting an area to study, 7) an ability to use different instructional methods and techniques that best correlate with their own style of learning, 8) a development of character attributes to include: integrity, self-discipline, perseverance, industriousness, altruism, sensitivity to others, and strong guiding principles, 9) additional attributes of independentness, nonconformity, and creativeness, 10) skills in reading and other processing capabilities, 11) the using of youth expreiences as a contributing factor in selecting learning project topics and processes, and 12) good interpersonal skills and an ability to be well-liked by others (Brockett & Hiemstra, 1991, p. 127). Hiemstra and Brockett additionally addressed the issues of both self-concept and self-awareness as needed important factors for successful self-directed learning (1994).

In general, Brockett and Hiemstra advocated for a self-directed learner (the student) to assume responsibity for their learning and to use a facilitator (like a teacher, but much more than just a lecutrer) when needed with regards to the teaching-learning transaction (1991, p. 108). The characteristics of this transaction where that the facilitator would serve as an educational resource, provide information/media via multiple learning technques and resources, aid in

assessing learner needs/competencies to create a learning path/map, provide ongoing feedback, assist with finding contacts for specialized information, assist with proper attitude development to content to be learned, serve as a sounding board and validator/evaluator when needed (Brockett & Hiemstra, 1991, p. 109).

Hiemstra's and Brockett's PRO model have been used for a multiple of topics to include self-directed learning within museum education (Banz, 2008), and self-directed learning in online learning (Gaspar, Langevin, Boyer, & Armitage, 2009). Additionally, Hiemstra's and Brockett's self-directed learning research has been cited by many researchers to include Merriam (2001), Song and Hill (2007), Kasworm (2011), as well as other research associated with the U.S. Army (Woodie, 2005; McKinley, 2005).

Subsequently, Stockdale (2003) used Hiemstra's and Brockett's PRO model (1991) in the development of the Personal Responsibility Orientation to Self-Direction in Learning Scale (PRO-SDLS). This scale was specifically designed to serve as a valid and reliable instrument in measuring graduate and undergraduate education students' self-directedness (Stockdale & Brockett, 2011). The PRO-SDLS was comprised of 35 psychometrically sound items that used a 5-point Likert-like format "that best reflected student's degree of agreement or disagreement with statements pertaining to self-perceptions of their actions and beliefs in self-directed learning opportunities" (Stockdale & Brockett, 2011). Additionally, the PRO-SDLS has been successfully used across multiple student types and online instruction to include finding a relationship between self-direction and: technology use among undergraduate seniors (Holt & Brockett, 2012), studying self-direction with Army officers (Carlisle & Fishback, 2015), online peer learning forums and online learning habits of mixed undergraduate students (Gaspar,

Langevin, Boyer, & Armitage, 2009) and the influence of online curricular activities on engineering students' learning autonomy (Duarte, Leite, & Mouraz, 2016).

In 2012 Hiemstra and Brockett reconfigured and updated their PRO model into a "21st century vision for SDL [self directed learning]" called the *Person, Process, Context* (PPC) model (p. 157). The *person* element of the PPC model is described as including the characteristics of the individual (creativity, critical reflection, enthusiasm, life experience, life satisfaction, motivation, education, resilience, and self-concept (Hiemstra & Brockett, 2012, p. 158). *Process* is expressed as involving the teaching-learning transaction which included facilitation, learning skills, learning styles, planning, organization, evaluation capabilities, teaching styles, and technological skills (Hiemstra & Brockett, 2012, p. 158). The *context* element deals with both the environmental and sociopolitical climate to include such things as culture, power, learning environment, finances, gender, learning climate, organizational policies, political milieu, race, and sexual orientation (Hiemstra & Brockett, 2012, p. 158). All three elements of the PPC model are described as being equally important, "although there will be situations where one element may assume a greater role… they are comparable in their influence," (2012, p. 158). Yet to achieve the greatest effect, all elements (person, process, and context) should be in balance (Hiemstra & Brockett, 2012).

The specific acknowledgment of *context* as an equally import element of self-directed learning was the major distinction of the PPC model from Hiemstra's and Brockett's original PRO (Personal Responsibility Orientation) model (2012). Hiemstra and Brockett highlighted their perceived importance of context in explaining that self-directed learning always occurs within different social and physical environments that affect the overall educational process (Hiemstra & Brockett, 2012). With the inclusion of the PPC model, Hiemstra and Brockett also

admitted "we have had important contributions that raise questions about the limits of self-direction in certain social contexts" (2012, p. 159).

The U.S Army's view of self-directed learning (referred to as *self-learning* and often synonymously with *lifelong learning*) was heavily influenced by Tough (1971) and Knowles (1975) as well as other researchers in the field (Boyce, Zaccaro, & Wisecarver, 2010; Kraiger & Wilson, 2011). The Army defined self-directed learning as learning done by a soldier when directed or called for in order to meet mission needs or for the purposes of career/institutional advancement (Wisecarver, Foldes, Ferro, Cullen, Graves, Rauchfuss, Wolfson, & Kraiger, 2012). The key elements in the Army's definition stated that the soldier had ownership and responsibility of completion, regardless of whether the actual learning was occurring in private (on the soldiers' own time), as part of regular training, at a specialized Army educational institution, or via online coursework (Army Regulation 621–5, 2009; Wisecarver, et al., 2012; Army Regulation 350-1, 2014; Army Field Manual 6-22, 2015).

The Army further compiled a list of self-directed learning skills (see figure 2.3) needed by soldiers in order to succeed within the current operational environment of the military (TRADOC Pamphlet 525-8-2, 2011; Graves, Rauchfuss, & Wisecarver, 2012; Wisecarver, et al., 2012). Additionally self-directed learning has been identified as a 21st century competency that all soldiers are now required to possess within the U.S. Army (TRADOC Pamphlet 525-8-2, 2011). To help achieve this 21st century competency requirement, the Army now teaches a class entitled "Self-directed learning principles" (Module I - SL111) within its Structured Self Development Level 1 online required courseware (United States Army Sergeants Major Academy, 2016).

Army Self-Directed Learning Skills	
• Self-motivational beliefs • Self-efficacy for learning • Goal orientation • Intrinsic interest in material • Self-reflection	• Ability to identify needed current/future competencies • Self-control strategies • Task-based strategies • Self-monitoring of learning • Self-modifying strategies

Figure 2.3 Army Self-Directed Learning Skills. Adapted from *Self-Learning among army noncommissioned officers: Experiences, attitudes, and preferred strategies* by M. Wisecarver, H. Foldes, G. Ferro, & M. Cullen, 2012.

These identified self-directed/life-long learning skills are also expressed and taught within various levels of soldier leadership training and are to be encouraged whenever soldiers are counseled (performance review), (Army Regulation 350-1, 2014; Army Field Manual 6-22, 2015; Army Regulation TC 7-21.13).

Motivation

Another factor dealing with self-directed learning is that of the motivational aspects of the adult learner. Although both Houle (1961) and Tough (1978) addressed motivation with self-directed learning, they focused on motivational reasons why adults would engage in self-directed learning activities, not the general topic of motivation and how it applies to adult learning. Knowles (1973) dove a bit deeper into motivations of the student as well as motivational aspects of an effective teacher. Many other researchers in self-directed learning also addressed this aspect in some way (Mocker & Spear, 1982; Candy, 1991; Grow, 1991; Hiemstra and Brockett, 1994), but Keller (1987) developed a widely used understanding of motivation, the ARCS (Attention, Relevancy, Confidence, and Satisfaction) Model of Motivation. With Keller's model *Attention* refers to a needed prerequisite for learning as well as the idea of getting and maintaining the student's attention (Keller, 1987). *Relevancy* deals with the students' perception as to why the information to be learned is important (and useful) both in the short term and in the

long term (Keller, 1987). The aspect of *Confidence* revolves around how students' attribute the reasons for their success within the classroom; meaning that students need to be confident that their hard work and effort will result in a better grade (this deals with Dweck's explanation of *mindset* that was referenced by Keller and further explained later in this document), (Keller, 1987). The aspect of *Satisfaction* deals with proper positive feedback and opportunities to use what was learned in a realistic setting/real applicability, as well as intrinsic/extrinsic rewards (Keller, 1987).

Keller's ARCS Model of Motivation has been successfully tested and used with self-directed learning (Gabrielle, 2003; Keller, 2009; Kim & Frick, 2011). The ARCS Model of Motivation offers a straightforward model that allows for a direct way to see if instruction addresses each motivational aspect (Keller, 1987). Gabrielle (2003) found that undergraduates given classes that used technology-mediated instructional strategies developed using the ARCS model, had significantly greater levels of academic performance than control group students. Keller (2009) stated in his book that he has conducted multiple field studies/action research using the ARCS method with positive results. Kim and Frick (2011), using the ARCS model, conducted a survey of 368 adult learners from both industry and higher education who had used online self-directed products, and found "If students are more motivated to learn, then they are more likely to be engaged; and if they are engaged and engaged successfully, they are more likely to achieve the learning objectives" (p.14).

This motivational model will be used throughout this document when reviewing the experiences expressed by soldiers going through the Army's Structured Self Development online process/coursework.

Mindset

Another concept that ties into motivation and is needed to ensure success as well as to maximize effectiveness in self-directed learning is that of *mindset* (Dweck, 2006; Keller, 2008, Lee, Heeter, Magerko, & Medler, 2012). Dweck (2006) defined mindset as a viewpoint that one adopts that "profoundly affects the way you lead your life" (p. 6). Dweck further identified mindset as a belief system that an individual would have that was either a *growth mindset* or a *fixed mindset* (2006).

The *fixed mindset* was described as "believing that your qualities are carved in stone" (Dweck, 2006, p. 6). With this fixed mindset people would view themselves as only having a certain amount of intelligence. Those of fixed mindset would have an internal need to prove that they have this level of intelligence and would not do anything or take any chances where their level of intelligence could be jeopardize (Dweck, 2006). People with a fixed mindset value looking smart above everything else, even to the point of sacrificing valuable learning opportunities that are needed for their future academic success (Dweck, 2010). Students that posses a fixed mindset do not like putting forth effort and believe that if someone really has the right ability then everything should simply come naturally to them (Dweck, 2010).

The belief system of the *growth mindset* was that people can improve or enhance their level of intelligence or capability (Dweck, 2006). The growth mindset was described as a "belief that your basic qualities are things you can cultivate through your efforts" (Dweck, 2006, p. 7). Students that have a growth mindset view work that was challenging as an opportunity to grow, improve, and learn thereby increasing their malleable intelligence (Dweck, 2010). Dweck (2015) further clarifies that the growth mindset was more than just effort in that "students need to try

49

new strategies and seek input from others when they're stuck. They need this repertoire of approaches — not just sheer effort — to learn and improve" (Dweck, 2015, p. 2).

An important component for student success in general and especially for soldiers as they continue to learn and train within the military was the mindset variable, specifically the growth mindset (Dweck, 2010; Hochanadel & Finamore, 2015). Research such as Mercer (2011) looking at language acquisition as well as Yan, Thai, and Bjork (2014) investigating learners' study decisions, found that having the growth mindset was a strong contributing factor to educational success. Additionally developing and maintaining a growth mindset greatly assised in overcoming issues with continuing education through online learning (Yan, Thai, & Bjork, 2014; Hochanadel & Finamore, 2015).

A necessary implementation of self-directed learning within the modern day Army is through the use of online learning. The U.S. Army spends billions of dollars on education every year (United States Department of Defense, 2015) and continues to invest in technology such as online learning (referred to as distributed learning "DL") to meet its educational needs (TRADOC Pamphlet 350-70-12, 2013). "DL has been recognized as an increasingly important part of the Army's training and leader development strategy, and the Army has identified the need to transform training and leader development programs in a major way through increased use of DL" (Shanley, Crowley, Lewis, Straus, Leuschner, and Coombs, 2012).

Online Learning

Development

The development of online learning (learning done through the Internet) arose from the efforts of distance education (learning done via a distance such as by mail, radio, TV, and now the Internet), with the first fully online course being available in 1981 (Harasim, 2000). Originally viewed as mainly just an outreach program and not as a main system of instruction,

distance education initially lacked real interaction and timely feedback mechanism (Craig, 2015).

Then, in the1990's as Internet adoption grew, and an understanding of how to do online

interactivity improved, the rate of universities offering online instruction greatly increased

(Wallace, 2003; Craig, 2015). Since 1995 the percentage of adult Americans who use the

Internet has increased from14% to 87% (Pew Research Center, 2014), and the number of higher

education students taking at least one online course has risen from 1.6 million in 2002 to 5.8

million in 2014 (Poulin & Straut, 2016).

An important needed aspect of the development of online learning has been in its ability

to increase interaction (Craig, 2015). Through the use of online learning tools, two-way

discussions and feedback has increased and become much faster than older forms of distance

education (Wallace, 2003). Yet interaction is only one aspect of overall educational effectiveness

with online instruction.

Effectiveness

In order to fully comprehend the effectiveness of any instructional program, to include

online learning, four levels of evaluation need to occur, Level 1: Reaction, Level 2: Learning,

Level 3: Behavior, and Level 4: Results (Kirkpatrick & Kirkpatrick, 2006). Level 1: Reaction

involves students' satisfaction with how the instruction occurred and ties in directly with

motivation (Kirkpatrick & Kirkpatrick, 2006; Clark, 2015). "Positive reaction may not ensure

learning, but negative reaction almost certainly reduces the possibility of its occurring"

(Kirkpatrick & Kirkpatrick, 2006, p. 22). Level 2: Learning includes the overall level with which

students change their attitude, increase their knowledge, and/or improve their skills due to the

instruction (Kirkpatrick & Kirkpatrick, 2006). Level 3: Behavior, "the extent to which change in

behavior has occurred because the participant attended the training program" (Kirkpatrick &

Kirkpatrick, 2006, p. 22). Most trainers want to jump to this level but all levels were described

as being important in order to ensure effective training/education (Kirkpatrick & Kirkpatrick,

2006). In order for change to actually occur there are four conditions that must be met:

1. The student must have a desire to change.

2. The student must know what to do and how to do it.

3. The student must work in the right climate (encouraging recommended as opposed to
   preventing, discouraging, or neutral).

4. The student must be rewarded for changing. (Kirkpatrick & Kirkpatrick, 2006, p. 23)

The final level, 4: Results, dealt with what has happened due to the instruction/training such as

increased production, decreased costs, reduced turnovers, or improved quality, to name a few

possibilities (Kirkpatrick & Kirkpatrick, 2006). Since the fourth evaluation level was *results,* the

final objectives of the instruction must be made clear at the very beginning in order to ensure

proper assessment (Kirkpatrick & Kirkpatrick, 2006). Additionally, research (Ssemugabi & De

Villiers, 2007; Nielsen & Molich, 1990) has shown that use of an established set of heuristics is

effective in evaluating online learning applications.

Swan (2003) conducted a research review of effective online instruction and discovered

multiple elements that aid in online asynchronous instruction. Swan's review and identification

of effective online instruction was structured around the three different types of needed

interaction for learning: learner-to-content, learner-to-instructor, learner-to-other-learners

(Moore, 1989; Swan, 2003). In learner-to-content online interaction Swan's (2003) review

identified the need for initial assessments of students' knowledge/skills for better personalized

instruction, ongoing assessment of student performance with immediate personalized feedback,

as well as opportunities for active learning (techniques such as writing reflections, discussions, and problem solving).

For learner-to-instructor interaction, recommendations were made for frequent opportunities for both public and private communication, and personalized timely supportive feedback (Swan, 2003). Additionally, Swan highlighted the importance of online verbal immediacy behaviors (giving praise, soliciting viewpoints, humor, self-disclosure) (2003).

With learner-to-other-learner interactions, Swan (2003) identified the importance of establishing a social presence and community of practice (community-building activities to establish trust, common educational goals, and an opportunity for sharing experiences and beliefs). Swan also identified the importance of quantity and quality with regards to student posting in online discussion boards (2003). The use of online discussions was further highlighted as a powerfully effective online learning tool when discussions were supportive of experimentation, divergent thinking, complex understanding, exploration of multiple perspectives, and reflection (Swan, 2003). Additionally, interactions with the online course interfaces were identified as a factor in the learning process "difficult or negative interactions with interfaces can depress learning" (Swan, 2003).

The 2010 U.S. Department of Education, Office of Planning, Evaluation, and Policy Development's *Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies*, identified very similar findings to those of Swan (Means, Toyama, Murphy, Bakia, & Jones, 2010). This Meta-Analysis review stated that "Students in online conditions performed modestly better, on average, than those learning the same material through traditional face-to-face instruction" (Means, Toyama, Murphy, Bakia, &

Jones, 2010, p. xiv). All of this information gives greater legitimacy to the U.S. Army's decision to use the online Structured Self Development courseware to train soldiers.

Structured Self Development

U.S. Army Regulation 350-1 (2014) defines Army Structured Self Development (SSD) as required online learning "to bridge the operational and institutional domains and set the conditions for continuous growth" (p. 83) and is to be completed by all fulltime (active duty) U.S. Army, Army Reserves, and Army National Guard enlisted soldiers. The process of Structured Self Development was to be "executed at the individual's [soldier-student's] pace but under the supervision of the first line leader" (Army Regulation 350-1, 2014, p. 83). The SSD instruction must be completed prior to the soldier attending the next face-to-face leader's (sergeant's) course (Army Regulation 350-1, 2014). Additionally, ALARACT 288 (2010) states "SSD will ensure learning is continuous and enduring not sporadic and transitory" and will improve Army readiness by being "closely linked to and synchronized with classroom and experiential learning" (p. 1).

All enlisted soldiers in the U.S. Army must go through Structured Self Development (SSD) in order to be promoted past the rank of specialist/corporal (E4). The SSD online courseware is made up of five different levels that corresponds to five different levels of Noncommissioned Officer rank (NCO): level 1 needed for promotion to E-5 Sergeant, level 2 to E-6 Staff Sergeant, level 3 to E-7 Sergeant First Class, level 4 to E-8 Master Sergeant, and level 5 to E-9 Sergeant Major (ALARACT 126, 2014), (see figure 2.4 below). A soldier must complete the corresponding SSD level before they can then attend the resident course (face-to-face) as part of their NCOES. Each SSD level is made up of a series of educational modules consisting of about 80 hours worth of instruction (Shanley, Crowley, Lewis, Straus, Leuschner, & Coombs, 2012; Tice & Tan, 2015).

Figure 2.4 Enlisted Soldier Ranks and Required SSD Levels. Adapted from "History of U.S. Army Enlisted Ranks," by Institute of Heraldry, 2016.

Purpose and Importance

The specific educational purpose of SSD is to "bridge the gap" between face-to-face required Army enlisted (sergeant) leadership courses by providing online courses on various topics depending on the SSD Level (United States Army Sergeants Major Academy, 2016). Five different levels of SSD are currently part of the overall Structured Self Development process with each level consisting of approximately 80 hours of coursework (United States Army Sergeants Major Academy, 2016). Lower SSD levels have online classes such as Army Ethics, Army Writing Style, Counseling, Command Supply Discipline, Army History, Risk Management Process, Equal Opportunity, Sexual Harassment, Combat Stress, and Antiterrorism (United States Army Sergeants Major Academy, 2016). Higher levels of SSD have online classes such as Ethical Leadership Decision-Making Process, Critical and Creative Thinking, Introduction to the International Security Environment, Senior Leader Media Skills, Strategic Level Leadership, Operational Environment, Nation Building Operations, and Civil Affair/Civil Military Operations (United States Army Sergeants Major Academy, 2016). All of these courses are delivered through different online tools via the Blackboard learning management system (United States Army Sergeants Major Academy, 2016).

SSD functions to link "development efforts by ensuring that the self-development domain is well defined, meaningful, and integrated into the leader development process" (United States

55

Army, 2010). TRADOC Command Sgt. Maj. David Davenport, in describing Structured Self

Development stated "SSDs prepare you for what you're going to see in the brick-and-mortar"

(Jones, 2016, para. 5). By this, Command Sgt. Maj. Davenport expressed that the information

learned from SSD would be needed in order to be properly prepare to pass the residency portion

of an Army face-to-face course needed for promotion to the next rank (Jones, 2016). Time

between resident/face-to-face courses can be a year or more for National Guard soldiers.

The requirement of Structured Self Development (SSD) must be addressed by all enlisted

soldiers at every level if they wish to progress within the Army. The Army's leadership has

placed great importance on and has invested heavily to try and make SSD relevant and practical

so that it fits in with soldiers' overall development. The identified purpose of SSD, to fill in the

gaps between soldiers' face-to-face (resident) courses, functions to continually improve soldiers'

capability and prepare them to pass subsequent face-to-face instruction.

Summary

This chapter has reviewed the relevant literature and summarized the main elements

dealing with different aspects associated with Structured Self-Development. This chapter

presented three main sections on the topics of self-directed learning, online-learning, and

Structured Self Development. The first section of this chapter, self-directed learning, which is the

major theoretical framework of this study, addressed different researchers viewpoints as well as

how the U.S. Army views this educational component. Other aspects of self-directed learning

(motivational, reflection, self-efficacy, and mindset) were also addressed. The second section of

online learning (additional theoretical framework of this study) addressed the issues of online

learning development, effectiveness, and researched-based implementation techniques. The last

section of this chapter defined and explained the purpose and importance of the U.S. Army's

mandated Structured Self Development (SSD) online instructional program for all enlisted

soldiers.

Chapter 3 - Methodology

The purpose of this research was to gain an understanding of what Kansas Army National Guard soldiers experienced in going through the Army mandated Structured Self Development (SSD) online learning system. Soldiers' experiences and feelings were obtained as to their overall process, content, and environmental perceptions dealing with Structured Self Development.

This chapter describes the methodology that was used in this study. The proceeding chapter sections are: research questions, rationale, setting, population, sample, procedures, data collection, and research theoretical framework.

Research Questions

The specific research questions that this study examines are:

1. What are the perception of experiences of soldiers that are going through or have gone through SSD?

    a. What are the described experiences and perceptions dealing with the SSD process?

    b. What are the described experiences and perceptions dealing with the SSD content?

    c. What are the described experiences and perceptions dealing with the SSD environment?

2. How do soldiers describe their motivation as they progress through SSD?

3. How do soldiers describe any impediments with their progression through SSD?

Rationale

This research explores the experiences and perceptions of soldiers through the use of qualitative interviews. Qualitative interviews have been selected as the main means of data capture in that this technique provided participants the ability to freely express their experiences and lived phenomena. These research questions were designed to logically address the phenomenon of Structured Self Development (SSD) with regards to the literature, personal military experience, and National Guard leadership's understanding of the topic.

Research Theoretical Framework

Interpretivism (as derived from constructivism) was used as the main research theoretical framework for this study. Interpretivism seeks to understand a person's subjective meaning of an experience as constructed through uniquely personal social interactions and interpretations of the world, time, and space around them (Creswell, 2007). A key aspect is that meaning isn't simply "imprinted" on an individual, rather it is "formed" or constructed (Creswell, 2007, p. 21). Crotty (1998), in describing constructivism, explains "meanings are constructed by human beings as they engage with the world they are interpreting.

As a subset of interpretivism, phenomenology was used to further define the specific theoretical views and processes of this study. Phenomenology, originating from psychology and philosophy (Creswell, 2007), deals specifically with exploring and understanding what the structure and essence of an experience means for a group of people who have experienced a shared phenomenon (Bhattacharya, 2007). For the purposes of this study, the phenomena will be going through the Army's online Structured Self Development (SSD) learning system.

To further define the specific aspect of phenomenology to be used, existential phenomenology was utilized in the process and analyzing of this study. Existential phenomenology, mainly attributed to Heidegger (1962) and Merleau-Ponty (1961), (Groenewald,

2004), is defined as a human experience that is subjective to an individual's own values, feelings, relationships and thoughts; concerning "itself with the experiences and actions of the individual, rather than conformity or behavior," "…as an active and creative subject, rather than an object in nature" (Jun, 2008, p. 2). This existential description sets up the phenomenon to research as very specifically experienced by an individual regardless of any shared behavior with others.

Appropriateness of Research Theoretical Framework to Study

The key aspect of this research study is to "understand and describe what a Kansas Army National Guard soldier experiences" which fully correlates and aligns with phenomenology's focus on attaining deep and rich understanding of a person's lived experience. The direct use of existential phenomenology provided specific direction in uncovering participants' independent feelings, values, and relationships with regards to the three research study questions of: 1. What are the perception of experiences of soldiers that are going through or have gone through SSD? 1a. What are the described experiences and perceptions dealing with the SSD process? 1b. What are the described experiences and perceptions dealing with the SSD content? 1c. What are the described experiences and perceptions dealing with the SSD environment? 2. How do soldiers describe their motivation as they progress through SSD? 3. How do soldiers describe any impediments with their progression through SSD?

Through the use of phenomenology, multiple interviewing techniques were employed to peel the layers away as to the participant's experiences in going through the many aspects of the SSD system. Deep understanding of experiences was obtained through allowing open-ended story telling of the participants' experiences. Minimal probing as done to ensure that participants addressed their understanding, feelings, and emotions towards different aspects of the physical SSD system, the process, the content, their leadership, and the overall educational culture and

environment associated with SSD. By using the interpretivist phenomenological framework, a greater understanding was derived through descriptions and experiences of the individual soldier. A better comprehension of their perceived realties will be obtained by their personalized stories.

Setting

The setting for this study was the Army National Guard within Kansas. The Kansas Army National Guard functions within 11 units that are in 38 armories, seven field maintenance shops, and additional training/logistical support facilities throughout the state (Kansas Adjutant General's Department, 2016). Soldiers from across the state travel to these areas for their weekend duty (referred to as "drill"), as well as for their annual training (generally lasting two weeks in the summer). Due to the great variety of military specialties (everything from infantry and artillery to finance and medical), soldiers sometimes have to travel long distances to their specific armory or training facility.

During soldiers' drill/duty much of their time is taken up by ongoing annual tasks such as constant administrative updating (life insurance, performance counseling, clothing/equipment issue review, career counseling, records review, etc.). Additionally soldiers have to conduct ongoing general annual training consisting of such things as: sexual harassment assault response and prevention, suicide prevention, cyber awareness, antiterrorism, combating trafficking in persons, operational security, and several other topics (Army Regulation 350-1, 2014). Soldiers also train and conduct their actual military specialty as well as any special missions such as reacting to national disaster and civil disturbances.

Population

The population for this study came from approximately 7,000 male and female soldiers within the Kansas Army National Guard (Kansas Adjutant General's Department, 2016). From that pool of soldiers, 3,309 of them are enlisted soldiers who have recently completed a

Structured Self Development (SSD) level (extracted from the Kansas National Guard Director's

Personnel Readiness Overview online database, February 2016). Note that soldier strength

numbers presented are a snapshot of current conditions in Kansas and fluctuate month by month

due to the national budget and recruiting issues.

Sample

The first condition for the sample group was that the soldiers for this study did not know

me personally, the researcher/interviewer, in that I too am a member of the Kansas Army

National Guard. This was a stipulation in order to control for any bias with regards to affecting

the soldier's described experiences (Creswell, 2007). Issues of access to this organization, trust,

and acceptance from this unit for the purposes of this study had already been established through

interactions with the Kansas National Guard higher command and my involvement with

command teams throughout the state (Creswell, 2007, p. 138).

Four soldiers were purposely selected as convenience samples for the research study. One

soldier was an E4 (Specialist) that had graduated from SSD 1 (within the last year). This level of

enlisted soldier (E4) had been in the military service for about 2 years, and served as a team

leader in charge of 3 other soldiers. Another participant for this research was an E5 (Sergeant)

soldier that had graduated SSD 2 (within the last year). This level of enlisted soldier (E5) had

been in the military service for about 4 years, and served as a team leader in charge of 3 other

soldiers. A third participant for this research was an E6 (Staff Sergeant) soldier that just

graduated from SSD 3 (within the last year). This level of enlisted soldier (E6) had been in the

military service for about 13 year, and served as a platoon sergeant in charge of multiple squad

and teams of soldiers. A final participant soldier was an E7 (Sergeant First Class) soldier that just

graduated from SSD 4 (within the last year). This level of enlisted soldier (E7) had been in the

military service for 20 years and functioned as the first sergeant for his soldiers (Army Field

Manual 3-21.8, 2007). Overall there were two female soldiers and two males soldiers used for this research study.

The convenience sample for this research study was obtained through the cooperation of the Kansas Army National Guard Land Component Command Sergeant Major and subsequent unit leadership. The enlisted NCO (Noncommissioned Officer) leadership was asked to provide a list of possible participants that met the stated sample conditions (three soldiers for each of the four levels, willing to voluntarily participate). This listing of possible soldier participants was then randomized (https://www.random.org/lists) to select soldiers from that unit for participation in the study resulting in 2 male and 2 female soldiers being interviewed.

Procedures

Each interviewee first signed a consent form and was then given an opportunity to choose their own pseudonym at the beginning of the very first interview as an additional means to protect the participants' identity (Creswell, 2007; Salanda, 2009). Field notes and observations were taken during each interview along with an audio recording of the entire event using an iPhone with the "Voice Recorder Pro" application. These audio recordings were then fully digitally transcribed. This was initially done through automatic speech to text means (via YouTube's capabilities through a private online channel), and then fully manually evaluated and corrected for 100% accuracy. All of this data was then securely backed-up on local hard drives.

Data Collection

The data collected for this study was obtained during one semester. In addition to the research interviews needed for this study, adviser debriefings and researcher reflective journals were also conducted.

The Interview

Research effectiveness was maximized through the incorporation of established interview procedural recommendations (McLellan, MacQueen, & Neidig, 2003). Initial open-ended descriptive questions were asked as opposed to more analytical questions to allow the participant to openly respond and describe their personal story (Spradley, 1979). This allowed the interviewee to fully describe their lived experiences with regards to SSD. These questions were presented in order of importance to best facilitate the participant's expressions.

Main Interview Questions:

1. What are the perception of experiences of soldiers that are going through or have gone through SSD?

    a. What are the described experiences and perceptions dealing with the SSD process?

    b. What are the described experiences and perceptions dealing with the SSD content?

    c. What are the described experiences and perceptions dealing with the SSD environment?

2. How do soldiers describe their motivation as they progress through SSD?

3. How do soldiers describe any impediments with their progression through SSD?

I, as the interviewer, further aided the interviews through the use of prompts as suggested by Creswell (2007, p. 158). Special attention was taken with the prompts to ensure that directional biases were not introduced. Prompts were logically selected and utilized to obtain a deep rich personal story representing the SSD process, content, and environment as experienced by the soldier. A full listing of these pre-established interview prompts are listed in Appendix C. Interview questions were at times slightly adapted due to different interview responses in order

to ensure that the research questions were being properly addressed. Additionally, self-expressed participant-produced drawings were utilized in order to have a greater succinct representation of participants' lived experiences, to additionally combat any researcher bias, and to assist with the triangulation of the study (Kearney & Hyle, 2004; Pain, 2012). Participants were asked to draw an emoticon (emotional icon popular on all smart phone/internet messaging applications), that best summarized their feelings towards Structured Self Development.

Interviewing Process

The interviews conducted with the soldier participant were done during National Guard duty. Each interview lasted about an hour with at least two different meetings (interview durations varied slightly due soldier time availability). The interviews were conducted in a comfortable, relaxing environment that was secluded to allow the participant to speak freely.

After rapport building had been accomplished, in-depth interviews were conducted using conversational, semi-structured/open-ended techniques and self-expressed participant-produced drawings. Capturing of what the interviewee described was accomplished through the use of field notes (annotations during interviews) and an audio recording device.

I, as the interviewer, wore civilian clothes (instead of the Army uniform) to help reduce any sense of bias, intimidation, or coercion due to rank disparity and to express that my function is on an academic level. The soldiers were informed that I was a First Sergeant with the Kansas Army National Guard but that their name would not be placed within the final report (Creswell, 2007). I, as the researcher, also ensured to realize that the interviewee was much more than just data, they were

> …exquisitely a person, and the full richness of a person and his verbalized experiences
> can be contacted only when the researcher listens to him with more than just his ears; he

must listen with the totality of his being and with the entirety of his personality.

(Colaizzi, 1978)

Data Analysis

The interview transcripts were evaluated and coded into an organizational software (Microsoft Excel – utilized in an NVivo like structure). The transcript data was organized into different color-coded concepts and categories derived directly from the participant's own words in order to maximize authenticity (Salanda, 2009). These categories were then reviewed and considered so as to identify themes and a greater understanding of the participants' experiences (Colaizzi, 1978). This specific sequence was followed in that "A theme is an *outcome* of coding, categorization and analytic reflection, not something that is, in itself, coded" (Salanda, 2009, p. 13). This sequential review, coding, reflection, theming of the content also correlated with Colaizzi's seven-step phenomenological procedure for data analyzation (Colaizzi, 1978). Colaizzi's (1978, p. 59) seven-step phenomenological procedure (1. Read all interviewees' subject descriptions, 2. Extract phrases/sentences that pertain to phenomenon, 3. Identify meaning in each significant statement, 4. Repeat 1-3 or each area being studied and create clusters of themes, 5. Have an exhaustive description, 6. Formulate an exhaustive description of the phenomenon in a statement of identification of its fundamental structure, and 7. Verify findings with interviewee) has been proven effective in research (Creswell, 2007; Shosha, 2012).

Data Representation

Inductive reasoning was used to analyze the information to present a thematic narrative of the findings. Findings of interviewees' experiences included theme identification with supporting stated evidences from the interviewees' own words (Creswell, 2007) that will answer the research questions.

Visual data is also be presented whenever possible in order to aid in comprehension of the findings (Creswell, 2007; Salanda, 2009; Verdinelli & Scagnoli, 2013; Miller, 2014). Items such as coding units used to derive themes and repeated phrases or expressions are presented in a more visual form to gain greater comprehension of the findings. Additionally, participants were asked a final question and asked to draw an emoticon (graphical representation) to represent their overall feelings with regards to SSD via a more visual representation.

Trustworthiness and Rigor

To ensure trustworthiness and rigor, bracketing, member checks, consensual validation, advisor debriefings, reflective journaling, and triangulation (multiple data sources: participant observations/interviews, self-expressed participant-produced drawings, and SSD information documents) were utilized. Additionally, a subjectivity statement and my relationship to the study have already been presented. The findings identified are presented as my logical interpretation as opposed to an absolute truth (Maxwell, 1992) and reflect the purpose to "understand the meaning of a particular phenomenon rather than to [just] gather information about it" (deMarrais & Lapan, 2004, p.108).

Through the use of bracketing, I as the researcher set aside my preconceptions and previous experiences so as to focus on the experience of the interviewee (Creswell, 2007). Specific use of bracketing enhanced the overall study in that "if a researcher conducts bracketing in a careful, thoughtful and honest manner, this will promote deeper engagement with the

material and increased reflexivity on the part of the researcher" (Tufford & Newman, 2012, p. 92). Bracketing was used at different times and in different ways throughout the research to maximize trustworthiness and rigor (Tufford & Newman, 2012).

Member checks, consensual validation, and peer/advisor debriefings were used to ensure that the interviewee verified the information captured, and that a logical phenomenological process was being adhered to (Creswell, 2007). Advisor debriefings also helped to identify and reduce researcher subjectivities (Creswell, 2007). These sessions were also documented via advisor debriefing transcripts for further accountability.

Reflective journaling and triangulation were two other key items that were implemented to safeguard overall trustworthiness and rigor. Reflective journaling was an assistive tool used throughout the research process to enhance deep reflection and memoing of ideas related to the study (Creswell, 2007; Salanda, 2009). Triangulation provided corroborating evidence by presenting information from multiple sources such as participant observations, interviews, self-expressed participant-produced drawings, schemes, and documents (Kearney & Hyle, 2004; Creswell, 2007).

Reciprocity and Ethics

Participant(s) in this study did not receive any monetary or tangible items as reciprocity during the process of this study. They were informed that their participation in this study would help give the Kansas Army National Guard leadership a better understanding of what a solider goes through while completing the mandated Structured Self Development (SSD) online courseware. Additionally, higher leadership would be encouraged to provide the National Guard Bureau if not the United States Army Training and Doctrine Command (TRADOC), overall findings of this research for the purposes of filling in much needed research on the real

68

experiences of enlisted soldiers going through this training and to identify any issues with the SSD process, content, and/or environment. In this way the soldiers' contributions would be worthwhile "Giving back to participants for their time and efforts in our projects -reciprocity" (Creswell, 2007, p. 44).

As Creswell (2007) recommended and Kansas State University requires, approval was obtained from the Institutional Review Board (IRB) before starting this research. Additionally, the participants were informed that they could stop the interview at any time without any type of penalty. The participants' were informed that their information, interview contributions, and consent forms would be deleted/removed based on the wishes of the participant.

Relationship to the Topic

At the time of this research I was a current member of the Kansas Army National Guard and served as a First Sergeant for the Joint Force Headquarters, a battalion within the 69th Troop Command, therefore I had a personal relationship to the topic of SSD. Additionally, I took SSD levels 3 and 4 for the purposes of military career advancement. My position within the Kansas Army National Guard, as well as a direct request from the leadership of Kansas Army National Guard to look into the phenomena of SSD (see permission document with IRB information in Appendix A and B), allowed me to have access to soldiers for this research. This closeness to the research topic gave me an insider perspective to obtain a deeper understanding of the concept of SSD (Bonner, & Tolhurst, 1997; Creswell, 2007).

To help ensure that any personal subjectivity was minimized, the interviewees approved the captured content. Additionally, there was peer/advisor review and personal reflections to improve academic rigor (Creswell, 2007, p. 45). A trusted (PhD level) peer reviewed the information to ensure that information followed a logical progression. Personal reflection were

used throughout the study via journaling to help ensure that any personal bias was acknowledged and mitigated as well as to review logical research progression.

Summary

This study captured the phenomenon of Structured Self Development as experienced by selected soldiers within the Kansas Army National Guard in order to enhance our field of knowledge with regards to this area of learning. Through the use of open-ended interviews soldiers were asked about their experiences, perceptions, motivating factors, and any impediments with regards to SSD. Additional questions prompts were used, but only to encourage the interviewees to further express themselves about the SSD experience. This study used member checks, consensual validation, peer/advisor debriefings, reflective journaling, and triangulation in order to help ensure that trustworthiness and rigor was fully upheld.

The thick descriptions and deep meaning understanding of what soldiers have gone through and expressed could be transferable to what other soldiers would experience. Additional research beyond this study with other soldiers would be needed to help establish a pattern of shared experiences thereby adding rigor to any identified issues with the SSD system.

Chapter 4 – Findings

Overview of the Study

This chapter describes the interview results of this study. Additionally, it presents the qualitative methodology utilized, general demographic information, and specific participant profiles in order to get a deeper understanding of their phenomenological perspectives. The analysis and findings to the research questions dealing with participants' experiences with Structured Self Development (SSD) are then presented.

Qualitative Methodology

An exploratory phenomenological qualitative methodology was used due to the investigative/probing nature of this research study to gain an understanding of what Kansas Army National Guard soldiers experience in going through the Army mandated Structured Self Development (SSD) online learning system. Creswell (2007) defined phenomenology as describing "the meaning for several individuals of their lived experiences of a concept or a phenomenon…focus on describing what all participants have in common as they experience a phenomenon" (p. 57). The purpose of this research study directly correlates with Creswell's (2007) explanation of reasons for phenomenological research to "reduce individual experiences with a phenomenon to a description of the universal essence" (p. 58), and to provide a "combination of the textural and structural descriptions to convey an overall essence of the experience" (p. 60). This is also similar to Merriam's (2009) explanation of phenomenological research which "is to depict the essence or basic structure of experience."

Demographics

The participants for this study came from a pool of approximately 3,300 enlisted soldiers of the Kansas National Guard (Kansas Adjutant General's Department, 2016). Additionally, each

participant had finished their level of SSD within the past year, to help ensure that the experience was fresh within their minds. Although efforts were made to diversify the participants in the study, all participants were of white, European descent. Although random samples were used (that met the criteria: SSD level/recency) the stipulation of two males and two females was utilized in order to obtain a more diversified phenomenological representation even though females currently represent only 14% of the enlisted soldier population in Kansas (Standard Installation/Division Personnel Reporting System, 2016).

Another important commonality of all the participants of this study was that none of them held a combat arms military occupational specialty (MOS) such as Infantry, Armor, Artillery. All of their specialties were what is referred to as support MOSs (some were attached or worked directly with combat arms units). Additionally, all participants completed their structured self development studies while within the United States, meaning they were not deployed or dealing with combat or real-world military operations while going through SSD. More specific information on each participant is presented within the participant profiles section of this chapter.

Participant Profiles

Participant profiles (using pseudonyms) are presented to give a greater perspective of the experiences expressed through interviews addressing the research question dealing with soldiers' experiences in going through Structured Self Development.

Mitch

Mitch was a male Kansas Army National Guard soldier with the rank of Specialist (E4) and the military occupational specialty of Allied Trade Specialist: Machinist (91E). At the time of the interview, he was 24 years old, single, with no children. His highest level of civilian education was high school, with plans to attend Salina Technical College to obtain a full

machinist license. He completed SSD1 within one month of the interview. His civilian job was that of a machinist in a metal fabrication plant, and a part-time martial arts instructor.

Jewels

Jewels was a female Kansas Army National Guard soldier with the rank of Sergeant (E5) and the military occupational specialty of Human Resources Specialist (42A). At the time of the interview, she was 23 years old, single, with one child that she was caring for. Her highest level of civilian education was one year of college and was continuing to pursue a degree in Human Resources and Business Administration. She completed SSD2 within eleven months of the interview. When not participating with the traditional National Guard (one weekend a month and two weeks in the summer), her regular job during the week was that of a full-time Human Resource Specialist in the Active Guard Reserve (AGR), which is a full-time National Guard job that also requires that she serve as a regular soldier during drill weekends.

Molly

Molly was a female Kansas Army National Guard soldier with the rank of Staff Sergeant (E6) and the military occupational specialty of Army Railway Movement Coordinator (88W). At the time of the interview, she was 52 years old, single, with no children. Her highest level of civilian education was an Associates Degree with a focus on accounting. She completed SSD3 within two months of the interview. When not participating with the traditional National Guard (one weekend a month and two weeks in the summer), her regular job during the week was that of a full-time Production Controller – technician, which is a full-time National Guard job that also requires that she serve as a regular soldier during drill weekends.

Albert

Albert was a male Kansas Army National Guard soldier with the rank of Sergeant First Class (E7) – but serving in a upper managerial position (generally held by a soldier of a higher rank), and the military occupational specialty of (specialty withheld due to a limited number of soldiers with this specialty making him easily identifiable). At the time of the interview, he was 38 years old, married, with three children. His highest level of civilian education was an Associates Degree with a focus on business. He completed SSD4 within one month of the interview. His civilian job was that of a service manager for a manufacturing company.

Analysis and Findings of the Research Questions

Analysis of this phenomenological qualitative research included 140 pages of interview transcripts and 136 pages of interview notes, field notes, journal notes, advisor debriefs, and analysis notes. Interviews were about one hour in duration, which occurred after an initial meeting to establish rapport. All participants were given the opportunity to member check for accuracy and intent as well as given anonymity via pseudonyms. Participants were also given a consent form, which informed them of their ability to withdraw from the interview at any time. All participants completed all of the interviews. Additionally, some interview information has been withheld from this document to ensure participant anonymity. As part of this analysis, quotes and participant drawings are provided to help express the deep richness of participants responses to questions posed in trying to understand their phenomenon in going through Structured Self Development.

Research Question #1

What are the perception of experiences of soldiers that are going through or have gone through SSD?

a. What are the described experiences and perceptions dealing with the SSD process?

b. What are the described experiences and perceptions dealing with the SSD content?

c. What are the described experiences and perceptions dealing with the SSD environment?

This question sought to gain a deeper understanding as to what soldiers went through while conducting the Structured Self Development online instruction. Three specific elements (process, content, and environment) were identified beforehand as a way to logically break down the SSD experience for a fuller analysis of the event. *Process* dealt with the physical aspect of sitting in front of a computer logging on and going through the courseware to include general heuristics/usability, accessibility and availability of the content/system, and time requirements. *Content* dealt with the specific information within the courseware as well as how the information was presented and assessed. *Environment* dealt with not only the area in which participants conducted their SSD, but also with the culture associated with the topic of SSD (views of peers, subordinates, and leadership). Three themes were identified with regards to the *process* component of this research question (frustration with the system, time spent on the system, cheating on SSD). Three themes were identified with regards to the *content* component of this research question (instructional technique, retention of information learned and cognitive overload). Two themes were identified with regards to the *environment* component of this research question (negative view of SSD by leadership and negative view of SSD by peers).

Process Theme 1: frustration with the system

Frustration was an emotion clearly expressed by all participants for different aspects of the system. The major element generating the most frustration dealt with the process of logging onto the SSD system. One participant, Albert, the highest-ranking participant, summed it up with a clear tone of irritation, due to an inability to get work done:

> …you end up spending more time trying to log in, it seems like at times, and fix these
>
> errors or potential downtime then you did actually doing the learning. That you were, that

was your objective. So it became more of a crossing your fingers, hoping that you were

actually able to get logged in that day during your, your time that you had to spare to try

to accomplish what you needed to. (Albert).

Another participant, who described himself as an online gamer and very computer literate,

Mitch, further explained the logging in issue with regards to having to use two part

authentication (using a Common Access Card and a Personal Identification Number) that was

validated by internal security certificates when logging to SSD through a web browser:

It's, as long as you've got a CAC [Common Access Card] reader, and you use, Fire or not

Firefox, Internet Explorer, it's a breeze until your computer forgets how to correctly

install that certificate. And then it's a problem that a professional IT [Information

Technology] guy has to go in and fix it. Which just adds to the frustration of trying to do

it [log into SSD]. Especially if you don't have time like I did in the afternoon to go to the

armory or you don't live near one just go and do it on my own time.

An additional area of frustration dealt with system glitches, where the SSD online

training system would perform in ways that were unexpected or incorrect. Mitch, the lowest

ranking soldier participant, explained his anger with the system in losing time by having to

restart a module multiple times due to erratic system behavior:

There were a few times there where I would close down, the module was done with, it,

it's over but it wouldn't save that it had been completed. So when I would go back to it, it

would start me off at the very last slide. I don't know if that's just the instability things

that hadn't finished updating it before I closed it out or if that's simply a, it didn't save and

it just brought me back to the last thing it had saved which is a problematic thing! It's one

more domino that's already fallen.

Molly, an older female soldier participant, expressed similar feelings of frustration:

> I've heard, you know, the complaints about it not loading, not being able to get access to it, not having time, or completing a section and then it not saving. I've been hearing that quite a bit lately and I think that's just a glitch in the system. And some, you know, every once and awhile it'll happen, so. I haven't heard that happening a lot but, I know it's not, it has happen to me so, so I know it's true.

Molly, a full-time National Guard soldier, seemed to be somewhat hesitant with her descriptions as evident by her tone and seeming contradictions "I've been hearing that quite a bit lately," and then "every once and awhile it'll happen, so. I haven't heard that happening a lot." She seemed reluctant to present negative feelings about her experience with the system.

General frustration with the SSD system was expressed in different ways by all soldier participants.

Process Theme 2: time spent on the system

Every participant interviewed identified that the SSD coursework felt like it took a very long time to complete. One participant in particular, Jewels, summarized what was felt and expressed by all other participants, and even started to associate her feeling with the issue by stating,

> …it's just the time-consuming part that kind of kills it [SSD] for everyone… That it was just exhausting and long. That it just wasn't very cheerful but it wasn't like depressing either. It was just kind of like you're exhausted you're just kind of over it.

Jewels expressed additional issues with time spent on the SSD system during the interview,

> …every single day I was working on it and it was very frustrating… I only had such a short notice; they let me work on it here [full time National Guard job location]. So I just stayed from like 7:00 in the morning till like 6:00 at night, everyday working on it.

77

Another participant, Mitch, with an excited and almost bewildering voice, summarized the time sentiment by comparing the amount of time spent on SSD with the equivalent amount of time that a college student spends in a course,

> Because yeah, you tell us when it's four modules, then they look at it, and they're looking at spending twelve to thirty hours on this thing [SSD]. It's daunting! Yeah. That's a college course, that's a semester-long college course right there!

He said this while shaking his head, clearly frustrated with the situation.

Molly (the higher ranking female soldier participant) also commented on the issue of time on several occasions throughout the interview,

> I would definitely say it takes some time. It's, you need to set aside time to do it, to complete it. I've heard, you know, the complaints about it not loading, not being able to get access to it, not having time… they [soldier at her unit] don't either have time or the computers aren't up and it's, it's holding them back… I don't think they [higher leadership] realize that the soldiers aren't given enough ample time to complete them with all the missions that they have to also, also complete during the drill weekend… they don't, they're not given enough time to complete, you know.

Albert, the most senior enlisted soldier participant of the study, also specifically mentioned issue of time spent on the SSD system,

> …I felt like it was very, it was very time-consuming... the method of like putting out the information was very drawn-out and difficult to take it all in… it would be nicer if it was, if you were able to access it a little bit quicker. So you could actually do the things, accomplish what you're trying to do in a more timely manner…. something just wasn't meshing up [with the SSD system] and so you end up spending time having to either

research it or yourself to get that corrected or finding someone that knew what that

certificate error was. And then basically going through an extenuating process of

correcting it and getting it taken care of so you could just get back to you know where,

where you needed to start at… but it was just a slower, a slower learning process, I feel.

The experience of spending a long amount of time on the SSD system was a powerful theme that was strongly shared by all participants in the study.

Process Theme 3: cheating on SSD

All participants expressed that cheating on SSD occurred with one interviewee (Mitch) offering a frank and revealing insight,

To be honest, morally and ethically, yes [leadership should be concerned], because you're

cheating on a test. But at the same time from a pragmatic point of view, No. Because

again so few people actually retain any of that stuff. I as a leader would not be overly

concerned because I know I'm just going to end up doing some congruent training with

them later on when I have time. Or I'm gonna tell them "hey work on this and this while

I'm not around." And I know they're gonna retain that a whole lot better and a whole lot

more of this is going to be relevant to them that way then SSD one… And end of the day

we're the Army we're about getting shit done, not necessarily getting it done in the

smoothest, nicest, most correct way, as long as we're not straight-up breaking laws and

regulations. At the end of the day the most important thing is the job got done, everyone

came home with all their bits and pieces. Excellent, job all done.

This issue also tied in with mindset as the senior enlisted soldier interviewee (Albert) answered

the question prompt of cheating in general and why people cheat by saying "Yeah, I mean it's I, I

think that falls in lines with just get it done…Because same mindset, just get it done."

The "just get it done" mindset that Albert expressed was in reference to a previous question asked with regards to leaderships' view of SSD which was also identified as a theme and expressed later in this chapter.

Content Theme 1: Instructional technique

When asked about SSD's instructional implementation, one participant, Albert, an older and higher ranking enlisted soldier, summed it up by stating, "…there's a lot better way potentially to learn," which was a common theme felt by the participants dealing with the issue of instructional technique and SSD.

A common thread associated with instructional technique with the interviewees was a wish for the incorporation of more hands-on learning,

> …me having experienced maybe, the, the two-phase learning in the military's past. I felt like phase one was a little, allowed you to be more hands-on and network with people to learn, versus the SSD where you don't get anything other than just basically going through these, these classes on online so. I felt like it lacked a lot. (Albert)

Albert expressed a desire for the older instructional system, before SSD, where soldiers first went to a phase one school which contained similar instructional content to SSD but soldiers were physically present, had a facilitator/instructor, and interacted with one another, often receiving much more hands-on interactive instruction,

> I, I feel like it could have went a lot, like there's a lot better way potentially for, to learn. I, I didn't, me having experienced maybe, the, the two-phase learning in the military's past. I felt like phase one was a little, allowed you to be more hands-on and network with people to learn, versus the SSD where you don't get anything other than just basically going through these, these classes on online so. I felt like it lacked a lot.

Another participant, Jewels (full-time female National Guard soldier), who generally expressed a more positive feeling about SSD than Albert or Mitch, still expressed a wish for more hands-on learning, "I do like things that are more hands-on…hands-on trainings is a lot better than just listening and then trying to remember… Definitely hands on anything interaction wise I definitely learned a lot more."

Mitch presented a more descriptive response with regards to the issue of instructional technique and hands-on training:

> …it's very difficult to do an effective training exercise when all you're doing is text. They were creative with it, matched this term to this term, define this, fill-in-the-blank, just make sure you're paying attention. But it's very, again it's very hard for most people to retain information like that, especially when you're looking for exact definitions. And most people don't remember an exact definition they remember broad overview of that definition. They did well for what they have, but I'm also kind of handicapped because I learned almost extensively, essentially, almost entirely by doing, which a lot of people learn better by doing than by reading, or writing, or being shown.

Mitch also expressed frustration by using the term "death by PowerPoint" when talking about SSD instruction and a need for better explanation on ramifications for not learning how to do things correctly:

> …they're giving the broad overview or even at the very end, it's important then to also go back or go forward as it were and say here's what happens if it's done right and here's what happens if this isn't done right. Here's what happens when it works and what happens when it falls apart. And again they did that here and there but most of it's just

81

death by PowerPoint thrown on and on here's bullet point bullet point, bullet point, as opposed to here is it, here it is falling apart and the ramifications thereof.

Additionally, all participants expressed a desire for more interaction of some kind (either student-to-student or student-to-instructor), Molly, the oldest interviewee who had a bit more of a favorable experience with SSD than Albert or Mitch, also expressed how she preferred the older multiphase instructional technique (before SSD) because there was a greater opportunity for interaction:

…it made you really think. You couldn't really just sit and Google everything, you know? You, you actually had to submit a typed OPORD [Operations Order], you know. They had some other things need to do. They had quite a few things and then just submit it to the instructor, they would grade it and then just email it back.

Jewels, in comparing SSD to her civilian online college courseware expressed preferring the interaction in her civilian online course more:

I like the interaction more, especially because you can really express it [understanding] more, rather than just answer it [via multiple choice answer]. Like oh, I actually took this note. Because sometimes with the question/answer [multiple choice] you don't really have to remember it as long as you wrote it down you can go back and answer it. Whereas sometimes with the essay I feel like you really have to understand it in order to write about it.

An aversion to "death by PowerPoint," and a desire for more interaction and hands-on learning were shared experiences by the soldier participants of this study.

Content Theme 2: retention of information learned

All participants expressed a concern that they weren't properly retaining the content being presented as they went through the SSD system. When asked about this issue directly, Albert presented a concerned face, shook his head and stated,

> …it was in the manner that it was presented. I, I know for myself I'll have to go back and in a given situations try to find information again. I mean there, I may hopefully recall some of it down the road, but I mean it's not enough, not in a manner that I will retain it.

Another participant, the most senior enlisted female in the group, Molly, expressed her concern with the issue of information retention when asked about her thoughts on the types of media used in SSD:

> Um the media there was a few videos, most of this was reading the content. I think that's about it. It was um a couple speeches that most of it was, was reading. And just retaining, being able to retain all of it at once, in one setting, it's kind of a struggle, especially if you're distracted because it is very time-consuming. But it, it had a little bit of both as far as media.

Jewels, the youngest female in the study but still an NCO (sergeant), gave a specific example when addressing the issue of information retention:

> I felt like there was a lot of information and like a lot of stories, was just some things like, especially on the security stuff. They would give you like, seven examples of like, a security breach or something. Whereas like, if they kind of just would have explained it and maybe gave it like, a small example it would've been easy to remember. But like, going through it that many times it's just like, okay this is boring. I get the point, where is like, then *you're not really grabbing on to it I guess* [emphasis added].

Mitch again provided a poignant statement on this theme with his statement filled with frustration and disappointment,

> To be honest it [SSD] was kind of a de-motivator. Because I would go through it, I'd finished one quiz and then I would sit back and go I've retained none of that. And I know that I'm going to have to relearn almost all that stuff later on in just as much if not more detail… I was hitting my head against the wall just trying to pick out the stuff I was going to need to retain for that next quiz.

Participants expressed anxiety and concern that they might not be able to retain the information presented within the SSD System.

Content Theme 3: cognitive overload (too much information)

This theme refers to participants expressing having a sense of trying to process and learn too much information (cognitive overload). Mitch, the youngest and lowest ranking soldier, expressed the view that was common and often repeated among all of the participants,

> So its biggest flaw is that it tries to cover so much, and I understand there is a need to cover a lot of information, but at the same time now, I honestly feel like there are better ways of doing it. I'm not the most qualified person but there are better ways of doing it… SSD one would probably benefit from being broken up into more SSDs something less broad. So something for, your about to be an E4, here's one that you have to do. You're about to go for your E5, you have to do a couple more, and then before you hit your E6, it all has to be done and you're started on SSD2. Something like that where it's not all, here's the ton of information that you need to try to distill down and instead you make it much more focused on what an individual needs.

Jewels previous quote also falls within this theme of cognitive overload in addition to the theme of information retention,

I felt like there was a lot of information and like a lot of stories, was just some things like, especially on the security stuff. They would give you like, seven examples of like, a security breach or something. Whereas like, if they kind of just would have explained it and maybe gave it like, a small example it would've been easy to remember.

Molly also expressed that SSD had a lot of information, but presented this experience in a more favorable light,

SSD 3s were, there was a lot... It was pretty long as far I mean it's like compared to SSD one from way back when, when I did it is, I think the length of the content is better. The more it has in it, because the more you need to know the more rank that you acquire you need to know a lot more information so I think it was pretty appropriate for the right structure.

All participants expressed feelings of having to learn a large and at times overwhelming amount of information, cognitive load.

Environment Theme 1: negative view of SSD by leadership

Most participants indicated that their leadership, at multiple levels, either expressly didn't like SSD or viewed it as a requirement, not highly acclaimed, just something that needed to be accomplished. Mitch was direct in how he felt his leadership viewed SSD, "I can't speak for her [leadership] exact feelings but she has made it clear to me she doesn't like it either, mostly for the same reasons I've given you. Albert's thoughts on how leadership views SSD offered a special higher enlisted point of view:

I feel like it's [SSD] something that everybody [all of higher leadership] feels like needs to have that, that box checked. Everybody's under the impression that, and clearly you have to have it to move to the next level, so the leadership basically wants everybody to check the box get it done.

85

When pressed to explain more what he meant by the phrase "check the box" Albert stated, "what I'm saying is, is just accomplish it, get it done, finish, get to the objective." Additionally Albert offered,

> The officers, I don't believe they have an SSD version for the officer so maybe they're just like yeah. Yeah just get it done. They, they haven't sat through some of these and understand that it just draws out more and more than what you would hope something of this level would, would do.

The two other soldiers who were full-time National Guard soldiers (Jewels and Molly) had leaders who had a bit more favorable views of SSD. Jewels admitted that her first line supervisor didn't like it that much but again tried to present it in a favorable way:

> I know she does not think highly of it. Well, she knows that there's good information though, she gave me lots of notes to help me through it. If I had questions she was there to help me. So she learned from it.

Additionally, when asked about what she thought her boss's boss (even higher leadership) thought about SSD, Jewels provided a somewhat conflicting response,

> Um, that it looks good on paper? [Jewels said this with a smile and somewhat sarcastic tone] I don't know, I guess I've never thought about it. That it's a good training. I think it kind of depends on the leadership maybe. I think some leaderships are very into the training and some are not.

Molly chose not to answer whether she thought her leadership liked or didn't like SSD, but instead addressed the issue of leadership's thoughts on SSD's importance,

> Um, my first line supervisors in the National Guard thinks it's very important and, as I do too, I mean, I would love to see all my soldiers underneath me get all their SSDs done so

they can get to the schools that they need to get promoted. Because without those they're

going to stay where they are and then they're not going to see themselves progress and

then they're gonna want to get out. Because it's all tied into the promotion.

When asked about what even higher leadership's thoughts might be on SSD, Molly addressed

what she felt was a problem with leadership's perception of the issue,

…I don't think they realize that the soldiers aren't given enough ample time to complete

them with all the missions that they have to also, also complete during the drill weekend.

Some soldiers may not have the internet at home so it's on, they're unable to do it.

Whereas at drill, they don't, they're not given enough time to complete, you know.

Because once you stop and if you don't do any more until the next drill weekend, it's

going to be hard to retain a lot of that information.

All participants expressed that they felt that leadership at different levels had a generally

negative view of SSD.

Environment Theme 2: negative view of SSD by peers

All participants also expressed that SSD had a fully established reputation for being a

negative experience, best expressed by Mitch,

…a fresh-faced private doesn't get it, doesn't, may not understand the depth of that. But

they'll understand this [SSD] is about to suck and I just gotta deal with it …they already

understand so for whatever reason I'm going to hate this, I'll just have to deal with it.

Another participant (Jewels) also expressed SSD's negative reputation when asked what other

(peers) think about the online courseware,

Probably that they dislike it… I think a lot of people, it was just such a time-consuming

thing feel like it's a waste of their time rather than actually looking at it as being useful

and knowledgeable. I think people mainly focus on that negativity of it rather than the

positive.

All participants expressed that they felt that peer soldiers and soldiers beneath there rank had a

generally negative view of SSD.

Research Question #2

How do soldiers describe their motivation as they progress through SSD?

This question sought to gain a better understanding as to the motivating factors, drives,

and/or mindsets, that help a soldier go through and finish their SSD. Two themes were identified

dealing with motivational aspects of soldiers' experiences while going through SSD, *relevancy*

of information learned and *boredom*.

Motivation Theme 1: relevancy of information learned

Although the participants felt most of the information within SSD was good, some

participants felt that not all of the information presented was really relevant to them. Albert, the

senior enlisted soldier, presented the analogy of good useful information mixed in with irrelevant

"weeds" that had to be navigated through,

> I thought there was a lot of good information within, within structured self-development
>
> four… I, I think there could be better ways of distributing the information but there, there
>
> is good information within there if one is able to kind of sort through the weeds to get it.

Mitch, the lowest ranking soldier, was quite poignant with his statement on the usefulness of the

information being taught,

> So rather than the practicality or I should say the pragmatic information being taught,
>
> what seemed to be more important was, I hesitate to use it but, fluff and the stuff that
>
> honestly when push comes to shove doesn't do much later on. So then that was kind of

my experience with it a lot of stuff I will have to relearn later on anyway or that simply

isn't of significant value compared to the stuff that was fairly touched on.

Conversely, the two full-time soldiers (Molly and Jewels) expressed more favorable views of the

relevancy of the SSD information in general with Jewels stating,

So there's a lot for me to learn all at once. But I think it did help a lot, especially right

before going to ALC...There was just more things that like it points out where like you

don't think about on a daily basis that you know. Leadership stuff, yeah I need to practice

that.

And Molly stating,

…I mean all that stuff that we need to know and will eventually use as our career, as we

build our career. I think it is very beneficial to anybody to really sit down and focus on an

SSD, and not just click a button.

The issue of relevancy was a theme that was more dominantly experienced by Mitch and Albert,

the regular National Guard soldiers, as opposed to the two female participants (Jewels and

Molly) where were full time National Guard soldiers.

Motivation Theme 2: boredom

The issue of boredom with regards to the SSD courseware in general and the videos

therein specifically was also brought up by several participants in different ways: "It's [SSD] a

painful experience, it's boring …I thought they [videos] were kind of long and drawn out"

(Mitch). Jewels was very specific with her feeling about the videos and stated, "They're [videos]

very long and boring. A lot of times they're like very monotone as well then you just get even

more tired of listening to it." Molly expressed similar feelings and simply expressed "I didn't

really care for the videos, I thought they were kind of long and drawn-out."

89

Research Question #3

How do soldiers describe any impediments with their progression through SSD?

This question sought to identify any items, events, processes, or situations that impeded the soldier with regards to their experience with Structured Self Development. One major theme was identified dealing with impediments identified in soldiers' experiences while going through SSD (accessibility to SSD system).

Impediment Theme 1: accessibility to SSD system

In reality, all of the previous items described are issues that caused some form of an impediment for the soldiers interviewed going through SSD, but the biggest issue dealt with the actual access to the SSD system to begin with. Only one participant, Albert, was able to fully access SSD from his home, and that was only with an Army issued laptop with a built-in CAC reader. Yet even then, Albert still had issues in accessing the SSD system at home:

> On a couple of different occasions, I'd go to log in and there are certificate errors where it whether something just wasn't meshing up and so you end up spending time having to either research it or yourself to get that corrected or finding someone that knew what that certificate error was. And then basically going through an extenuating process of correcting it and getting it taken care of so you could just get back to you know where, where you needed to start at so.

All other participants expressed that they had to use the military computers within a military establishment (like their armories) in order to successfully access and complete their SSD coursework. When asked about specifically trying to access SSD through her home computer Molly shook her head in frustration and explained the issues that she not only faced but that many other soldiers faced as well,

Um, I know on my home computer I can't log into the SSDs at all. But as being a

technician I have a military computer at my access so it's a lot easier to, and I've heard

other soldiers say they struggle to be able to get on to the SSDs…[At home] It's just,

AKO won't load or it won't, it'll load or it won't recognize my credentials on my own

computer…A lot of people [soldiers] don't have that [military computer] so, and I think

that's one of the things that hurt other soldiers as far as completing their SSDs because

they struggle with it. Like on a drill weekend they don't either have time or the computers

aren't up and it's holding them back.

Self-Expressed Participant-Produced Drawings

Another finding to this study are the results of the participant-produced drawings, which

the participants created when asked to draw an emoticon (emotion-icon common on messaging

systems like on a cellphone) that best represented how they felt overall about SSD.

Participant 1, Mitch:

Figure 4.1 Mitch's Actual Emoticon Drawing - on left, adapted real emoticon on right

When asked to describe his emoticon drawing (figure 4.1), Mitch smiled as he finished

his drawing, chucked a bit, and enthusiastically explained:

I have the perfect one. I never see it used anymore, but I remember it…It's just hitting

your head against the wall. I don't even remember how long it's been since I saw it

[emoticon], but that's all it was. Just hitting your head against the wall. It's either that one

91

or you know that new one that's, it's just a little pile of poop is all it is. That's it but I think that's [drawing] pretty good [expression of overall feeling towards SSD].

Participant 2, Jewels:

Figure 4.2 Jewels' Actual Emoticon Drawing - on left, adapted real emoticon on right

Jewels, who was one of the full-time female National Guard soldiers, who at times seemed to express a more favorable view of SSD, laughed a bit, smiled, and explained her emoticon drawing (figure 4.2) in an upbeat tone:

OK. The one where he's just blowing out the air, this looks weird. I guess I don't know how to draw that. The one where he's like blowing out the air, like okay probably that guy. That's probably mine cuz it was just like: "uh, I'm still doing this?"

Jewels went on to further describe the significance of the drawn character blowing out air, "That it was just exhausting and long. That it just wasn't very cheerful but it wasn't like depressing either. It was just kind of like you're exhausted you're just kind of over it."

Participant 3, Molly:
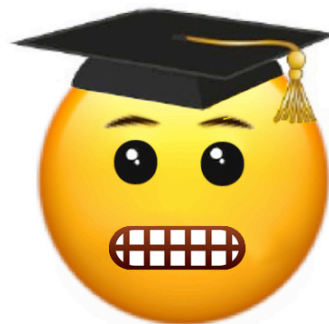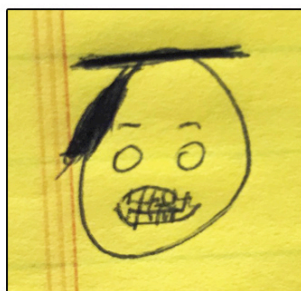
Figure 4.3 Molly's Actual Emoticon Drawing - on left, adapted real emoticon on right

Molly, who was the other full-time National Guard soldier, the oldest female participant, and who also seemed to sometimes present a more favorable view of SSD, smiled when describing her emoticon drawing (figure 4.3),

Um, well, I drew an emoticon with a graduation hat on because once you've accomplished, completing the SSDs you're done, you're ready for your next level, and it's like a relief to have it done because sometimes it is a struggle.

When asked to clarify the meaning of the drawn emoticon's facial expression, Molly added, "A little bit of frustration and happiness mixed together."

Participant 4, Albert:

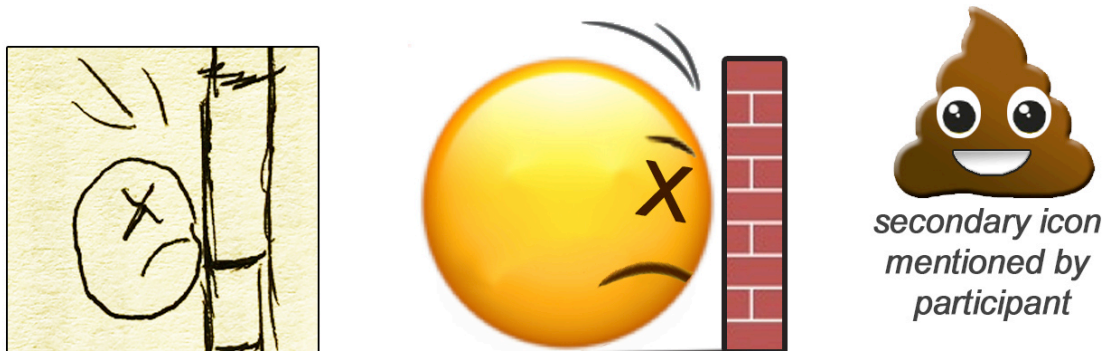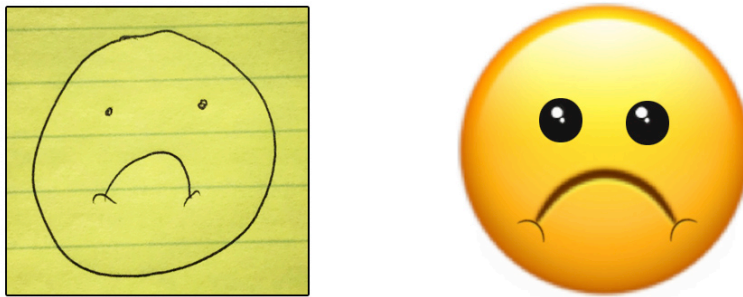*Figure 4.4* Albert's Actual Emoticon Drawing - on left, adapted real emoticon on right

When asked to describe his emoticon drawing (figure 4.4), Albert, the oldest and highest ranking participant, retained a stoic expression and with an ongoing tone of frustration simply stated, "I'm a frown face." When asked why he specifically chose to draw a frown face Albert elaborated by shaking his head and explaining,

Um, just once again my overall feelings, I feel like there's a better way that it could be done and once again I also feel like we may have regressed. Because I, I liked the phase one type with the NCO schools where you were networking and learning through hands-on and instruction from an actual NCO teaching a course. Whereas this, it basically, I feel like we stepped back. So it's kind of a little bit of a downer to me.

A noteworthy finding dealing with the self-expressed participant-produced drawings was that even though Jewels and Molly had a more favorable view of SSD in general, their created drawings were less than fully favorable of the SSD system. Jewels chose to include her character blowing out air signifying how exhausting she perceived the SSD process and Molly, drawing her character with teeth grinding, expressing her frustration with the SSD system. Mitch and Albert clearly expressed their negative feelings for the system with Mitch drawing his character banging its head against the wall, and Albert with a frown face indicating their frustration and disappointment with the system.

Summary

The research questions addressed with these interviews sought to address how soldiers experience Structured Self Development (SSD) in general and aspects of process, content, environment, motivation, and impediments specifically. The interview results of this phenomenological study found a multiple of themes within the participants' experiences with SSD. The findings indicate themes associated with: frustration with the SSD system, the amount of time spent on the system, cheating on SSD, instructional techniques used, retention of information learned, cognitive overload, negative view of SSD by leadership, negative view of SSD by peers, relevancy of information learned, boredom, and accessibility to SSD system. These theme findings along with overall feelings depicted by self-expressed participant-produced drawings (hitting head against the wall, exhausted, frustrated graduate, and frown face), reveal areas and real soldier emotions that Army leadership and SSD designers should take into consideration for future SSD development and enhancement.

Chapter 5 - Analysis, Discussion, and Implications

Overview of the Study

This chapter provides an analysis of the phenomenological qualitative research by discussing the research findings and implications. Information is presented within the following sections: restatement of the problem statement, review of the research methods, discussion, implications of findings, recommendations, recommendations for future research, and a reflection.

Restatement of the Problem Statement

Structured Self Development (SSD) is an essential connecting educational requirement for all enlisted soldiers in order to attend advanced training and qualify for promotion. In spite of SSD's importance, there are no phenomenological studies conducted to better understand how soldiers experience SSD. In 2015 the Kansas National Guard only had a 56.76% SSD graduation rate averaged across all SSD levels (information extracted from the Kansas National Guard Director's Personnel Readiness Overview online database, February 2016). The reasons for this low SSD graduation rate with the Kansas Army National Guard are not fully known or clearly understood. Since SSD specific research does not exist that examined the process, content, environment, motivation, and impediment aspects as to why soldiers don't fully complete SSD, this phenomenological study was needed. Completion of SSD is vital for soldiers' development as well as advancement through the Army's rank structure.

Review of the Research Methods

Exploratory phenomenological qualitative methodology was used in this study to investigate and probe in order to gain a better understanding of what Kansas Army National Guard soldiers experience in going through the Army mandated Structured Self Development

(SSD) online learning system. This research was conducted with 4 different Kansas Army National Guard soldiers (2 males and 2 females) of different ranks, who each recently graduated (within the last year) from one of four different levels of Structured Self Development.

Semi-structured interviews along with open-ended questions and self-expressed participant-produced drawings were used to elicit participants' experiences and to invoke story telling in an effort to obtain a deep expression of their lived SSD phenomenon. Interviews were conducted in a relaxed setting and the interviewer (myself) wore civilian clothes instead of a military uniform in order to help the soldier participant speak more freely and openly about their SSD experience. In addition to observations, interviews, and a review of SSD documents, the use of participant produced drawing were utilized to aid in triangulation and further enhance the credibility of the research findings and analysis.

Interviews for this research were digitally recorded, auto transcribed, then reviewed and edited for accuracy by myself, the researcher. Transcripts were offered to each participant for review for content validity and accuracy. Additionally, a peer coder with a doctoral degree in adult education was used in order to confirm logical analysis and theme identification.

Discussion of Findings

Research question #1: what are the perception of experiences of soldiers that are going through or have gone through SSD?

A. What are the described experiences and perceptions dealing with the SSD process?

B. What are the described experiences and perceptions dealing with the SSD content?

C. What are the described experiences and perceptions dealing with the SSD environment?

Words that the participants used to describe their drawings of emoticons expressed how they felt about Structured Self Development. In the participants' own words; these participant

96

soldiers' experiences of SSD was like "hitting your head against the wall," "exhausting and long," a "bit of frustration and happiness mixed together," and a "bit of a downer," (Mitch, Jewels, Molly, and Albert).

Multiple themes were identified with different aspects of SSD (process, content, and environment) while analyzing the participants lived phenomenon. Three themes were identified with regards to the *process* component of this research question (1. Frustration with the system, 2. Time spent on the system, and 3. Cheating on SSD). Three themes were identified with regards to the *content* component of this research question (1. Cognitive overload, 2. Retention of information learned, and 3. Cognitive overload). Two themes were identified with regards to the *environment* component of this research question (negative view of SSD by leadership and negative view of SSD by peers).

Process: Frustration with the System

All participants in this study expressed a mid to high level of frustration in going through the Structured Self Development online learning system. For the purposes of this study the operational definition of *frustration* is defined as participant feelings of insecurity, stress, discouragement, and annoyance (Hart & Staveland, 1988). The two main areas which caused these elevated levels of frustration dealt with the issues of logging on to the system itself and periodic glitches with the SSD system that would cause participants to lose saved work and progress. Note that the highest levels of frustration were expressed by the two soldier participants who were not full time Kansas National Guard soldiers resulting in less access to the secure government online connection and regularly maintained government computers.

Logging on to the SSD system was the main issue of frustration with the participants, "…you end up spending more time trying to log in, it seems like at times, and fix these errors or

potential downtime then you did actually doing the learning" (study participant Albert). Due to the unusual, high level of security placed on accessing the unclassified information within SSD, participants often had to struggle with logging on problems while using the two factor authentication (special Common Access Card ID along with a six digit code) that had to properly correlate with security certificates on their browser. Yet in an article within the U.S. Army Sergeant Major Academy's website (they are responsible for managing Structured Self Development) they hinted that log on issues were being fully addressed "…a reduction of help desk trouble tickets from more than 8,000 a month to well under 500" (Crozier, 2013, para. 6). The finding of this study indicate that the logging on process is still an area of high frustration.

High levels of student frustration (as expressed by the participants) are a concern in that research has shown this to be negatively correlated with learning (Grafsgaard, Wiggins, Boyer, Wiebe, & Lester, 2013). High levels of frustration within a learning system can impede progress, lower persistence, and cause a student to quit the educational event (Grafsgaard, Wiggins, Boyer, Wiebe, & Lester, 2013; Mcquiggan, Lee, & Lester, 2007). Multiple adult learner/self-directed learner specific research has also found issues with learner frustration and technology such as lack of sufficient computer experience, inability to properly use poor graphical user interfaces, lack of learning engagement/variety, lack of properly created/timed feedback, and poor online motivational techniques (Banerjee, 2013; Clark & Beverly, 1998; Keller, 2008). Additionally, researchers Din, Haron, and Rashid, in explaining their Self-directed Learning Environment (SeDLE) Index, described one of its main domains (Technology) by explaining that "relevant technology need to be designed and developed for easy use. This is important element as to enable student to participate without much difficulties… it must be done with good faith and integrity" (2016, p. 224).

Besides issues with logging into SSD, the other area that caused a large amount of frustration for the participants dealt with glitches within the system. A study participant explained this issue with great frustration "…it didn't save and it just brought me back to the last thing it had saved which is a problematic thing! It's one more domino that's already fallen" (Mitch). Participants felt increasing frustration in they perceived that their hard work was wasted and that they had lost precious time. This problematic issue again correlates with adult learning research "Mature learners typically are engaged in challenging careers and will not have patience with technological glitches, generally unfriendly user environments, or timewasting online experiences" (Sieber. 2005, p. 332). The specific issue of time was yet another theme of the findings.

Process: Time Spent on the System

Each participant had negative views on the amount of time experienced in completing SSD. "…spending twelve to thirty hours on this thing [SSD]. It's daunting! Yeah. That's a college course, that's a semester-long college course right there," (Mitch). "…it's just the time-consuming part that kind of kills it [SSD] for everyone… That it was just exhausting and long," (Jewels). "I would definitely say it takes some time…it was pretty long," (Molly). "I felt like it was very, it was very time-consuming… it drags out, it becomes very, it can be very demotivating," (Albert). Although Molly's comments didn't seem as negative, she felt the need to raise the issue of time several more times with regards to other soldiers trying to accomplish their SSD "they [soldiers] don't either have time or the computers aren't up and it's, it's holding them back…There's just not enough time…soldiers aren't given enough ample time to complete them [SSD] with all the missions that they have to also, also complete during the drill weekend" (Molly).

99

Each level of SSD takes about 80 hours to complete and soldiers are given two and a half years (30 months) to complete their level of SSD (Mattson, 2013). Thirty months to complete the course is misleading because soldiers must complete their level of SSD before they can go to their next developmental residency school (needed for promotion). The opportunity to being sent to this school can occur anywhere from 9 to 23 months after soldiers' initial entry/training (basic training) into the military (Army Regulation 600–8–19, 2015). Often, soldiers put off completing their SSD and are then caught unprepared when told that an opportunity to go to their residency school is available, if they have their SSD completed. This then leads to soldiers rushing through their Structured Self Development program. Two of the participants in this research study confided that they had less than a few weeks to accomplish their SSD in order to complete it before they could get orders to be sent to their resident developmental school.

Leadership at different levels inadvertently encourages this *rush* as exemplified by an official military course chief when asked how long it would take a soldier to go through an SSD level, "It depends on your availability, but it could take as long as two weeks to complete, or it could take only one week…It's on the availability of the Soldiers," (Newcomb, 2012). This seems to be in conflict to the definition of Army structured self development (SSD), which is to "…ensure learning is continuous and enduring, *not sporadic and transitory* [emphasis added]," (Army Regulation 350-1, 2014).

The assumption of time management skills of self-directed learners has been challenged by Grow (1991) who classified this ability as belonging to fully developed "Stage 4 Learners."

> Learners at this stage are both able and willing to take responsibility for their learning, direction, and productivity. They exercise skills in time management, project

100

management, goal-setting, self-evaluation, peer critique, information gathering, and use

of educational resources. (Grow, 1991, p. 134)

Yet a soldier isn't a self-directed learner simply because they are an adult. As Grow's research

describes, self-directed learners have been developed and fostered by teachers/facilitators so that

they can progress to take a more learner-centered role in their own instruction (1991). Soldiers

receive one short instructional event on self-directed learning, entitled "Self Directed Learning

Principles" within on portion of SSD level 1 (United States Army Sergeants Major Academy,

2017). This is even more problematic in that many soldiers did not complete SSD level 1

because the course was created after they had passed that level of military education (their rank

was beyond that SSD level). Rushing through SSD or *cramming* is an issue of concern due to

that process being linked to the phenomenon of *binge-and-purge* as identified by Brown,

Roediger, and McDaniel, who researched and identified issues that hamper academic

performance, "Cramming, a form of massed practice, has been likened to binge-and-purge. A lot

goes in, but most of it [what was learned] comes right back out in short order," (2014, p. 63).

Going through SSD too quickly detracts from student-soldiers' ability to retain the information

long-term and for future application. The issue of information retention was another finding of

this research that is discussed later in this chapter.

Process: Cheating on SSD

All participants acknowledged that cheating on SSD did occur and one participant Mitch

(the lowest enlisted soldier in the study) gave a very forthcoming statement on the issue that

many soldiers, especially those in higher leadership are not willing to express.

…morally and ethically, yes [leadership should be concerned], because you're cheating

on a test. But at the same time, from a pragmatic point of view, no. Because again so few

people actually retain any of that stuff. I, as a leader, would not be overly concerned because I know I'm just going to end up doing some congruent training with them later on when I have time. Or I'm gonna tell them "hey work on this and this while I'm not around." And I know they're gonna retain that [hands-on learning] a whole lot better and a whole lot more of this is going to be relevant to them that way then SSD one… And end of the day we're the Army we're about getting shit done, not necessarily getting it done in the smoothest, nicest, most correct way, as long as we're not straight-up breaking laws and regulations. At the end of the day the most important thing is the job got done, everyone came home with all their bits and pieces. Excellent, job all done. (Mitch)

Compare that response with what the oldest and highest ranking soldier in the study stated "I think that [cheating in SSD] falls in lines with just get it done…Because same mindset, just get it done… finish, get to the objective [in this case accomplishment of the SSD courseware]," (Albert).

Initially this might seem counterintuitive to the high standards and morals of the Army Values: loyalty, duty, respect, selfless service, honor, integrity, and personal courage (Soldier's Guide - Training Circular 7-21.13, 2015). The Army value of *Integrity* is defined specifically as "Do what's right, legally, and morally," (Soldier's Guide - Training Circular 7-21.13, 2015, p. 3-6). Yet in the same breath, soldiers are also taught the Soldiers Creed, a portion of which states "I will always place the mission first. I will never accept defeat. I will never quit," (Soldier's Guide - Training Circular 7-21.13, 2015, p. 3-7). In this regard it appears that many soldiers see the completion of SSD as the *objective* instead of gaining the knowledge contained within.

Only one participant in the study asked about the operational definition of "cheating." In response I asked the participant (Jewels) what her definition of cheating was:

Just I guess, using resources that you shouldn't be. Like if you're asking someone for all

the answers or looking up the answers I feel like if you're not taking your own notes and

using your own knowledge then it's cheating. I think that should definitely be looked

down upon by leadership as well.

This definition of cheating is problematic since all Army manuals are either freely available

online or available within a password protected military website. Additionally all of the

assessments conducted within SSD (as reported by the participants) were multiple choice and

true/false questions, the answers of which could generally be found within a military manual.

The main issue and hard definition of cheating that would most logically fit in this situation

would be online resources that specifically answer SSD questions directly. Use of official Army

manuals to answer SSD questions is allowed, but use of resources that have actual SSD questions

and answers (verbatim) is considered academic dishonesty/cheating. A cursory search on Google

identified 302,000 websites, videos, and forums that resulted when the phrase: *structured self

development + answers* were searched (Google search, November 21, 2017). An example result

was a page that provided the exact wording of the questions on a SSD Level I test, along with the

exact wording of the correct answer (Nelsonc1993, 2017).

The issue of academic integrity however isn't limited to soldiers as many online students

deal with this issue (Paullet, Chawdhry, Douglas, & Pinchot, 2016; Simkin, & McLeod, 2010;

Stuber-McEwen, Wiseley, & Hoggatt, 2009). Specific reasons why student-soldiers might

engage in academic dishonesty were beyond the scope of this research study, however other

research has looked into the issue in higher education (Eshet, Grinautski, & Peled, 2012;

Greenberger, Lessard, Chen, & Farruggia, 2008). The main results of these two research studies

found that students who were more intrinsically motivated appeared less likely to cheat, as

opposed to students who were more extrinsically motivated who were more likely to cheat (Eshet, Grinautski, & Peled, 2012; Greenberger, Lessard, Chen, & Farruggia, 2008).

Given the perceptions of the participants with regards to cheating, the easily available resources to allow for cheating, and the SSD system design that makes it more prone to cheating, this finding is an area that deserves greater attention. Specific recommendations for improvement are provided later within this chapter.

Content: Instructional Technique

Participants of this research study shared a commonality of wishing for dynamic instructional methods such as more hands-on learning and better interaction within the SSD experience. Jewels, the lowest ranking female participants summoned up the shared feelings dealing with hands-on learning, "I do like things that are more hands-on…hands-on trainings is a lot better than just listening and then trying to remember… Definitely hands on anything interaction wise I definitely learned a lot more." And Mitch, the lowest ranking male participant, explained it this way:

> …it's very difficult to do an effective training exercise when all you're doing is text. They were creative with it, matched this term to this term, define this, fill-in-the-blank, just make sure you're paying attention. But it's very, again it's very hard for most people to retain information like that… I learned almost extensively, essentially, almost entirely by doing, which a lot of people learn better by doing than by reading, or writing, or being shown.

Mitch additionally expressed a concern for the ongoing monotonous presentation of slideshows, "…most of it's just death by PowerPoint thrown on and on here's bullet point, bullet point, bullet point." The use of the term death by PowerPoint (death by slide show) violates Army doctrine,

which states that this should be avoided within the educational process (TRADOC Pamphlet 525-8-2, 2011).

The issue of hands-on training is a common request among adult learners in general and Army soldiers specifically (Everest College, 2014; Graves, Rauchfuss, & Wisecarver, 2012),

> In too many high schools and colleges, instruction seems to occur through engaging the ears and sometimes the eyes (through visuals such as with slide presentations). Interestingly, though, a study finds 52% of U.S. Adults say number one way to learn is through active participation, followed by visual demonstration. (Gerstein, 2016)

 The benefits of hands-on learning are potent in that it provides more realistic use of the information to be learned, more engagement therefore brain activation, general increased comprehension, improved information retention, enhancement in critical thinking skills, and greater student/teacher satisfaction (Bass, Yumol, & Hazer, 2011; Haury, 1993; Haury, & Rillero, 1994; Marzano, Pickering, & Pollock, 2001). Some research even indicates that some sort of hands-on learning implementation is a key factor in effective and successful online instruction (Janicki, & Liegle, 2001; Johnson & Aragon, 2002).

Content: Retention of Information Learned

The issue of retention of information learned through SSD was a concern experienced by all the participants. Molly, the second highest ranking soldier participant and a female, offered her perspective "…being able to retain all of it at once, in one setting, it's kind of a struggle, especially if you're distracted because it is very time-consuming." Mitch, the lowest ranking soldier participant and a male, expressed quite a bit of frustration "I would go through it, I'd finished one quiz and then I would sit back and go I've retained none of that. And I know that I'm going to have to relearn almost all that stuff later on in just as much if not more detail."

The *retention* aspect of SSD is vital in that properly remembering information allows for deeper learning and application (Wlodkowski & Ginsberg, 2017). Additionally, retention of new information learned creates the ability for enhanced cognitive process like comprehension, critical thinking, and creative problem solving, as well as attitudinal modification (Gagne, 1978; Sousa, 2016; Wlodkowski & Ginsberg, 2017). Neuroscience research has also found that the strength of a memory will fade unless it is reinforced through additional use or associated in a way that is relevant to the learner (Ratey, 2001). The U.S. Army states in its definition of SSD that it "…will ensure learning is continuous and *enduring* [emphasis added]," (Army Regulation 350-1, 2014). Yet all the soldier-participants in this study expressed concern that this was not their experience.

Elements of other themes surfaced in the form of the other themes noted within the findings of this research and additionally contributed to lack of retention, (frustration, time, cognitive overload, motivation: relevancy/boredom, learning environment/culture, and system accessibility). Information on how to enhance SSD information retention will be presented within the recommendations portion of this chapter.

Content: Cognitive Overload

Another theme related to retention was the participant perceived feeling of cognitive overload. "…its biggest flaw is that it tries to cover so much," (Mitch). Cognitive overload creates confusion, excessive anxiety, and/or excessive frustration caused by too much information processing being attempted by the learner (Miller, 2014). This is somewhat different than but sometimes included with *information overload* (also alluded to by the participants of this research), which can be defined as too much data being presented to learners, exceeding their working memory, and surpassing their capacity to view or use the information presented

within the needed amount of time (Jacoby, 1984; Jones, Ravid, & Rafaeli, 2004). One of the Army's own manuals (Army Learning: Army Educational Processes) specifically addresses this issue "Caution: Cognitive overload may occur because of excessive amount of information and reading assigned in a short time period," (TRADOC Pamphlet 350-70-10, 2013, p. 17). Again the Army's own doctrine specifically addresses this concept in its main leadership manual (Leader Development), "Do not overload the team with information. Offer information in segments for understanding without causing confusion and together will convey the complete story," (Army Field Manual 6-22, 2015, p. 7-26).

"I felt like there was a lot of information," study participant Jewels complained as she went on to express that at times the courseware would present too many examples which would frustrate her attempts to get through the system. "…there was a lot… being able to retain all of it at one, in one setting it's kind of a struggle, especially if you're distracted," Molly expressed in describing her experience with the system which as she explained had lots of both good and bad points. "…the information was very drawn-out and difficult to take it all in… there is good information within there if one is able to kind of sort through the weeds to get it," senior enlisted soldier-participant Albert explained in dealing with the frustration of trying to take in all the information.

Although gaining an ability to perform while receiving excessive information, managing cognitive overload, and being able to mentally navigate multiple complex issues is a skill that advanced Army leaders need to possess, often referred to as cognitive flexibility (Army Field Manual 6-22, 2015), there is a danger in having courseware that has excessive cognitive overload within every level. In conducting research on self-directed online research (both within higher education and corporate settings), Kim and Frick (2011) described that cognitive overload can

directly cause problems with learners' motivation by negatively affecting their attention to material to be learned. "This is consistent with the contention that motivation is adversely affected when students feel overwhelmed by the mental effort necessary to learn, " (Kim & Frick, 2011, p. 3). Additionally, Kim and Frick noted that cognitive overload could affect student persistence and increase attrition rates, anxiety, and fear within the learner (2011).

Environment: Negative View of SSD by Leadership and Peers

The majority of the participants in this study directly stated that they believed leadership didn't have a very positive feeling about Structured Self Development. "…she [Army supervisor] has made it clear to me she doesn't like it either, mostly for the same reasons I've given you" Mitch answered with regards to his thoughts on how leadership felt about SSD. "…they're [higher leadership] just like yeah. Yeah just get it done. They, they haven't sat through some of these and understand that it just draws out more and more than what you would hope something of this level would, would do," senior enlisted soldier-participant Albert stated as to his thoughts on how leadership views SSD.

With the issue of peer views of SSD, all participants expressed negativity. "…they'll [peers] understand this [SSD] is about to suck and I just gotta deal with it …they already understand so for whatever reason I'm going to hate this, I'll just have to deal with it," Mitch, the lowest enlisted soldier-participant in the study explains what he thinks peers' thoughts are about SSD. "I think a lot of people, it was just such a time-consuming thing feel like it's a waste of their time rather than actually looking at it as being useful and knowledgeable," Jewels stated in a somewhat sad voice, concerned that peers seem to focus on the negative aspects of SSD.

Having a negative leadership/environment/culture/peer view of SSD is a major issue of concern in that it can affect important aspects of learning. Research by Keeton, Scheckley and

108

Griggs (2002), have identified that the level of support and encouragement for the learning environment was one of the top eight educational principles that had the largest impact on student learning outcomes within higher education. Additionally, research by Duartea, Leiteb, and Mourazb, expressed that the creation of an encouraging learning environment was vital in order to foster self-directed learning behavior within students (2016). Other research has also identified the relationship and importance of having a supportive learning environment/culture in both higher education and the workplace in order to positively impact the development of life long learners (Sim, Zadnik, & Radloff, 2003). Having a negative learning environment also makes it much more difficult for students to develop intrinsic motivation to learn the instructional content (Abeysekera, & Dawson, 2015; Van Nuland, Taris, Boekaerts, & Martens, 2012); this is further explained later, in the motivational portion of this section of the research.

Overall, participants described experiencing a frustrating, rushed, cognitive overloaded, negative learning environment. Negativity is imbedded in the structure of Structured Self Development itself. The common language used in the military is that a soldier has to *get through* SSD in order to get to go to the *actual* residency course. When a soldier finishes SSD, they get access to a simple SSD completion certificate online that then allows them to attend their resident developmental course. Upon completion of the residency portion of the course (usually at a graduation ceremony), they will then receive a highly sought after DA Form 1059 Service School Academic Evaluation Report, which is viewed highly by leadership at all levels (Army Pamphlet 623-3, 2015). This DA Form 1059 document provides promotion points (no promotion points given for completing SSD) and promotion eligibility to Soldiers (Army Regulation 600–8–19, 2015). The DA Form 1059 also provides a performance summary (exceeded course standards, achieved course standards, marginally achieved course standards, or

failed to achieve course standards), a ranking of demonstrated abilities (written communication, oral communication, leadership skills, contribution to group work, and evaluation of student's research ability) with the ranking of not evaluated, unsatisfactory, satisfactory or superior as well as a comment section to provide a "word picture of each student that will accurately and completely portray academic performance, intellectual qualities, and communication skills and abilities." There is no mention or requirement to address SSD in any way within the DA Form 1059 (Army Pamphlet 623-3, 2015).

All participants expressed the commonality of negative feelings with regards to how others (leadership and peers) viewed Structured Self Development.

Research Question #2: How Do Soldiers Describe Their Motivation As They Progress Through SSD?

As described earlier in this study, Keller's ARCS (Attention, Relevancy, Confidence, Satisfaction) model of motivation was used as the overall framework from which motivation was observed within this research (1987/2004). Although the different components of Keller's ARCS overlap with each other, two recurring themes were identified dealing with motivational aspects of soldiers' experiences while going through SSD, *relevancy of information learned* and *boredom*.

Motivation Theme 1: Relevancy Of Information Learned

Although all soldiers felt that there was at least some good information within SSD, the issue of relevancy of the information identified within SSD was a frequent issue described by participants. "…there is good information within there [SSD] if one is able to kind of sort through the weeds to get it," (Albert). In this case, research participant Albert (senior enlisted soldier) explains that although he felt there was some good information presented within SSD, there was also a lot of undesirable/unneeded information (the weeds) that one had to

110

avoid/ignore. Participant Mitch (lowest rank enlisted soldier participant) presented a similar
sentiment

> …rather than the practicality or I should say the pragmatic information being taught,
> what seemed to be more important was, I hesitate to use it but, fluff and the stuff that
> honestly when push comes to shove doesn't do much later on… that simply isn't of
> significant value compared to the stuff that was fairly touched on… It honestly just needs
> to be slimmed down and made something far more focused on here's how you function
> and here's how you begin leading soldiers

Additionally, Jewels and Molly, who were more favorable to SSD in general, also made
comments that the SSD system could have done a better job at expressing relevancy and
focusing more on information that would prepare soldier for their upcoming residency school.

> …if the SSDs were geared that way, that would kind of help other people prepare other
> soldiers for when they go to the next school. Because they might retain a little more than
> just doing the normal history, OPORDers [Operations Orders] you know, and PT
> [Physical Training] stuff like that. (Molly)

The motivational component of *relevancy* was described by Keller as dealing with students'
perceptions as to why the information to be learned is important (and useful) both in the short
term and in the long term (1987/2004). Keller (2008) also states that relevancy,

> …includes concepts and strategies that establish connections between the instructional
> environment, which includes content, teaching strategies, and social organization, and the
> learner's goals, learning styles, and past experiences. Learner goals can be extrinsic to the
> learning event in that it is necessary to pass a course to be eligible for a desired
> opportunity… (p. 4)

111

Keller, additionally, explained that learning motivation is stronger when the student has a more

intrinsic goal orientation (2008). Intrinsic motivation is further complicated for SSD students

given the addressed issues of negative culture/environment, views of SSD by leadership and

peers. The effectiveness of motivational design is tied in with the effectiveness of the learning

environment (Keller, 2010). The importance of having students understand why what is being

taught is relevant goes beyond the simple fact that relevancy is a key component to learner

motivation (Keller, 1987; Wlodkowski, & Stiller, 2005). Relevancy is also a vital aspect in

helping students meet short and long range goals, integrating previously learned information, and

grasping of the utility of information in future applications (Keller, 2010). As stated earlier with

regards to the issue of information retention (but also applicable with the issue of relevancy),

neuroscience research has identified that the strength of a memory will fade unless it is

reinforced through additional use or associated in a way that is *relevant* to the learner (Ratey,

2001). Additionally, understanding the importance of how information learned now could be

applied in the future is a key area of *relevancy* that needs to be considered within the SSD

system. This forward thinking conceptualization is generally a skill that only more seasoned

NCOs (sergeants) would possess. Notice the phraseology used by Molly (the highest ranking

female participant – an E6 Staff Sergeant),

> …I mean all that stuff that we need to know and will eventually use in our career, as we
>
> build our career. I think it is very beneficial to anybody to really sit down and focus on an
>
> SSD, and not just click a button.

This again correlates with Grow's (1991) description of adult learners in that only higher-level

self-directed learners have developed the ability to:

…examine themselves, their culture, and their milieu [social environment] in order to

understand how to separate what they feel from what they should feel, what they value

from what they should value, and what they want from what they should want. (p. 133)

It is worth noting again that although the Army wants all of its soldiers to be lifelong self-

directed learners, it only provides one instructional event on self-directed learning, entitled "Self

Directed Learning Principles" which makes up only one lesson of the 38 lessons presented in

SSD level 1, which higher ranking soldiers would not have gone through (United States Army

Sergeants Major Academy, 2017). Although relevancy may be understood by a more

experienced soldier, junior soldiers would most likely not be able to see relevancy on their own

which would then lead them to become bored with the learning event.

Motivation Theme 2: Boredom

The issue of boredom was a negative sensation experienced and expressed by all research

participants at different points within the interviews. Mitch, the lowest enlisted soldier

participant, was very direct with his feels on the issue of motivation, "To be honest it [SSD] was

kind of a de-motivator…It's [SSD] a painful experience, it's boring …I thought they [videos]

were kind of long and drawn out." The other participants expressed similar sentiments with

several comments directed to the videos used within the SSD program, "I didn't really care for

the videos, I thought they were kind of long and drawn-out," (Molly).

In a review of both qualitative and quantitative higher education research studies, Pekrun,

Goetz, Titz, and Perry (2002) found that "…boredom may serve functions of escaping

behaviorally or mentally from situations not providing sufficient stimulation, but may also serve

as an escape from situations having demands that are beyond the student's capabilities," (p. 93)

The overall finding that boredom greatly hampers learning is an issue that needs attention in

113

order to maximize SSD's effectiveness. Within Keller's ARCS (Attention, Relevancy, Confidence, and Satisfaction) model of motivation, boredom falls mainly within the area of *Attention*, "…getting attention is not enough. A real challenge is to sustain it… The goal is to find a balance between boredom and indifference versus hyperactivity and anxiety," (Keller, 1987). Further writings of Keller explain that the issue of boredom can affect all aspects of his motivational theory: Attention, Relevancy, Confidence, and Satisfaction (2010). If an instructor or instructional content/system (as with SSD) can't obtain or retain *attention,* then boredom will set in and the student will not be an effective learner (Keller, 2010). If information being presented is not made explicitly and personally *relevant* to the learner, then the learner can easily lose interest allowing boredom to set in and learning to cease (Keller, 2010). If a student is not *confident* in his/her abilities to learn and retain the information presented, then they will again lose interest allowing boredom to set in and learning to cease (Keller, 1987; 2010). If students are not *satisfied* with the educational experience due to a lack of proper feedback and an inability to use what is being taught (such as with hands-on learning) or intrinsic/extrinsic rewards (intrinsic being the most beneficial), then students will once again become bored with the instruction leading to no or ineffective learning (Keller, 1987; 2010). Motivational aspects overlap one another and if not properly addressed offer a great impediment to student-soldiers success with SSD.

Research Question #3: How Do Soldiers Describe Any Impediments With Their Progression Through SSD?

The biggest impediment to progression through SSD experienced and directly expressed by the participants dealt with actual access to the SSD system. All participants experienced significant problems in accessing the SSD system through a home computer and in the end; all were only able to complete the SSD system by using a government computer. Albert, the senior

enlisted soldier participant, and only one who was able to access SSD from his home expressed this about his experience:

On a couple of different occasions, I'd go to log in and there are certificate errors where it whether something just wasn't meshing up and so you end up spending time having to either research it or yourself to get that corrected or finding someone that knew what that certificate error was. And then basically going through an extenuating process of correcting it and getting it taken care of so you could just get back to you know where, where you needed to start.

All other participants had to use government computers at a government installation, through a government connection to the Internet.

Molly the senior female enlisted soldier participant further explained the problematic issue of accessing SSD:

…on my home computer I can't log into the SSDs at all. But as being a technician [full time National Guard soldier] I have a military computer at my access so it's a lot easier to, and I've heard other soldiers say they struggle to be able to get on to the SSDs…[At home] It's just, AKO won't load or it won't, it'll load or it won't recognize my credentials on my own computer…A lot of people [soldiers] don't have that [military computer] so, and I think that's one of the things that hurt other soldiers as far as completing their SSDs because they struggle with it. Like on a drill weekend they don't either have time or the computers aren't up and it's holding them back.

Although this is a separate specific finding dealing with SSD progress impediment, it ties in with virtually all of the other findings in that problems with accessing the SSD system leads to

115

increased frustration, time spent on the system, as well as leading to negative views of the SSD system by peers and leadership.

Along similar lines, accessing the SSD system is further complicated in that none of the participants were able to access the system via smartphone or tablet due to certificate errors and the usual need to use the secure military CAC (Common Access Card). This was in contrast to online university instruction that some of the participants were participating in, within which they were able to easily access via smartphone and tablet. The Army has specifically known about the importance of mobile access to online instruction,

> Implementing the best teaching and learning practice requires an understanding of how the student will access and use the instructional content… Standardized content delivered to a mobile device that is tracked and recorded by an LMS or student information system. (TRADOC Pamphlet 350-70-12, 2013, p. 53)

The Army however has yet to realize the value of full mobile SSD implementation to enhance the learning experience and ability of the soldier learner to complete the instruction.

Implications of Findings

In order to enhance the effectiveness of SSD, several implications of this research should be considered:

1. With regards to the *process*, participants experienced frustration, perceived excessive time on the system, and felt that there was rampant cheating within the SSD.

2. With regards to the *content*, participant soldiers perceived low retention of the information learned, and expressed undergoing cognitive overload at times within the system.

3. Participants expressed an overall negative culture/environmental perception of SSD by both their leadership and peers.

116

4. Soldier participants expressed issues with different aspects of *motivation* (the focus of the second research question) mainly in areas associated with perceived relevancy of information presented and with boredom of instruction while going through the SSD system.

5. All participants expressed general difficulties with *accessibility* to the SSD system. Specifics as to how soldiers connect to and access the system were a recurring issue. Associated issues such as time and resources to interact with the system were also presented indicating a funding, resourcing, and allocations factor would need to be evaluated with regards SSD implementation.

6. The Army cannot assume that all adults are automatically self-directed in a meaningful way. Understanding what level of self-directedness a soldier posses has implications for how effective they will be within SSD and their long term ability to utilize the information presented. A novice level one learner would not be as effective in an SSD environment as an expert level four self-directed learner (Grow, 1991).

7. Different sections and organizations within the Army (such as TRADOC and Sergeant Majors Academy) know much of what should be done but struggle to bringing it all together and fully implement (i.e. motivational issues and reduction of cognitive overload).

The findings presented where commonalities across the experiences of four different soldier participants, who had four different ranks, and four different backgrounds. Although this is a qualitative study and generalizations can not be made directly from the findings presented, the implication of the results is that there is a good chance there their high level of shared experiences are common across the Army enlisted soldier population.

Recommendations

Frustrations Dealing With Logging Into SSD And Periodic Glitches

A simple and direct solution to both of these problems would be to utilize a modern learning management system such as Instructure Canvas (www.canvaslms.com). This type of sophisticated learning environment provides ongoing updates to the system to remain modern and flexible with constantly changing technology, provides constant saving of work progress within the system (main glitch issue noted within SSD), and would allow for easy login access from any system to include desktops, laptops, tablets, and smartphones. A Common Access Card (CAC) is not needed to access this system which would make SSD more in line with how virtually all colleges and universities manage student access to their learning environment.

The specific need to use a CAC to access the SSD learning system should be re-evaluated in that it currently creates a large barrier to student-soldier access and is not needed since all of the information accessed on SSD is unclassified. The improved access to the SSD system and elimination of glitches would lower frustration and also provided a lower sense of overall time spent on the system.

Perceived Time On The SSD System

This can be improved upon through enhancements to the SSD interface and improvements to content organization/presentation. Organizing the different components to be learned in each SSD level into an easy to understand and navigate interface that presents information such as what has been completed and how much more of a section needs to be completed would greatly assist students, allowing them to navigate more quickly through the system (Nielsen, & Loranger, 2006). Additionally, presenting classes, or sections to be learned via chunking the information into more manageable allows for better-perceived progress and a lowered sense of time spent on the system and reduces students' perceptions of cognitive

118

overload (Gobet, Lane, Croker, Cheng, Jones, Oliver, & Pine, 2001; Van Merriënboer, Kirschner, & Kester, 2003). A simple example of this would be to instead of having a presentation that has 50 slides, have two presentations with 25 slides each. Enhanced chunking of the instructional content would provide even greater benefits for student-soldiers accessing and completing the SSD coursework via mobile devices (Koole, 2006).

Cheating Within The SSD System

The first part of an effective solution to this issue deals with improving the perception and culture of SSD so as to enhance a greater amount of intrinsic motivation to avoid the issue of cheating in the first place (Paullet, Chawdhry, Douglas, & Pinchot, 2016). This solution will be addressed more fully in recommendations dealing specifically with the area of perceived negative views of the SSD system by leadership and peers. Another way to help address the issue of cheating with the SSD system is to incorporate a mix of objective (true/false, multiple choice) and subjective (essay/short answer) questions posed within the courseware (Cabrera, 2013). Even though the use of essays and short answers may not seem viable given the asynchronous nature, quick turn-around progression, and large volume of students in the SSD system; quick automatic grading of essays is fully possible and comparable to human grading with currently implementable technology (Crossley, Allen, Snow, & McNamara, 2016; Drolia, Rupani, Agarwal, & Singh, 2017).

Instructional Technique Improvements Within SSD

This can be achieved through consulting the Army's own TRADOC Pamphlet 525-8-2 (2011: 2017) and TRADOC Pamphlet 350-70-12 (2013) in that these references provide specific guidance on improvements to this issue. TRADOC Pamphlet 350-70-12 (2013), The Army

Distributed Learning (DL) Guide, provides information on how the U.S. Army is to analyze, design, develop, deliver, and evaluate online instruction:

A modernized TADLP [The Army Distributed Learning Program] will ensure a tactical edge by deploying innovative and *emerging technologies* that have the potential to revolutionize technological advances and drive transformation. These opportunities will provide better self-discovery, peer-to-peer *interaction*, and experience-based learning in support of the ALM [Army Learning Model]. A modernized TADLP and associated technologies will permit *active learning* using automated and adaptive information extraction, assimilation, and management to provide Soldiers with the ability *to become adaptive, critical thinkers* able to solve complex problems in uncertain operational environments. [emphasis added]

Increased Interaction Within SSD

Instructional interaction can be enhanced within SSD by utilizing discussion boards/forums, one for periodic questions about the lesson material and one to allow SSD students to interact with one another as well as pose questions to the instructor for all to benefit from. This would create a community of practice and would still allow for the asynchronous utilization of the SSD system while improving the student-content, student-student, and student-teacher interaction components of the course (Deschaine, & Whale, 2017; Poll, Widen, & Weller, 2014). This would additionally make the SSD system more inline with research-derived best practices for online instruction (Corso & Giacobbe, 2005; Nilson, 2016). Instructional interaction also ties in with the concept of instructional presence that can also be improved through the utilization of discussion boards and the strategic use of online video (Anders, 2017; Poll, Widen, & Weller, 2014).

Video tools, such as those available with advanced video delivery systems like Mediasite (www.sonicfoundry.com), should be used to provide additional opportunities for interaction. Tools within this type of video delivery system provide interactive tools such as in-video polls, quizzes, closed captioning, and advanced playback controls, to aid in comprehension and retention (Cummins, Beresford, & Rice, 2016).

More Hands-on Learning Within SSD

This can be accomplished through the inclusion of online games, simulations, and hands-on projects. Utilization of different types of online games and simulations has been shown to be effective in comprehension, learning, and student satisfaction (Boyle, Hainey, Connolly, Gray, Earp, Ott, Lim, Ninaus, Ribeiro, & Pereira, 2016). Additionally, the use of hands-on, challenging projects such as making a student-soldier conduct a video interview on leadership with their company commander or similar type of real-life type assignment has been shown to be effective in addressing this issue (Nilson, 2016; Poll, Widen, & Weller, 2014). This type of real-world tie-in assignment could be graded by the student-soldiers' first line supervisor and then submitted to SSD for grade archiving and continued progression. Improvements made via inclusion of hands-on learning will also improve the issue of information retention (Halpern, & Hakel, 2003; Haury, & Rillero, 1994).

Improving SSDs Learning Environment/Culture Perception

"Soldiers and Army civilians must promote a culture of continuous learning, adaptability, and innovation in the institutional and operational armies," (TRADOC Pamphlet 525-8-2, 2017, p. 10). Command emphasis at all levels need to address the SSD culture to uplift and enhance its perception. The explicit message that the purpose of SSD is to provide usable information to improve the soldier needs to be fully grasped by the soldier as opposed to the current message

121

that SSD is something that just needs to get completed as soon as possible so that the soldier can go to the actual residency course in order to really learn. Presentations of graduation diplomas for each SSD level completed from a commanding officer, as well as the presentation of a battalion challenge coin should be considered. Awarding of direct, fully accredited, college credit for SSD levels completed would also greatly improved the viewed value of going through the SSD courseware.

The previously mentioned usability recommendation of enhancing SSD's navigational component would also enhance the SSD learning environment by allowing SSD to function as an ongoing resource as opposed to a once-and-done educational event. As an example if a student soldier were to go through a simulation on how to conduct a change-of-command ceremony during SSD, they could then later easily navigate back to that simulation on the very real chance that they would be ask to participate in or conduct an actual change-of-command ceremony. By now serving as an easily reached, usable, and relevant instructional resource, the perception of SSD's value would greatly increase.

Enhancing Students' Motivation

The *relevancy* component of motivation (a key finding in this study) can be improved through the explicit expression of how the information presented will be useful to the student both now and in future situations (Keller, 1987, 2008). SSD needs to present information that is current and explicitly relatable in order to maximize perceived relevancy (Gabrielle, 2003). Enhancing the motivational relevancy aspect of SSD content will also directly improve information retention (Ratey, 2001).

The additional motivational issue finding of boredom with the SSD system can be addressed by updating media (mainly video) presented within SSD and as previously mentioned,

122

by ensuring that the content is explicitly relevant to the student as motivational variables often overlap (Keller, 1987, 2008). Additionally, the use of variability, such as presenting information in different ways: video, images, audio, with less text, with more interaction, and sometimes posed as a problem, will aid in capturing and sustain students' attention and help to prevent boredom (Keller, 2009).

Yet improving a system to be less boring is only part of the equation in that students must also want to learn and have the right confidence/mindset that they can learn and succeed (Keller, 1987). This student *mindset* enhancement is accomplished by providing encouragement to the student for their effort and persistence within the system such as: "Great work (actual name of student). You are halfway done with SSD level 1. Your dedication to self improvement will greatly benefit you and the soldiers you train and lead in the future," (Dweck, 2010). Teaching students about the specifics of mindset, about having a positive *growth mindset* and avoiding a negative *fixed mindset* should be incorporated into the SSD curriculum to further improve motivation (Dweck, 2010).

Overcoming the Impediment of Access to SSD

Using a previously described modern learning management system (LMS) such as Instructure Canvas (www.canvaslms.com) and removing the requirement to use the Common Access Card (CAC) would greatly enhance soldiers accessibility to the SSD system. Modern LMSs like Instructure Canvas also have mobile apps that make accessing the instructional content even easier. Without the CAC requirement currently in place, student-soldiers would be able to truly access SSD from any device to include personal smart phones, tablets, laptops, and home computers.

Additional funding and resources needs to be allocated to ensure that soldiers have the proper equipment, access, and time to complete SSD. Some of these issues however would be reduced if a modern LMS and no CAC requirement were implemented in that accessing the SSD system would then be much less complicated/problematic.

Recommendations for Future Research

An observation made within this research dealt with a difference in overall perceptions of the two full-time National Guard soldier participants versus the two regular one-weekend a month National Guard soldier participants. The two full time National Guard soldier participants also happened to be the two females in the research study. Further research should explore differences along the lines of fulltime versus regular National Guard soldiers as well as perceptual difference of male versus female soldiers.

Additional research should also be done on understanding the differences between levels of self-directedness between novice lower enlisted soldiers and more seasoned (have been in the military longer), expert, NCOs. Are senior NCOs more self-directed than lower enlisted or are there other adult learner aspects that better address and predict soldier-students success in self-directed learning?

A final area for future research deals with the additional interview tool of participant-produced drawings. This impactful and physical aspect of the research provided a greater emotional response from the interviewees' leading to a deeper understanding of their shared phenomenon. More research dealing with the best ways to use participant-produced drawings, especially with the use of emoticons, should be investigated.

Reflection

In reflecting over this multiyear research endeavor, this challenging academic journey has revealed a multiple of personal findings. For one, I never fully realized the complexities of

educating soldiers online in an asynchronous manner in a way that would be usable to everyone. So much of the information discovered seems to overlap and interrelate with itself making investigating and understanding somewhat challenging at times. Having personally gone through SSD level four, I know the time constraints and frustrations that can be felt in going through the system. I wondered if it was only me who had issues with the system and if there was anything I could do to help improve the system to better develop fellow soldiers. Note that I worked very hard to bracket any personal bias and use my relationship to the topic to help give a more knowledgeable insider perspective. The findings provided great insights to what other soldiers experienced across different ranks, genders, and military specialties. The fact that the research results were very similar, with multiple commonalities across all participants was a powerful finding that should be of great value to Army leadership and Training and Doctrine Command (TRADOC) personnel. It seems as if SSD if more frustrating than it needs to be and that the Army assumes that all soldiers are much more self-directed with intrinsic motivation than is actually the case. This research is a culmination of wanting to improve myself as a student-soldier, to set the example for others to follow, and a deep desire to help other soldiers and the Army in general.

In Closing

This exploratory phenomenological research study examined the phenomenon of what four different enlisted soldiers (two males, two females, all of different ranks) in the U.S. Army National Guard experienced in going through the mandated online training, Structured Self Development (SSD). The findings of this research, conducted via multiple in-depth interviews, revealed commonalities across the different participants with emerged themes dealing with frustration with the system, perceptions of excessive time spent on system, cheating on SSD, anxiety of retention of information learned, cognitive overload, and negative views of SSD by

125

leadership and peers. The use of participant-produced drawings were also utilized which in the participants own words expressed a description of SSD as being like "hitting your head against the wall," "exhausting and long," a "bit of frustration and happiness mixed together," and a "bit of a downer," (Mitch, Jewels, Molly, and Albert).

Additionally, one participant, the lowest ranking, who had a particular negative view of SSD felt a need to express his happiness with the fact that research was actually being done on the SSD system so as to improve it for other soldiers:

> …it's great to hear that somebody else, especially someone in a position of authority, is wanting to look at this and then try to push it up higher to actually make it better. Because a lot of people, especially in the guard, are content with things the way they are. Yeah they're just like it sucks. So what? Instead of, hey this is not to standard, we need to make it to standard. So it's excellent to see someone of some position of authority actually want to fix it. (Mitch)

The Army's use of self-directed online learning has become a central, ongoing component of soldier educational development (Jones, 2016). Recently the Army has announced that it will be evolving the Structured Self Development (SSD) system into a new Distributed Leader Course (DLC) system (Myers, 2017). Yet all of the items identified within this study still apply, especially with regards to issues surrounding the educational environment and culture. The best, most advanced learning system will still fail to reach optimal results if issues dealing with system access, motivation, and educational environment/culture are not properly understood and addressed.

126

References

Abeysekera, L., & Dawson, P. (2015). Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research. *Higher Education Research & Development, 34*(1), 1-14.

AARP. (2016). *What skills are employers looking for?* Retrieved from http://www.aarpworksearch.org/Inside/Pages/HowEmployableAmI.aspx

AESD. (2016). *Create or reset my AKO password*. Retrieved from https://esd-crm.csd.disa.mil/app/answers/detail/a_id/259

ALARACT 288. (2010). Structured self- development (SSD) governance. Department of the Army, Headquarters, United States. Washington, DC.

ALARACT 216. (2012). Structured self- development (SSD) governance. Department of the Army, Headquarters, United States. Washington, DC.

ALARACT 126. (2014). Structured self- development (SSD) governance. Department of the Army, Headquarters, United States. Washington, DC.

Allen, I. E., & Seaman, J. (2007). *Online nation: Five years of growth in online learning*. Newburyport, MA: Sloan Consortium.

Anders, B. (2017). *How to enhance instructional presence: Research & experience based techniques to improve both online & face-to-face instruction*. Manhattan, KS: Sovorel Publishing.

Army Field Manual 3-21.8 (2007). *The Infantry Rifle Platoon and Squad.* Department of the Army, Headquarters, United States. Washington, DC.

Army Field Manual 6-22 (2015). *Leader development.* Department of the Army, Headquarters, United States. Washington, DC.

Army Pamphlet 623-3 (2015). *Evaluation Reporting System.* Department of the Army,

      Headquarters, United States. Washington, DC.

Army Regulation 350-1 (2014). *Army training and leader development.* Department of the

      Army, Headquarters, United States. Washington, DC.

Army Regulation 600–8–19 (2015). *Enlisted promotions and reductions.* Department of the

      Army, Headquarters, United States. Washington, DC.

Army Regulation 621–5. (2009). *Army continuing education system*. Department of the Army,

      Headquarters,. United States. Washington, DC.

Army Regulation TC 7-21.13. (2015). *Soldiers guide*. Department of the Army, Headquarters,.

      United States. Washington, DC.

Banerjee, R. (2013). *Self-directed learning in the technological age*. Florida International

      University, USA.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change.

      Psychological review, 84(2), 191.

Banz, R. (2008). Self-directed learning: Implications for museums. *Journal of Museum

      Education, 33*(1), 43-54.

Bass, K., Yumol, D., & Hazer, J. (2011). The effect of raft hands-on activities on student

      learning, engagement, and 21st century skills. *RAFT Student Impact Study*.

Bonner, A., & Tolhurst, G. (1997). Insider-outsider perspectives of participant observation.

      Nurse Researcher, 9(4), 7-19.

Boyce, L.A., Zaccaro, S.J., & Wisecarver, M.Z. (2010). Propensity for self-development of

      leadership attributes: Understanding, predicting, and supporting performance of leader

      self-development. *The Leadership Quarterly*, 21, 159-178.

Boyle, E. A., Hainey, T., Connolly, T. M., Gray, G., Earp, J., Ott, M., Lim, T., Ninaus, M.,
Ribeiro, C. & Pereira, J. (2016). An update to the systematic literature review of
empirical evidence of the impacts and outcomes of computer games and serious games.
Computers & Education, 94, 178-192.

Brockett, R. G., & Hiemstra, R. (1991). *Self-direction in adult learning: Perspectives on theory,
research, and practice. Routledge series on theory and practice of adult education in
North America.* New York, NY: Chapman and Hall Inc.

Brookfield, S. (1985). Sources in self-directed learning theory and practice. *New Directions for
Adult and Continuing Education, 1985*(25), 87-90.

Brookfield, S. (1993). Self-directed learning, political clarity, and the critical practice of adult
education. *Adult Education Quarterly, 43*(4), 227-242.

Brown, P. C., Roediger, H. L., & McDaniel, M. A. (2014). *Make it stick*. Harvard University
Press.

Cabrera, D. (2013, March 4). Tips to reduce the impact of cheating in online assessment.
Northern Illinois University Instructional Design Center. Retrieved from
https://facdevblog.niu.edu/onlinecheating

Candy, P. C. (1991). *Self-direction for lifelong learning: A comprehensive guide to theory and
practice*. San Francisco, CA: Jossey-Bass Inc.

Carlisle, V., & Fishback, J. (2015). Fostering Self-Direction in Learning. *Adult Education
Research Conference*. Paper 9. Retrieved from
http://newprairiepress.org/cgi/viewcontent.cgi?article=1106&context=aerc

Clark, D. R. (2015, October 15). *Kirkpatrick's four level evaluation model*. Retrieved from

> http://www.nwlink.com/~donclark/hrd/isd/kirkpatrick.html

Clark, K. & Beverly, A. (1998, October). Faculty perceptions of adult students and their learning

> needs. *In Proceedings of the Annual Midwest Research-to-Practice Conference in Adult,*
>
> *Continuing and Community Education* (pp. 23-28).

Colaizzi, P. (1978). Psychological research as the phenomenologist views it. In R. S. Valle & M.

> King (Eds.), *Existential-phenomenological alternatives for psychology* (pp. 48 - 71). New
>
> York, NY: Oxford University.

Confessore, G. J., & Confessore, S. J. (1992). *Guideposts to self-directed learning: Expert*

> *commentary on essential concepts*. King of Prussia, PA: Organizational Design and
>
> Development, Inc.

Conradie, P. W. (2014). Supporting self-directed learning by connectivism and personal learning

> environments. *International Journal of Information and Education Technology, 4*(3),
>
> 254.

Corso, M., & Giacobbe, A. (2005, March). Building communities of practice that work: A case

> study based research. *In The Sixth European Conference on Organizational Knowledge,*
>
> *Learning, and Capabilities* (pp. 17-19).

Cottingham, L. A. (1977). *A classification system for independent learning*. University of
New Mexico.

Craig, R. (2015, June). A brief history (and future) of online degrees. Forbes. Retrieved from:

> http://www.forbes.com/sites/ryancraig/2015/06/23/a-brief-history-and-future-of-online-
>
> degrees/#65890ee07e37

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Crossley, S. A., Allen, L. K., Snow, E. L., & McNamara, D. S. (2016). Incorporating learning characteristics into automatic essay scoring models: What individual differences and linguistic features tell us about writing quality. *Journal of Educational Data Mining, 8*(2), 1-19.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Thousand Oaks, CA: Sage Publications.

Crozier, D. (2013, July 24). Structured Self-Development and Advanced Leaders Course – common core. Retrieved from http://usasma.armylive.dodlive.mil/structured-self-development-and-advanced-leaders-course-common-core

Cummins, S., Beresford, A. R., & Rice, A. (2016). Investigating Engagement with In-Video Quiz Questions in a Programming Course. *IEEE Transactions on Learning Technologies, 9*(1), 57-66.

Defense Manpower Data Center. (2016). *DoD Personnel, Workforce Reports & Publications.* Retrieved from https://www.dmdc.osd.mil/appj/dwp/dwp_reports.jsp

deMarrais, D. & Lapan, S. D. (Ed.). (2004). *Foundations for research: Methods of inquiry in education and the social sciences*. Mahwah, NJ: Lawrence Erlbaum Associates.

Deschaine, M., & Whale, D. (2017). Increasing Student Engagement in Online Educational Leadership Courses. *Journal of Educators Online, 14*(1).

Din, N., Haron, S., & Rashid, R. M. (2016). Can Self-directed Learning Environment Improve Quality of Life?. *Procedia-Social and Behavioral Sciences, 222*, (pp. 219-227).

Drolia, S., Rupani, S., Agarwal, P., & Singh, A. (2017). Automated essay rater using natural language processing. *International Journal of Computer Applications, 163*(10).

Duarte, M., Leite, C., & Mouraz, A. (2016). The effect of curricular activities on learner autonomy: the perspective of undergraduate mechanical engineering students. *European Journal of Engineering Education, 41*(1), 91-104.

Dweck, C. (2006). *Mindset: The new psychology of success*. New York, NY: Random House.

Dweck, C. S. (2010). Even geniuses work hard. *Educational Leadership, 68*(1), 16-20.

Dweck, C. (2015, September 23). Carol Dweck revisits the growth mindset. *Education Week*. Retrieved from http://www.islandtrees.org/main/curriculum/rgm.pdf

Eshet, Y., Grinautski, K., & Peled, Y. (2012). Learning motivation and student academic dishonesty: A comparison between face-to-face and online courses. *In Proceedings of the Chais conference on instructional technologies research 2012: Learning in the technological era.*

Everest College. (2014). Learning in America survey. Retrieved from http://gallery.mailichimp.com/893163

Fisher, M., King, J., & Tague, G. (2001). Development of a self-directed learning readiness scale for nursing education. *Nurse education today, 21*(7), 516-525.

Ford, K., & Vignare, K. (2014). The evolving military learner population: A review of the literature. *Online Learning: Official Journal of the Online Learning Consortium, 19*(1).

Freire, P. (1968). *Pedagogy of the oppressed* (M. B. Ramos, Trans). New York, NY: Seabury Press.

Gabrielle, D. M. (2003). *Effects of technology-mediated instructional strategies on motivation, performance, and self-directed learning* (Doctoral dissertation). Retrieved from http://diginole.lib.fsu.edu/islandora/object/fsu%3A182576/datastream/PDF/view

Gagne, E. D. (1978). Long-term retention of information following learning from prose. *Review of Educational Research, 48*(4), 629-665.

Gaspar, A., Langevin, S., Boyer, N., & Armitage, W. (2009). Self-perceived and observable self-direction in an online asynchronous programming course using peer learning forums. *Computer Science Education, 19*(4), 233-255.

Gerstein, J. (2016, December 23). The imperative of experiential and hands-on learning. Retrieved from https://www.google.com/amp/s/usergeneratededucation.wordpress.com/2016/12/23/the-imperative-of-experiential-and-hands-on-learning/amp

Gobet, F., Lane, P. C., Croker, S., Cheng, P. C., Jones, G., Oliver, I., & Pine, J. M. (2001). Chunking mechanisms in human learning. *Trends in cognitive sciences, 5*(6), 236-243.

Grafsgaard, J. F., Wiggins, J. B., Boyer, K. E., Wiebe, E. N., & Lester, J. C. (2013, September). Automatically recognizing facial indicators of frustration: a learning-centric analysis. In *Humaine Association Conference on Affective Computing and Intelligent Interaction (ACII), 2013* (pp. 159-165). IEEE.

Graham, C. R. (2006). Blended learning systems. In Bonk, C. J. & Graham, C. R. (Eds.). *Handbook of blended learning: Global Perspectives, local designs (pp. 3-20)*. San Francisco, CA: Pfeiffer Publishing.

Graves, T. R., Rauchfuss, G., & Wisecarver, M. (2012). Self-learning among Army noncommissioned officers: Experiences, attitudes, and preferred strategies. U.S. Army Research Institute for the Behavioral and Social Sciences. Arlington, VA.

Greenberger, E., Lessard, J., Chen, C., & Farruggia, S. P. (2008). Self-entitled college students: Contributions of personality, parenting, and motivational factors. *Journal of Youth and Adolescence, 37*(10), 1193-1204.

Groenewald, T. (2004). A phenomenological research design illustrated. *International Journal of Qualitative Methods 3, 3*(1), 42-55.

Grow, G. O. (1991). Teaching learners to be self-directed. *Adult Education Quarterly, 41*, 125-149.

Halpern, D. F., & Hakel, M. D. (2003). Applying the science of learning to the university and beyond: Teaching for long-term retention and transfer. *Change: The Magazine of Higher Learning, 35*(4), 36-41.

Harasim, L.M. (2000) Shift happens: online education as a new paradigm in learning. *The Internet and Higher Education, 3*, pp.41-61.

Hart, S. G., & Staveland, L. E. (1988). Development of a multi-dimensional workload rating scale: Results of empirical and theoretical research. In P. A. Hancock & N. Meshkati (Eds.), *Human mental workload* (pp. 139–183). Amsterdam: Elsevier.

Haury, D. L., (1993). Teaching science through inquiry. *ERIC/CSMEE Digest*, ED359048.

Haury, D. L., & Rillero, P. (1994). *Perspectives of hands-on science teaching*. Columbus, OH: ERIC Clearinghouse.

Heidegger, M. (1962). *Being and time*, trans. J. Macquarrie and E. Robinson. New York, NY: Harper & Row, Publishers.

134

Hiemstra, R., & Brockett, R. (1994). *Overcoming resistance to self-direction in adult learning (No. 64)*. San Francisco, CA: Jossey-Bass Inc Pub.

Hiemstra, R., & Brockett, R. G. (2012). Reframing the meaning of self-directed learning: An updated modeltt. *Adult Education Research Conference*. Saratoga Springs, NY. Retrieved from http://newprairiepress.org/aerc/2012/papers/22/

Himmel, C. (1970). *A critical review and analysis of self-directed learning methods utilized in the teaching of undergraduate psychology courses* (Doctoral dissertation). University of Illinois at Urbana-Champaign, Champaign, IL.

Hochanadel, A., & Finamore, D. (2015). Fixed and growth mindset in education and how grit helps students persist in the face of adversity. *Journal of International Education Research, 11*(1), 47.

Houle, C. O. (1961). *The inquiring mind: A study of the adult who continues to learn*. Madison, WI: University of Wisconsin Press.

Institute of Heraldry. (2016). *History of U.S. Army enlisted ranks*. Retrieved from http://www.tioh.hqda.pentagon.mil/Catalog/HeraldryMulti.aspx?CategoryId=9168

Jacoby, J. (1984). Perspectives on information overload. *Journal of consumer research, 10*(4), 432-435.

Janicki, T. & Liegle, J. O. (2001). Development and evaluation of a framework for creating web-based learning modules: A pedagogical and systems approach. *Journal of Asynchronous Learning Networks, 5* (1), 2001.

Johnson, S. D., & Aragon, S. R. (2002). An instructional strategy framework for online learning environments. In T. M. Egan & S. A. Lynham (Eds.), *Proceedings of the academy for human resource development* (pp. 1022-1029). Bowling Green, OH: AHRD.

Johnson, S. D., Aragon, S. R., Shaik, N., & Palma-Rivas, N. (2000). Comparative analysis of learner satisfaction and learning outcomes in online and face-to-face learning environments. *Journal of interactive learning research, 11*(1), 29.

Jones, C. (2016, July 12). Soldiers' concerns addressed in changes to SSD, NCO PME. *NCO Journal*. Retrieved from http://ncojournal.dodlive.mil/2016/07/12/soldiers-concerns-addressed-in-changes-to-ssd-nco-pme

Jones, Q., Ravid, G., & Rafaeli, S. (2004). Information overload and the message dynamics of online interaction spaces: A theoretical model and empirical exploration. *Information systems research, 15*(2), 194-210.

Jun, J. (2008). Existential phenomenology. In R. Thorpe, & R. Holt (Eds.), *The SAGE Dictionary of Qualitative Management Research*. (pp. 94-96). London, United Kingdom: SAGE Publications Ltd. doi: http://dx.doi.org/10.4135/9780857020109.n43

Kansas Adjutant General's Department. (2016, February 10). Kansas National Guard overview. Retrieved from http://www.kansastag.gov/ng_default.asp

Kansas Adjutant General's Department. (2016, September 8). *Army National Guard*. Retrieved from http://kansastag.gov/NGUARD.asp?PageID=3

Mercer, S. (2011). Understanding learner agency as a complex dynamic system. *System, 39*(4), 427-436.

Kasworm, C. (2011). New perspectives on post-formal cognitive development and self-directed learning. *International Journal of Self-Directed Learning*, 18.

Kearney, K. & Hyle, A. (2004). Drawing out emotions: The use of participant-produced drawings in qualitative inquiry. *Qualitative Research Vol. 4*(3), 361-383

Keeton, M.T., Scheckley, B.G., Krecji-Griggs, J. (2002). Effectiveness and efficiency in higher

education for adults. *Council on Adult and Experiential Learning*. Chicago: Kendall-

Hunt.

Keller, J. M. (1987). Development and use of the ARCS model of instructional design. *Journal

of Instructional Development*, *10*(3), 2-10. Retrieved from

http://www.jstor.org/stable/pdfplus/30221294.pdf

Keller, J. M. (2008). First principles of motivation to learn and e3‐learning. *Distance

Education, 29*(2), 175-185.

Keller, J. M. (2009). *Motivational design for learning and performance: The ARCS model

approach*. New York, NY: Springer Science & Business Media.

Keller, J. & Suzuki, K. (2004). Learner motivation and E-learning design: A multinationally

validated process. *Journal of Educational Media*, Vol. 29, No. 3.

Kim, K. J., & Frick, T. W. (2011). Changes in student motivation during online learning. *Journal

of Educational Computing Research, 44*(1), 1-23.

Kirkpatrick, D., & Kirkpatrick, J. (2006). *Evaluating training Programs: The four levels*. San

Francisco, CA: Berrett-Koehler.

Knowles, M. (1973). *The Adult learner: A neglected species*. Houston, TX: Gulf Publishing

Company.

Knowles, M. (1975). *Self-directed learning*. Englewood Cliffs, NJ: Cambridge Adult Educaiton

Prentice Hall Regents.

Knowles, M. (1984). *Andragogy in Action: Applying Modern Principles of Adult Learning*. San

Francisco, CA: Jossey-Bass.

Koole, M. L. (2006, November). Practical issues in mobile education. *In Wireless, Mobile and Ubiquitous Technology in Education, 2006*. WMUTE'06. Fourth IEEE International Workshop on (pp. 142-146). IEEE.

Kraiger, K., & Wolfson, N. (2011). *Assessing learning needs and outcomes in lifelong learning support systems*. In M. London (Ed.), The Oxford Handbook of Lifelong Learning (pp. 441-449). New York, NY: Oxford University Press, Inc.

Lee, Y. H., Heeter, C., Magerko, B., & Medler, B. (2012). Gaming mindsets: Implicit theories in serious game learning. *Cyberpsychology, behavior, and social networking, 15*(4), 190-194.

Mantie, R. (2012). Learners or participants? The pros and cons of 'lifelong learning'. *International Journal of Community Music, 5*(3), 217-235.

Marzano, R. J., Pickering, D. J., & Pollock, J. E. (2001). *Classroom instruction that works.* Alexandria, VA: Association for Supervision & Curriculum Development.

Mattson, J. (2013, May 23). Toolkit: Structured self-development. Retrieved from http://ncojournal.dodlive.mil/2013/05/23/toolkit-structured-self-developmentMaxwell, J. (1992). Understanding and validity in qualitative research. *Harvard educational review*, *62*(3), 279-301.

Merleau-Ponty, M.. (1961). Eye and mind. *Images: A Reader*, 131-134.

McKinley, M. R. (2005). *An assessment of the Army officer education system from an adult learning perspective* (No. ATZL-SWV). Army Command And General Staff College, School of Advanced Military Studies. Fort Leavenworth, KS.

McLellan, E., MacQueen, K. M., & Neidig, J. L. (2003). Beyond the qualitative interview: Data preparation and transcription. *Field methods, 15*(1), 63-84.

Mcquiggan, S. W., Lee, S., & Lester, J. C. (2007, September). Early prediction of student frustration. *In International Conference on Affective Computing and Intelligent Interaction* (pp. 698-709). Springer, Berlin, Heidelberg.

Means, B., Toyama, Y., Murphy, R., Bakia, M. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. Washington, DC: U.S. Department of Education. Retrieved from:

http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf

Merriam, S. B. (2001). Andragogy and self‐directed learning: Pillars of adult learning theory. *New directions for adult and continuing education, 2001*(89), 3-14.

Merriam, S. B. (2009). Qualitative research: A guide to design and implementation. San Francisco, CA: Jossey-Bass.

Mezirow, J. (1985). A critical theory of self-directed learning. *New Directions for Adult and Continuing Education, 1985*(25), 17-30.

Miller, M. D. (2014). Minds online: Teaching effectively with technology. Cambridge, MA: Harvard University Press.

Mocker, D. W., & Spear, G. E. (1982). Lifelong learning: Formal, nonformal, informal, and self-directed. *Information Series* No. 241.

Myers, M. (2017, November 7). From specialists to sergeants major, the Army is overhauling its education system. ArmyTimes. Retrieved from https://www.armytimes.com/news/your-army/2017/11/07/from-specialists-to-sergeants-major-the-army-is-overhauling-its-education-system/

Moore, M. G. (1989). Three types of interaction. *American Journal of Distance Education, 3* (2), 1-6.

National Guard. (2016, February 10). Our history. Retrieved from

http://www.nationalguard.com/legacy

Nelsonc1993. (2017). Structured self development level 1 module 04 exam. Retrieved from

https://quizlet.com/88471594/structured-self-development-level-1-module-04-exam-

flash-cards/

Newcomb, A. (2012, July 26). Structured Self Development courses allow Soldiers to continue

to learn, grow. Retrieved from

http://www.myguidon.com/index.php?option=com_content&task=view&id=15047

Nielsen, J., & Loranger, H. (2006). *Prioritizing web usability*. New York City, NY: Pearson

Education.

Nielsen, J., & Molich, R. (1990, March). Heuristic evaluation of user interfaces. In *Proceedings

of the SIGCHI conference on Human factors in computing systems* (pp. 249-256). ACM.

Nilson, L. B. (2016). *Teaching at its best: A research-based resource for college instructors*.

Hoboken, NJ: John Wiley & Sons.

Pain, H. (2012). A literature review to evaluate the choice and use of visual methods.

International Journal of Qualitative Methods, 11(4), 303-319.

Paullet, K., Chawdhry, A., Douglas, D., & Pinchot, J. (2016). Assessing Faculty Perceptions and

Techniques to Combat Academic Dishonesty in Online Courses. *Information Systems

Education Journal, 14*(4), 45.

Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-

regulated learning and achievement: A program of qualitative and quantitative research.

Educational psychologist, 37(2), 91-105.

Pew Research Center. (2014). Internet use over time. Retrieved from:

http://www.pewinternet.org/data-trend/internet-use/internet-use-over-time/

Poll, K., Widen, J., & Weller, S. (2014). Six instructional best practices for online engagement

and retention. *Journal of Online Doctoral Education, 1*(1).

Polson, C.J. (2010). Military contributions to adult education. In C.E. Kasworm, A.D. Rose, &

J.M. Ross-Gordon (Eds.), *Handbook of Adult and Continuing Education: 2010 Edition*

(pp. 263-273). Los Angeles: Sage Publications, Inc.

Popovski, V., Topuzovska, M., & Popovska, M. B. (2013). Lifelong learning for best adaptation

to the 21 century changes in the world of work. *Economic Development, (1-2),* 58-70.

Poulin, R. and Straut, T. (2016). WCET distance education enrollment report 2016. Retrieved

from: http://wcet.wiche.edu/initiatives/research/WCET-Distance-Educatio-Enrollment-

Report-2016

Pratt, D. D. (1988). Andragogy as a relational construct. *Adult Education Quarterly, 38*, 160-

181.

Pratt, D. D. (1993). Andragogy after twenty-five years. In Sharan Merriam (Ed.), *Adult*

learning theory: An update. San Francisco: Jossey-Bass, Publishers, pp. 15-25.

Premkumar, K., Pahwa, P., Banerjee, A., Baptiste, K., Bhatt, H., & Lim, H. J. (2013). Does

medical training promote or deter self-directed learning? *A longitudinal mixed-methods*

study. Academic Medicine, 88(11), 1754-1764.

Ratey, J. J. (2001). *A user's guide to the brain: Perception, attention, and the four theatres of the*

brain. New York: Pantheon.

Rovai, A. P. (2002). Building sense of community at a distance. *The International Review of*

Research in Open and Distributed Learning, 3(1).

Ryan, L. (2016). *12 qualities employers look for when they're hiring*. Retrieved from

    http://www.forbes.com/sites/lizryan/2016/03/02/12-qualities-employers-look-for-when-

    theyre-hiring/#f4cb33e75081

Salanda, J. (2009). The coding manual for qualitative researchers. Thousand Oak, CA: SAGE.

Shanley, M., Crowley, J., Lewis, M., Straus, S., Leuschner, K., Coombs, J. (2012). *Making*

    improvements to the Army distributed learning program. Santa Monica, CA: RAND

    Corporation-Arroyo Center.

Sheftick, G. (2015, October 18). New course for E7s begins as part of NCO education overhaul.

    Army Homepage. Retrieved from http://www.army.mil/media/412973/

Shosha, G. A. (2012). Employment of Colaizzi's strategy in descriptive phenomenology: A

    reflection of a researcher. *European Scientific Journal, 8*(27).

Sieber, J. E. (2005). Misconceptions and realities about teaching online. *Science and*

    Engineering Ethics, 11(3), 329-340.

Sim, J., Zadnik, M. G., & Radloff, A. (2003). University and workplace cultures: Their impact

    on the development of lifelong learners. *Radiography, 9*(2), 99-107.

Simkin, M. G., & McLeod, A. (2010). Why do college students cheat? *Journal of Business*

    *Ethics, 94(*3), 441-453.

Smith, J. C. (1986, May). Librarians and self-directed learners. *In Proceedings of the Adult*

    Education Research Conference (pp. 249-254).

Soldier's Guide - Training Circular 7-21.13. (2015, November 30). Department of the Army,

    Headquarters, United States. Washington, DC.

Song, L., & Hill, J. R. (2007). A conceptual model for understanding self-directed learning in

    online environments. *Journal of Interactive Online Learning, 6*(1), 27-42.

Sousa, D. A. (2016). *How the brain learns*. Thousand Oaks, CA: Corwin Press.

Spradley, J. P. (1979). *The ethnographic interview*. Belmont, CA: Wadsworth Group.

Ssemugabi, S., & De Villiers, R. (2007, October). A comparative study of two usability evaluation methods using a web-based e-learning application. In Proceedings of the *2007 annual research conference of the South African institute of computer scientists and information technologists on IT research in developing countries* (pp. 132-142). ACM.

Stockdale, S. (2003). *Development of an instrument to measure self-directedness*. Doctoral Dissertation, University of Tennessee, Knoxville, TN.

Stockdale, S. L., & Brockett, R. G. (2011). Development of the PRO-SDLS: A measure of self-direction in learning based on the personal responsibility orientation model. *Adult Education Quarterly, 61*(2), 161-180.

Stuber-McEwen, D., Wiseley, P., & Hoggatt, S. (2009). Point, click, and cheat: Frequency and type of academic dishonesty in the virtual classroom. *Online Journal of Distance Learning Administration, 12*(3).

Tice, J. & Tan, M. (2015, August 20). Changes for NCOs: New requirements and promotion points. *Army Times*. Retrieved from http://militari.ly/1NBqwHa

Tough, A. (1971). The adult's learning projects. Toronto, Ontario, Canada: Ontario Institute for Studies in Education.

Tough, A. (1978). Major learning efforts: Recent research and future directions. *Adult Education Quarterly, 28*(4), 250-263.

Tough, A. M. (1967). *Learning without a teacher* (No. 3). Ontario Institute for Studies in Education.

TRADOC Pamphlet 350-70-10. (2013). *Army Learning: Army educational processes*. Department of the Army, Headquarters, United States Army Training and Doctrine Command. Fort Eustis, Virginia.

TRADOC Pamphlet 350-70-12. (2013). *The Army distributed Learning (DL) guide*. Department of the Army, Headquarters, United States Army Training and Doctrine Command. Fort Eustis, Virginia

TRADOC Pamphlet 525-8-2. (2011). *The U.S. Army learning concept for 2015*. Department of the Army, Headquarters, United States Army Training and Doctrine Command. Fort Monroe, Virginia.

TRADOC Pamphlet 525-8-2. (2017). *The U.S. Army learning concept for training and education: 2020-2040.* Department of the Army, Headquarters, United States Army Training and Doctrine Command. Fort Eustis, Virginia.

Tufford, L., & Newman, P. (2012). Bracketing in qualitative research. *Qualitative Social Work, 11*(1), 80-96. United States Army (2010, December 2). Stand-to! Retrieved from https://www.army.mil/standto/archive/2010/12/02

United States Army (2013). *ALARACT 288/2010 structured self-development (SSD) governance*. Retrieved from http://geauxguard.com/wp-content/uploads/2013/05/EN-2-SSD-ALARACT-Files.pdf

United States Army Sergeants Major Academy. (2016, January 27). *Structured self-development*. Retrieved from https://usasma.bliss.army.mil/page.asp?id=9

United States Army Sergeants Major Academy. (2016, March 14). *Structured self-development*. Retrieved from http://usasma.armylive.dodlive.mil/?page_id=254

United States Army Sergeants Major Academy. (2017, November 23). *Structured self-development – mevel I modules*. Retrieved from

http://usasma.armylive.dodlive.mil/structured-self-development-level-i-modules

United States Department of Defense. (2015, Feburary). *United States Department of Defense fiscal year 2016 budget request*. Retrieved from

http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2016/FY2016_Budget _Request_Overview_Book.pdf

Van Merriënboer, J. J., Kirschner, P. A., & Kester, L. (2003). Taking the load off a learner's mind: Instructional design for complex learning. *Educational psychologist, 38*(1), 5-13.

Van Nuland, H. J., Taris, T. W., Boekaerts, M., & Martens, R. L. (2012). Testing the hierarchical SDT model: The case of performance-oriented classrooms. *European Journal of Psychology of Education, 27*(4), 467-482.

Verdinelli, S., & Scagnoli, N. I. (2013). Data display in qualitative research. *International Journal of Qualitative Methods, 12*(1), 359-381.

Wallace, R. M. (2003). Online learning in higher education: A review of research on interactions among teachers and students. *Education, Communication & Information, 3*(2), 241-280.

Wisecarver, M., Foldes, H., Ferro, G., Cullen, M., Graves, T. R., Rauchfuss, G., Wolfson, N., & Kraiger, K. (2012). *Defining antecedents for noncommissioned officer self-learning: A review of the literature*. U.S. Army Research Institute for the Behavioral and Social Sciences. Arlington, VA.

Wlodkowski, R. J., & Ginsberg, M. B. (2017). *Enhancing adult motivation to learn: A comprehensive guide for teaching all adults*. San Francisco, CA: John Wiley & Sons.

Wlodkowski, R. J., & Stiller, J. (2005). Accelerated learning online research project. *Center for the study of accelerated learning: Research report*. Aravada, CO: Regis University.

Woodie, T. E. (2005). *Learning together: The role of the online community in Army professional education*. Army Command And General Staff College, School Of Advanced Military Studies. Fort Leavenworth, KS

Yan, V. X., Thai, K. P., & Bjork, R. A. (2014). Habits and beliefs that guide self-regulated learning: Do they vary with mindset? *Journal of Applied Research in Memory and Cognition, 3*(3), 140-152.

Zhang, D., & Nunamaker, J. F. (2003). Powering e-learning in the new millennium: an overview of e-learning and enabling technology. *Information Systems Frontiers, 5*(2), 207-218.

Appendix A: IRB

KANSAS STATE
U N I V E R S I T Y
University Research Compliance Office

Committee for Research Involving Human Subjects (IRB)
Application for Approval Form
Please send your completed application to comply@k-state.edu

Last Revised: 08/02/2016

ADMINISTRATIVE INFORMATION:

Title of Project/Course: The Structured Self Development Experience

Type of Application: (check one box)
☑ New / Renewal ☐ Revision (to a pending new application)
☐ Modification to an existing approved application #:

Principal Investigator Details: (must be a KSU faculty member):

Name: Sarah Jane Fishback   Degree/Title: Dr./ Associate Professor

Department: Educational Leadership - Adult Education   Campus Phone: 785-532-5554

Campus Address: 354 Bluemont Hall, 1114 Mid-Campus Drive North, Manhattan, KS 66506

E-mail: jfishbac@k-state.edu   Fax #: 785-532-7304

Responsible Graduate Student: (Person to contact for questions/problems with the form):

Name: Brent A. Anders   Campus Phone: 785-532-2449

E-mail: superman@ksu.edu

Does this project involve any collaborators not part of the faculty/staff at KSU? (projects with non-KSU collaborators may require additional coordination and approvals):

☑ No ☐ Yes

Project Classification (Is this project part of one of the following?):

☐ Thesis ☑ Dissertation ☐ Faculty Research
☐ Other:

Note: Class Projects should use the short form application for class projects.

Copy of the Consent Form: ☑ Copy will be submitted to comply@ksu.edu with this application ☐ Consent form not used

Funding Source: ☑ Internal ☐ External (Identify source. You will also need to provide a copy of the sponsor's grant application or contract as submitted to the funding agency. This should be submitted to comply@ksu.edu with your application.)

Based upon criteria found in 45 CFR 46 – and the overview of projects that may qualify for exemption explained at http://www.hhs.gov/ohrp/policy/checklists/decisioncharts.html, I believe that my project using human subjects should be determined by the IRB to be exempt from IRB review:

☑ No ☐ Yes (If yes, please provide the category of "Exemption" in the space below)

Exempt Projects: 45 CFR 46 identifies six categories of research involving human subjects that may be exempt from IRB review. The categories for exemption are listed here: **http://www.hhs.gov/ohrp/policy/checklists/decisioncharts.html#c2** If you believe that your project qualifies for exemption, please indicate which exemption category applies (1-6). Please remember that only the IRB can make the final determination whether a project is exempt from IRB review, or not.

Exemption Category:

MODIFICATION:

Is this a modification of an approved protocol?   ☑ **No**   ☐ **Yes**   **If yes, please comply with the following:**

If you are requesting a modification or a change to an IRB approved protocol, please provide a concise description of all of the changes that you are proposing in the following block. Additionally, please highlight or bold the proposed changes in the body of the protocol where appropriate, so that it is clearly discernible to the IRB reviewers what and where the proposed changes are. This will greatly help the committee and facilitate the review.

I. **NON-TECHNICAL SYNOPSIS** (Please provide a brief narrative description of proposal. This should typically be less than 75 words and be easily understood by nonscientists):

> The overall purpose of this research is to gain an understanding of what Kansas Army National Guard soldiers experience in going through the Army mandated Structured Self Development (SSD) online learning system. Soldiers' experiences and feelings will be obtained as to their overall process, content, and environmental perceptions dealing with Structured Self Development by conducting one on one interviews using open ended in-depth interviewing techniques.

II. **BACKGROUND** (concise narrative review of the literature and basis for the study):

> The specific Army online learning system of Structured Self Development (SSD) has not been academically researched and presented within the literature. An underlying aspect of SSD is the concept of self-directed learning. This is an educational concept that has been viewed and interpreted in different ways by many researchers (Houle, 1961; Tough, 1967; Knowles, 1975; Mocker and Spears, 1982; Candy, 1991; Grow, 1991; Confessore & Confessore, 1991; Hiemstra & Brocket, 1994). While some researchers (Houle, 1961; Tough, 1967) have viewed it as an internal learner process, others (Knowles, 1975; Mocker and Spears, 1982; Candy, 1991; Grow, 1991; Confessore & Confessore, 1991; Hiemstra & Brocket, 1994) have viewed it as a mixture of both an internal process and an instructional method with different levels of utilization and impact. Understanding the concept of self-directed learning is of great interest to the U.S. Army in that they rely on soldiers to continue with training and education on their own throughout their military careers (TRADOC Pam 525-8-2, 2011).

III. **PROJECT/STUDY DESCRIPTION**

(Please provide a concise narrative description of the proposed activity in terms that will allow the IRB or other interested parties to clearly understand what it is that you propose to do that involves human subjects. This description must be in enough detail so that IRB members can make an informed decision about the proposal).

> Audio recorded face-to-face interviews will be conducted at the soldiers' armory in a relaxed setting, away from any superiors, to lower soldiers' anxiety. Soldiers will be asked interview questions to obtain their specific experiences in trying to go through the Structured Self Development process.

IV. **OBJECTIVE**

(Briefly state the objective of the research – what you hope to learn from the study).

> 1. What are the experiences and perceptions described by soldiers that are going through or have gone through SSD?
> a. What are the described experiences and perceptions dealing with the SSD process?
> b. What are the described experiences and perceptions dealing with the SSD content?
> c. What are the described experiences and perceptions dealing with the SSD environment?

MODIFICATION:

Is this a modification of an approved protocol?   ☑ **No**   ☐ **Yes**   **If yes, please comply with the following:**

If you are requesting a modification or a change to an IRB approved protocol, <u>please provide a concise description of all of the changes</u> that you are proposing in the following block. Additionally, please highlight or bold the proposed changes in the body of the protocol where appropriate, so that it is clearly discernible to the IRB reviewers what and where the proposed changes are. This will greatly help the committee and facilitate the review.

I.   <u>**NON-TECHNICAL SYNOPSIS**</u> (Please provide a brief narrative description of proposal. This should typically be less than 75 words and be <u>easily understood by nonscientists</u>):

The overall purpose of this research is to gain an understanding of what Kansas Army National Guard soldiers experience in going through the Army mandated Structured Self Development (SSD) online learning system. Soldiers' experiences and feelings will be obtained as to their overall process, content, and environmental perceptions dealing with Structured Self Development by conducting one on one interviews using open ended in-depth interviewing techniques.

II.   <u>**BACKGROUND**</u> (concise narrative review of the literature and basis for the study):

The specific Army online learning system of Structured Self Development (SSD) has not been academically researched and presented within the literature. An underlying aspect of SSD is the concept of self-directed learning. This is an educational concept that has been viewed and interpreted in different ways by many researchers (Houle, 1961; Tough, 1967; Knowles, 1975; Mocker and Spears, 1982; Candy, 1991; Grow, 1991; Confessore & Confessore, 1991; Hiemstra & Brocket, 1994). While some researchers (Houle, 1961; Tough, 1967) have viewed it as an internal learner process, others (Knowles, 1975; Mocker and Spears, 1982; Candy, 1991; Grow, 1991; Confessore & Confessore, 1991; Hiemstra & Brocket, 1994) have viewed it as a mixture of both an internal process and an instructional method with different levels of utilization and impact. Understanding the concept of self-directed learning is of great interest to the U.S. Army in that they rely on soldiers to continue with training and education on their own throughout their military careers (TRADOC Pam 525-8-2, 2011).

III.   <u>**PROJECT/STUDY DESCRIPTION**</u>

(Please provide a concise narrative description of the proposed activity in terms that will allow the IRB or other interested parties to clearly understand what it is that you propose to do that involves human subjects. This description must be in enough detail so that IRB members can make an informed decision about the proposal).

Audio recorded face-to-face interviews will be conducted at the soldiers' armory in a relaxed setting, away from any superiors, to lower soldiers' anxiety. Soldiers will be asked interview questions to obtain their specific experiences in trying to go through the Structured Self Development process.

IV.   <u>**OBJECTIVE**</u>

(Briefly state the objective of the research – what you hope to learn from the study).

1. What are the experiences and perceptions described by soldiers that are going through or have gone through SSD?
a. What are the described experiences and perceptions dealing with the SSD process?
b. What are the described experiences and perceptions dealing with the SSD content?
c. What are the described experiences and perceptions dealing with the SSD environment?

VIII. CONFIDENTIALITY: Confidentiality is the formal treatment of information that an individual has disclosed to you in a relationship of trust and with the expectation that it will not be divulged to others without permission in ways that are inconsistent with the understanding of the original disclosure. Consequently, it is your responsibility to protect information that you gather from human research subjects in a way that is consistent with your agreement with the volunteer and with their expectations.

Explain how you are going to protect confidentiality of research subjects and/or data or records. Include plans for maintaining records after completion.

Names will not be used within the write-up of the research. Only gender, age, and rank will be obtained for purposes of perspective of descriptions given. Recordings/transcripts will be stored in a secure location for 3 years after research is completed.

IX. INFORMED CONSENT: Informed consent is a critical component of human subjects research - it is your responsibility to make sure that any potential subject knows exactly what the project that you are planning is about, and what his/her potential role is. (There may be projects where some forms of "deception" of the subject is necessary for the execution of the study, but it must be carefully justified to and approved by the IRB). A schematic for determining when a waiver or alteration of informed consent may be considered by the IRB is found at http://www.hhs.gov/ohrp/policy/checklists/decisioncharts.html#c10

Even if your proposed activity does qualify for a waiver of informed consent, you must still provide potential participants with basic information that informs them of their rights as subjects, i.e. explanation that the project is research and the purpose of the research, length of study, study procedures, debriefing issues to include anticipated benefits, study and administrative contact information, confidentiality strategy, and the fact that participation is entirely voluntary and can be terminated at any time without penalty, etc. Even if your potential subjects are completely anonymous, you are obliged to provide them (and the IRB) with basic information about your project. See informed consent example on the URCO website. It is a federal requirement to maintain informed consent forms for 3 years after the study completion.

Answer the following questions about the informed consent procedures.

☑ Yes ☐ No **A.** Are you using a written informed consent form? If "yes," include a copy with this application. If "no" see B.

☐ Yes ☑ No **B.** In accordance with guidance in 45 CFR 46, I am requesting a waiver or alteration of informed consent elements (see section VIII above). If "yes," provide a basis and/or justification for your request.

☑ Yes ☐ No **C.** Are you using the online Consent Form Template provided by the URCO? If "no," does your Informed Consent document have all the minimum required elements of informed consent found in the Consent Form Template? (Please explain)

☐ Yes ☑ No **D.** Are your research subjects anonymous? If they are anonymous, you will not have access to any information that will allow you to determine the identity of the research subjects in your study, or to link research data to a specific individual in any way. Anonymity is a powerful protection for potential research subjects. (An anonymous subject is one whose identity is unknown even to the researcher, or the data or information collected cannot be linked in any way to a specific person).

☑ Yes   ☐ No   **E.**   Are subjects debriefed about the purposes, consequences, and benefits of the research? Debriefing refers to a mechanism for informing the research subjects of the results or conclusions, after the data is collected and analyzed, and the study is over. (If "no" explain why.) **Copy of debriefing statement to be utilized should be submitted to comply@k-state.edu with your application.**

> See attached.

F.   **Describe the Informed Consent Process:**

Who is obtaining the consent? (i.e. Principle Investigator, Graduate Student, etc.)

> Graduate student

When and where will consent be obtained?

> At the first interview

If assent (for minors) is required, please describe who will obtain the assent? (Assent means a child's affirmative agreement to participate in research)

If assent (for minors) is required, when and where will assent be obtained?

How will consent be obtained from non-English speaking participants? (a translated written form, orally, identify the name and qualifications of the individual providing the translation)

Informed Consent Checklist

Items	YES	NO	N/A
Does the title appear at the top of the consent/assent form?	☑	☐	☐
Is the consent/assent form written toward the subject?	☑	☐	☐
Is there a statement that explains that the study is *research*?	☑	☐	☐
Is there a statement that explains the *purpose* of the research?	☑	☐	☐
Are the procedures to be followed explained clearly and adequately?	☑	☐	☐
Does the consent document describe *risks or discomforts* to subjects as a result of participating in the research?	☑	☐	☐
Is the consent/assent form written in the *native language* of the potential subject?	☑	☐	☐
Are participants compensated?	☐	☑	☐
If the subjects' identity is known to the PI, does the form detail how confidentiality of records will be maintained?	☑	☐	☐
Is contact information for both the PI and the URCO/IRB office included?	☑	☐	☐
Does the consent document indicate to the participant that he/she can withdraw at any time from the project without penalty or loss of benefit?	☑	☐	☐
Are there probable circumstances which would require the PI to terminate a subject's participation regardless of his or her consent?	☐	☑	☐
Is the consent document written in lay language (Recommended 8th grade level)?	☑	☐	☐

X.   **PROJECT INFORMATION:** (If you answer Yes to any of the questions below, you should explain them in one of the
paragraphs above)

☐ Yes	☑ No	A.	Deception of subjects? If "YES" explain why this is necessary.

> _(blank text box)_

☐ Yes	☑ No	B.	Shock or other forms of punishment
☐ Yes	☑ No	C.	Sexually explicit materials or questions about sexual orientation, sexual experience or sexual abuse
☐ Yes	☑ No	D.	Handling of money or other valuable commodities
☐ Yes	☑ No	E.	Extraction or use of blood, other bodily fluids, or tissues (if "yes', you must comply with facility and handling protections detailed in the 5th Edition of the Biosafety in Biomedical Laboratories (BMBL))
☐ Yes	☑ No	F.	Questions about any kind of illegal or illicit activity
☐ Yes	☑ No	G.	Questions about protected health information as defined by HIPAA
☐ Yes	☑ No	H.	Purposeful creation of anxiety
☐ Yes	☑ No	I.	Any procedure that might be viewed as invasion of privacy
☐ Yes	☑ No	J.	Physical exercise or stress
☐ Yes	☑ No	K.	Administration of substances (food, drugs, etc.) to subjects
☐ Yes	☑ No	L.	Any procedure that might place subjects at risk
☐ Yes	☑ No	M.	Will there be any use of Radioactive materials and/or use of Radioactive producing machines
☐ Yes	☑ No	N.	Any form of potential abuse; i.e., psychological, physical, sexual
☑ Yes	☐ No	O.	Is there potential for the data from this project to be published in a journal, presented at a conference, etc?
☐ Yes	☑ No	P.	Use of surveys or questionnaires for data collection. **Copies should be submitted to comply@k-state.edu with your application.**

XI.   **SUBJECT INFORMATION:** (If you answer yes to any of the questions below, you should explain them in one of the
paragraphs above)

☐ Yes	☑ No	a.	Under 18 years of age (these subjects require parental or guardian consent)
☐ Yes	☑ No	b.	Over 65 years of age
☐ Yes	☑ No	c.	Minorities as target population
☐ Yes	☑ No	d.	Physically or mentally disabled
☐ Yes	☑ No	e.	Economically or educationally disadvantaged
☐ Yes	☑ No	f.	Unable to provide their own legal informed consent
☐ Yes	☑ No	g.	Pregnant females as target population
☐ Yes	☑ No	h.	Victims
☐ Yes	☑ No	i.	Subjects in institutions (e.g., prisons, nursing homes, halfway houses)
☐ Yes	☑ No	j.	Are subjects likely to be vulnerable to coercion or undue influence
☐ Yes	☑ No	k.	Is this international research? If yes, provide details as to if OHRP regulations apply in or near the area you intend to conduct research or if you have contacted individuals for applicable regulations to human subject research.
☐ Yes	☑ No	l.	Are research subjects in this activity students recruited from university classes or volunteer pools? If so, do you have a reasonable alternative(s) to participation as a research subject in your project, i.e., another activity such as writing or reading that would serve to protect students from unfair pressure or coercion to participate in this project? If you answered this question "Yes," explain any alternatives options for class credit for potential human subject volunteers in your study. (It is also important to remember that: Students must be free to choose not to participate in research that they have signed up for at any time without penalty. Communication of their decision can be conveyed in any manner, to include simply not showing up for the research.)

> _(blank text box)_

☑ Yes   ☐ No   m.   Is audio from the subjects recorded? If yes, how do you plan to protect the recorded information and mitigate any additional risks?

> Actual names will not be used on the recordings and records will not be released to the public. Recording/transcripts will be safeguarded in a secure location.

☐ Yes   ☑ No   n.   Are research subjects' images being recorded (video taped, digitally recorded, photographed)? If yes, how do you plan to protect the recorded information and mitigate any additional risks?

>

XII. FDA ACTIVITIES: Answer the following questions about potential FDA regulated activities:

☐ Yes   ☑ No   a.   Is this a Clinical Trial?

☐ Yes   ☑ No   b.   Are you using an FDA approved drug/device/diagnostic test?

☐ Yes   ☑ No   c.   Does this activity involve the use of FDA-Regulated products? (biological products, color additives, food additives, human drugs, etc.)

☐ Yes   ☑ No   d.   Has the protocol been submitted to the FDA, or are there plans to submit it to the FDA?

☐ Yes   ☑ No   e.   Have you submitted an FDA form 3454 or 3455 (conflict of interest)?

XIII. CONFLICT OF INTEREST: Concerns have been growing that financial interests in research may threaten the safety and rights of human research subjects. Financial interests are not in them selves prohibited and may well be appropriate and legitimate. Not all financial interests cause Conflict of Interest (COI) or harm to human subjects. However, to the extent that financial interests may affect the welfare of human subjects in research, IRB's, institutions, and investigators must consider what actions regarding financial interests may be necessary to protect human subjects. Please answer the following questions:

☐ Yes   ☑ No   a.   Do you or the institution have any proprietary interest in a potential product of this research, including patents, trademarks, copyrights, or licensing agreements?

☐ Yes   ☑ No   b.   Do you have an equity interest in the research sponsor (publicly held or a non-publicly held company)?

☐ Yes   ☑ No   c.   Do you receive significant payments of other sorts, eg., grants, equipment, retainers for consultation and/or honoraria from the sponsor of this research?

☐ Yes   ☑ No   d.   Do you receive payment per participant or incentive payments?

                 e.   If you answered **yes** to any of the above questions, please provide adequate explanatory information so the IRB can assess any potential COI indicated above.

>

XIV. PROJECT COLLABORATORS:

A. **KSU Collaborators**: List anyone affiliated with KSU who is collecting or analyzing data: (list all collaborators on the project, including co-principal investigators, undergraduate and graduate students).

Name:	Department:	Campus Phone:	Campus E-mail:

Add Row	Delete Row

B. **Non-KSU Collaborators**: List all collaborators on your human subjects research project not affiliated with KSU in the spaces below. KSU has negotiated an Assurance with the Office for Human Research Protections (OHRP), the federal office responsible for oversight of research involving human subjects.

Name:	Organization:	Phone:	Institutional E-mail:

Add Row	Delete Row

C.   **Does your non-KSU collaborator's organization have an Assurance with OHRP?** (for Federalwide Assurance listings of other institutions, please reference the OHRP website under Assurance Information at: **http://ohrp.cit.nih.gov/search**).

☐ Yes   ☐ No   If yes, Collaborator's FWA # [_____]

Is your non-KSU collaborator's IRB reviewing this proposal?
☐ Yes   ☐ No   If yes, IRB approval # [_____]

XV.   **IRB Training:**

A.   **The URCO must have a copy of the Unaffiliated Investigator Agreement on file for each non-KSU collaborator who is not covered by their own IRB and assurance with OHRP.** When research involving human subjects includes collaborators who are not employees or agents of KSU the activities of those unaffiliated individuals may be covered under the KSU Assurance only in accordance with a formal, written agreement of commitment to relevant human subject protection policies and IRB oversight. The Unaffiliated Investigators Agreement can be found and downloaded at **http://www.k-state.edu/ research/comply/irb/forms**

Online Training
TRAINING REQUIREMENTS HAVE RECENTLY CHANGED
The IRB has mandatory training requirements prior to protocol approval. Training is now offered through the Collaborative Institutional Training Initiative (CITI) Program. Instructions for registration and access to training are on the URCO website http://www.k-state.edu/research/comply/.

_Use the check boxes below to select the training courses that apply to this application. If you have any questions about training, contact URCO at comply@ksu.edu, or (785) 532-3224.**

Mandatory Training
Required for all Principal Investigators, research staff and students

☒ Responsible Conduct of Research

☒ IRB core modules

Required (Provost-mandated) for all full-time K-State employees

☐ Export Compliance

Required procedure-specific training (check all that apply to this protocol):

- [ ] International Research   [ ] Research in Public Elementary and Secondary Schools   [ ] Research with Children
- [ ] Research with Prisoners   [ ] Internet Research   [ ] Vulnerable Subjects - Research Involving Workers/Employees
- [ ] Research with Subjects with Physical Disabilities and Impairments   [ ] Illegal Activities or Undocument Status in Human Research
- [ ] Gender and Sexuality Diversity in Human Research   [ ] Research with human blood, body fluids, or tissues
- [ ] Research with Older Adults

All new personnel or personnel with expired training are required to register for CITI and take the new training requirements. If you previously completed online IRB modules, your training status will remain current until it expires. URCO will verify training from the previous system as well as the new system prior to approval of any protocol.

INVESTIGATOR ASSURANCE FOR RESEARCH INVOLVING HUMAN SUBJECTS

(Print this page separately because it requires a signature by the PI.)

P.I. Name: Sarah J. Fishback

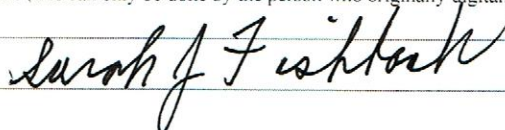**Title of Project:** The Structured Self Development Experience

XVI. <u>ASSURANCES</u>: As the Principal Investigator on this protocol, I provide assurances for the following:

A.   <u>Research Involving Human Subjects</u>: This project will be performed in the manner described in this proposal, and in accordance with the Federalwide Assurance FWA00000865 approved for Kansas State University available at http://www.hhs.gov/ohrp/assurances/forms/filasurt.html, applicable laws, regulations, and guidelines. Any proposed deviation or modification from the procedures detailed herein must be submitted to the IRB, and be approved by the Committee for Research Involving Human Subjects (IRB) prior to implementation.

B.   <u>Training</u>: I assure that all personnel working with human subjects described in this protocol are technically competent for the role described for them, and have completed the required IRB training accessed via the URCO website at: http://www.k-state.edu/research/comply/irb/training. I understand that no proposals will receive final IRB approval until the URCO has documentation of completion of training by all appropriate personnel.

C.   <u>Extramural Funding</u>: If funded by an extramural source, I assure that this application accurately reflects all procedures involving human subjects as described in the grant/contract proposal to the funding agency. I also assure that I will notify the IRB/URCO, the KSU PreAward Services, and the funding/contract entity if there are modifications or changes made to the protocol after the initial submission to the funding agency.

D.   <u>Study Duration</u>: I understand that it is the responsibility of the Committee for Research Involving Human Subjects (IRB) to perform continuing reviews of human subjects research as necessary. I also understand that as continuing reviews are conducted, it is my responsibility to provide timely and accurate review or update information when requested, to include notification of the IRB/URCO when my study is changed or completed.

E.   <u>Conflict of Interest</u>: I assure that I have accurately described (in this application) any potential Conflict of Interest that my collaborators, the University, or I may have in association with this proposed research activity.

F.   <u>Adverse Event Reporting</u>: I assure that I will promptly report to the IRB / URCO any <u>unanticipated</u> problems involving risks to subjects or others that involve the protocol as approved. Unanticipated or Adverse Event Form is located on the URCO website at: http://www.k-state.edu/research/comply/irb/forms. In the case of a serious event, the Unanticipated or Adverse Events Form may follow a phone call or email contact with the URCO.

G.   <u>Accuracy</u>: I assure that the information herein provided to the Committee for Human Subjects Research is to the best of my knowledge complete and accurate.
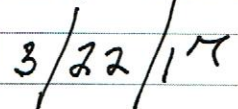
You may sign this form using a digital signature. DO NOT sign the form until it has been completed.
You cannot edit the form entries once the form has been digitally signed. If you are making revisions to a previously signed form, right-click the digital signature and select Clear to remove the signature (this can only be done by the person who originally digitally signed the form). Forms that have not been signed will not be accepted.

P.I. Signature: *Sarah J Fishback*   Date: 3/22/17

Appendix B: Army Permission

DEPARTMENT OF THE ARMY
JOINT FORCES HEADQUARTERS KANSAS
2722 SOUTHWEST TOPEKA BOULEVARD
TOPEKA KS 66611-1287

NGKS-JFB   18 March 2017

~~MEMORANDUM THRU CDR, JFHQ, 2722 SW Topeka Blvd, Topeka, KS 66611~~

~~THRU CSM, 69th TC, 2722 SW Topeka Blvd, Topeka, KS 66611~~

FOR KSARNG CSM, 2722 SW Topeka Blvd, Topeka, KS 66611

SUBJECT: Approval for conducting research dealing with Structured Self Development.

1. I, 1 SG Brent Anders, am requesting permission to conduct a research study dealing with SSD in the KSARNG (to be conducted between APR-JUL 2017).

2. Purpose: to gain an understanding of what a KSARNG Soldier experiences in going through the Army mandated SSD online learning system. The 3 research questions are:

    a. What are the experiences and perceptions described by Soldiers that are going through or have gone through SSD?

    b. How do Soldiers describe their motivation as they progress through SSD?

    c. How do Soldiers describe any impediments with their progression through SSD?

3. Four enlisted 69th TC Soldiers, who just completed SSD1-SSD4, would be Interviewed (2-3 private interviews, totaling 3 hours) at an armory in a relaxed setting.

4. Data collecting methods will be field notes, observations, and in-depth interviews. Audio of the interviews will be recorded. The Soldier will not be identified in any subsequent write up.

2. Point of contact is the undersigned at 785-341-4170.

BRENT A. ANDERS
1SG, KSARNG
Joint Forces Headquarters

[A line through the top sections of an official Army memo with a signature indicates approval and in this case, official permission]

157

Appendix C: Interview Prompts

SSD System Prompts

- Tell me about your experience in logging onto the SSD system.

- What was a typical learning session on SSD like?

- What are your thoughts on the SSD interface and the ways in which the information was displayed?

- Did the SSD computer system affect your motivation in any way? If so how?

SSD Content/Process Prompts

- Tell me about your levels of motivation when going through SSD. Did they ever fluctuate (if yes, why)?

- What was your experience dealing with the educational content? How did it display this information to you?

- What assignments, or learning activities did it require you to go through? Did you feel these assignments/learning activities where appropriate?

SSD Environment Prompts

- How do think your first line supervisors feel about SSD?

- What do you think higher up leaders think about SSD?

- Did any of your leadership ever say or do anything with regards to SSD that affected your motivation?

- What are some typical things I would hear if I where to hear you and your peers talking about SSD?

- In regards to the issue of cheating, do you think it should be an issue of concern for leadership? What has led you to feel this way?

- What are your thoughts on the amount of time you had to complete SSD?

- In what placed did you do your SSD (at home, at work, at school, at Guard, other)?

SSD Overall Impression Prompts

- Tell me about the moment you finished SSD, how did you feel?

- Explain how SSD has prepared you for your next level of leadership in the National Guard.

- Did you ever feel that the information you were learning in SSD was the same as online or face-to-face classes you have to go through as part of training every year?

- Do you feel that your SSD online course properly prepared you for the resident, face-to-face course?

- What might you change about your experience with SSD?

Participant-Produced Drawings

"Draw an emoticon that best represents how you feel overall about SSD."

[Ensure participants knows/understands what an emoticon is and have them choose/create one to draw an a sheet of paper that you provide them]