THE GRIT-TO-GRADUATE: PEDAGOGICAL IDEAS FOR FOSTERING COLLEGE PERSISTENCE, ACADEMIC SUCCESS, AND CAREER READINESS IN FRESHMEN THROUGH THE BASIC COMMUNICATION COURSE

by

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A Thesis

Submitted to the Faculty of Purdue University

In Partial Fulfillment of the Requirements for the degree of

Master of Arts

Department of Communication

Fort Wayne, Indiana

May 2019

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To my Lord and Savior, Jesus Christ, who works in me and through me (Philippians 3:13).

Soli Deo Gloria

ACKNOWLEDGMENTS

I would like to express my sincere appreciation to those who provided me the opportunity to pursue and complete this project.

To my lead professor and committee chair, Dr. Marcia Dixson: Your excellence in teaching, research, and writing inspires me. Thank you for mentoring me as a student, instructor, and person. I count it a high privilege to have learned from you. I especially thank you for your time, feedback, encouragement, and support on this research project and thesis.

To Dr. Irwin Mallin, a master advisor and professor: Thank you for caring about students and making learning interesting. The meaningful projects that I completed for your interpersonal, small group, and organizational communication classes greatly contributed to my learning and completion of this research project and thesis. I especially thank you for helping me discover my research interest of college persistence and grit through your classroom communication class. I will always have fond memories of your frequent and fun question to me: "Who got what you need? It's Lynette Bleed."

To Dr. Sarah LeBlanc: Thank you for your time, feedback, APA expertise, and encouragement in helping me complete this thesis. While I regret not having the opportunity to take one of your interpersonal communication classes, I greatly admire your passion for teaching, research, and scholarship. I'm so glad our paths crossed.

To Kevin Stoller, Basic Course Director: You are one of the best bosses I have ever had. Thank you for giving me the opportunity to be a graduate teaching assistant and for allowing me to try new ideas in the classroom.

To my freshmen students, past and present: Thank you for participating in my research and allowing me to learn from you. I wish you greatness and success in your future endeavors.

To my graduate school cohort: Christa and Anthony, we did it! I am so grateful to have been on this journey with you. (Love, Netty B.) Tao, I really enjoyed spending time with you at Central States and wish you the best as your family grows.

To my husband, Kevin, and our three beautiful adult children. Thank you for believing in me and encouraging me as an "older" graduate student. I am daily blessed by each of you.

To my parents: Thank you for giving me the opportunity to attend college as a first gen student in 1984; for your love, wisdom, and legacy of faith; and for teaching me how to work hard and work smart.

Finally, in no particular order, to my close friends: Crystal, Kathy, Kim C., Kim K., Kristy, Stephanie, and Tammy. Thank you for your encouragement and prayers.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

Author: Bleed, Lynette J. MA
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Degree Received: May 2019
Title: The Grit-to-Graduate: Pedagogical Ideas for Fostering College Persistence, Academic Success, and Career Readiness in Freshmen Through the Basic Communication Course
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Students who achieve their long-term goal of graduating from college are models of persistence and grit. Grit is the self-regulatory construct defined as "passion and perseverance for long-term goals despite setbacks, failures, and competing pursuits" (Eskreis-Winkler, Gross, Duckworth, 2016) and has been associated with both academic and workplace success (Eskreis-Winkler, Duckworth, Shulman, & Beal, 2014). Unfortunately, 37% of freshmen drop out of college by the end of their freshmen year (Almeida, 2016; Snyder, de Brey, & Dillow, 2018). The college classroom provides an optimal environment for institutions of higher learning to foster the grit-to-graduate in college freshmen, to enhance learning and academic success, and to increase goal commitment to graduation, degree achievement, and career readiness.

The purpose of this study was to investigate whether six pedagogical interventions and project adaptations would increase student grit in an entry-level communication class heavily comprised of freshmen. Four class sections were administered the 12-item grit scale (Duckworth, 2019) during the first and last week of first semester at a Midwestern University (N=79). The experimental group received the pedagogical grit interventions throughout the semester; the control group did not. A repeated measures ANOVA computed the variance of grit scores between the groups. Students in the experimental group also provided quantitative and qualitative data about which pedagogical instruments they found most effective.

While the hypothesis was not supported, student feedback on the six grit interventions was largely positive. Ideas for improving the interventions and for fostering grit and college persistence in freshmen are included.

CHAPTER 1. INTRODUCTION

"Grit is sticking with your future, day in, day out, not just for the week; not just for the month, but for years, and working really hard to make that future a reality. Grit is living life like it's a marathon, not a sprint"
(Duckworth, 2013).

Introduction

Why do some college students quit while others persevere to realize their long-term goal of earning a bachelor's degree? Why are freshmen students, in the early weeks and months of their college journeys, especially vulnerable for quitting? The research areas of both college persistence and grit in the undergraduate domain attempt to answer these important questions. Grit is a self-regulatory construct defined as "passion and perseverance for long-term goals despite setbacks, failures, and competing pursuits" (Eskreis-Winkler, Gross, Duckworth, 2016) and has been associated with both academic and workplace success (Eskreis-Winkler, Duckworth, Shulman, & Beal, 2014). Grit determines who shows up, and who keeps showing up, in the challenging domain at hand (Eskries-Winkler, et al., 2014). Undergraduate students who persist day after day, project after project, and semester after semester in the challenging domain of college to learn, graduate, and earn their bachelor's degrees are models of college persistence and grit. Sadly, many students who begin their college journey drop out.

Statement of Problem

According to the National Center for Education Statistics (Snyder, de Brey, & Dillow, 2018), only 40% of first-time, full-time, U.S. students graduated with a bachelor's degree within 4-years and only 60% graduated within 6-years. Significantly, 37% of this dropout occurs by the end of freshmen year (Almeida, 2016; Snyder, et al., 2018). While a number of both external and

internal factors contribute to a student's desire and opportunity to even attend college (i.e. finances, admission, family support, etc. . .), it would seem these issues are already somewhat addressed by the time a freshman begins the semester, making the timing of this dropout particularly suspect. Why are students abandoning their long-term goal of earning a degree and life trajectory of attending college just weeks and months after their matriculation?

The implications of college dropout are problematic on many levels (e.g. societal, institutional) but particularly for individual first-time college students. For many, this was the next logical step after high school in pursuit of a successful future which was to include higher education (and a life plan) for the next several years. For first-generation students, the opportunity to attend college may represent their family's opportunity to change the educational legacy for generations to come. For every young-adult freshman, this may be the only opportunity they will get in their lives to attend college, or to attend college without the increased responsibilities of finishing later in life. Students who do not obtain a college degree will earn less throughout the course of their lifetimes, but the student who drops out might have the additional burden of paying back student loans on these lower incomes. Finally, individuals who quit may feel like a failure and eventually regret their decision, which will likely affect their future happiness and fulfillment. Given these important implications, perhaps part of a college education needs to be prevention of dropout. The solution might be fostering grit, defined as "passion and perseverance for a long-term goal" (Duckworth, Peterson, Matthews & Kelly, 2007).

Significance of Study

"Grit has a short history but a long past" (Eskreis-Winkler, et al., 2016, p. 380). While the notion of hard work, excellence, and perseverance has accompanied success in many domains

throughout history, a measurement tool for assessing a person's "passion and perseverance for a long-term goal" (i.e. grit) did not exist until Duckworth et al., (2007) created the 12-item grit scale (Grit-O). The Grit-S scale was later created using a subset of eight of the original twelve items (Duckworth & Quinn, 2009). Duckworth's (2019) website also shows a five-item grit scale as one of six parts of the Gates College Persistence Study, evidence that grit is now being researched in the undergraduate domain and in the context of college persistence. The other five parts of the persistence survey include: Purposeful and Instrumental Motives for Going to College; Belonging Uncertainty; Growth Mindset Intelligence; High School Trust; and Self-Control (i.e. work self-control and interpersonal self-control). Duckworth's website isn't just for researchers or educators; anyone interested in grit, or learning their personal grit score, can complete a 10-item scale and receive immediate feedback from Duckworth's website (www.angeladuckworth.com).

Since the creation and validation of the grit scale by Duckworth, et al. (2007), the scale has remarkably predicted success in several areas of life where perseverance is needed for long-term goal attainment, especially in challenging domains (Duckworth, et al., 2007; Duckworth & Quinn, 2009; Eskreis-Winkler, et al., 2014; Hochanadel & Finamore, 2015). The college environment, of course, is a challenging domain for most students, especially freshmen. Thus, the study of grit in the undergraduate domain is providing a potential solution for the problem of college dropout (Duckworth, 2019; Hanford, 2012; Hochanadel & Finamore, 2015; Wolters & Hussain, 2015.) However, while grit predicts success, can it be taught? Can college students learn grit so they will succeed semester after semester until graduation? Do students even need grit in order to achieve a college degree or is learning enough? While cognitive learning and

knowledge acquisition are indeed prerequisites for completing college coursework, educators intuitively know that other contributing factors also determine college success.

Meaning and Importance of Noncognitive Skills

Cognition means thinking. Cognitive skills represent a student's mental abilities such as intelligence, intellect, critical thinking abilities, and rate of learning. Cognitive abilities can be measured by standardized intelligence and achievement tests (Kaufman & Duckworth, 2017; Rowan-Kenon, Savitz-Romer, Ott, Swan & Liu, 2017; West, Kraft, Finn, Martin, Duckworth, Gabrieli, & Gabrieli, 2016). The standard cognitive ability indicators for college admissions are SAT/ACT scores, which provide a baseline measurement of the necessary mental capabilities required for college coursework. The term noncognitive has come to represent everything beyond the "cognitive" definition. Noncognitive is a broad label encompassing an array of skills, attitudes, and dispositions which refer to a diverse set of "social emotional and self-management capacities and behaviors" (SRI International, 2018; West, et al., 2016). Obviously there is overlap between cognitive and noncognitive abilities because IQ test scores are also affected by factors such as motivation, anxiety, curiosity, ambition and perseverance (Borghans, Duckworth, Heckman, & Ter Weel, 2008). Development of a student's noncognitive skills is relevant to this study in two ways. First, grit is a noncognitive skill, arguably the most significant skill of college persistence because students must persevere (and persist) through many courses, semesters, and years toward college graduation. Second, a bachelor's degree represents a level of career-readiness. It shows a future employer that the student has mastered the cognitive learning associated with his major as well as the persistence to graduate (grit-to-graduate). Employers likely assume this persistence represents a number of other professional requisite skills (i.e. noncognitive skills) which the student has developed throughout the years. In fact, there is broad

agreement that noncognitive skills contribute to workplace readiness and thus their development should be an integral part of preparing students for future success (Rowan-Kenon, et al., 2017; Schechtman, et al., 2013; West, et al., 2016). This is especially important given most students attend college to obtain degrees, higher paying jobs, and careers (Côté & Levine, 1997) which require these noncognitive skills.

Which noncognitive skills are most important? Rowan-Kenon et al. (2017) conducted a thorough review of both academic and employment literature to see which noncognitive skills were most valuable in each context and found significant overlap, in spite of subtle terminology differences. Some of the terms for noncognitive skills included "soft skills, metacognitive skills, 21st century skills, and socio-emotional competencies" (p. 142) and were aligned into three skills domains which included approach to learning/work, interpersonal skills, and social skills. The approach to learning/work domain included attention control, goal commitment, goal orientation, growth mindset, identification of obstacles, identification and utilization of social support, managing time, meta-cognition, task value and relevance, and task analysis (pp. 168-169). The intrapersonal skills domain included adaptability, conscientiousness, future time perspective, internal locus of control, managing emotions, openness; self-awareness, self-efficacy, and taking initiative" (pp. 169-170). Finally, social skills included "belonging, cultural awareness, empathy, respect for others, and social awareness" (p. 171). Obviously, these noncognitive skills greatly contribute to a student's learning and success, yet measurements of them do not readily exist like they do for cognitive abilities (i.e. ACT/SAT score, IQ). Since most university admissions rely mostly on cognitive ability indicators such as SAT/ACT, some proponents have suggested also considering the noncognitive skill of grit for college admissions (Almeida, 2016) but most grit researchers and educators disagree.

Longitudinal research has confirmed that personal qualities/noncognitive skills powerfully predict academic, economic, psychological, and physical well-being (Borghans, et al., 2008; Farrington, Roderick, Allensworth, Nagaoka, Keyes, Johnson & Beecham, 2013; Yeager & Walton, 2011), so in general there is broad support for cultivating these qualities in undergraduates. The debate, however, is in using a quantitative measure for a difficult-to-accurately-measure noncognitive ability. While the Grit-O and Grit-S scales provide measurement tools for assessing the noncognitive skill of grit, Duckworth (2019) strongly cautions against using a person's grit score in any high-stakes situation, including college admissions. In contrast, her team's grit research continues to evolve in answering the important question everyone agrees upon: How can we cultivate grit in people, so they can better achieve personal success?

This study seeks to help freshmen persevere to become seniors who achieve the personal success of graduating from college, using the construct of grit as a model for this success. There is an urgency to begin the grit development process on day one of first semester so freshmen will succeed and not contemplate dropout. In order to create effective and targeted interventions to accomplish this, I will first study the classroom audience who will receive these interventions, examining some of the internal thought processes and expectations of today's college freshmen.

Today's College Freshmen: Gen Z Learners in Transition

A freshman's transition to college is a complex, life-changing event. Chickering and Reisser (1993) described seven vectors (i.e. developmental tasks) students are working on during the college years including developing competence; managing emotions; moving through autonomy toward interdependence; developing mature interpersonal relationships; establishing identity; developing purpose; and developing integrity. Through the years, freshmen from every

generation have faced these significant and difficult transitions, however, the majority of today's college freshmen, those born from 1995 - 2010 who belong to Gen Z (Seemiller & Grace, 2016) are arriving at campus with unique characteristics and challenges due to technology.

Many freshmen students have increased anxiety and lack the coping skills to mediate it. Abney, Lusk, Hovermale and Melnyk (2018) noted that anxiety has now surpassed depression as the most common mental health diagnosis among college students though depression is also increasing. The overload of information due to technology adds to the intensity of freshmen who are already overwhelmed and stressed by their new environment, making it difficult to focus and maintain personal mental health. Constant connection via social media, texts from friends, and the Internet means Gen Z students are now exposed to intimate details of war, politics, tragedy, school shootings, and increased violence portrayed in the media, sometimes in real time (Seemiller & Grace, 2016). This increased anxiety no doubt affects students both socially and academically, thus affecting their college transition and self-efficacy which in turn affects their academic performance and success.

Growing up with technology has also shaped Gen Z's perception of knowledge acquisition and learning, a relevant factor to the study at hand which seeks to increase student grit in the context of higher learning. According to Seemiller and Grace (2016), Gen Z learners are used to 24/7 access to information and educational resources on demand; prefer logic-based approaches and experiential learning which allows them to learn hands-on through application activities that are relevant to real-life; are limited in multi-option creative problem-solving; demand an education that will be useful in getting a job after graduation; want engaging instructors who do not lecture at them; and like being able to learn independently and at their own pace, yet also enjoy working in group settings, a sign of their desire for social interaction.

"They want to have some role in setting the tone and pace for their own learning but also see the value and benefit of working with others or at least near them" (p. 179). Seemiller and Grace (2016) also found that Gen Z perceives their ability to multitask, "splitting their time and focus among multiple screens" (p. 180) as being positive, when in reality, it is an inability to focus. These Gen Z characteristics reflect a number of learning preferences and expectations for the college classroom and coursework, for the broader domain of college (i.e. higher learning), and for the beneficial outcomes of a college education (i.e. getting a job after graduation). These expectations play a significant role in how freshmen adapt to college and their academic success (Casanova, Almeida, Peixoto, Ribeiro, Marôco, 2019; Pascarella & Terenzini, 2005).

Internal Processing of Costs and Benefits of College

College persistence research aims at understanding initial student thought processes and how these change over time. Some researchers of college persistence have likened dropout to workplace turnover where an employee mentally weighs expectations against the situation through a sequential decision-making process to form behavioral intentions (to stay or leave) (Bean, 1983; Stange, 2012). Just as disgruntled employees often quit their jobs mentally before giving physical notice to their employer, disillusioned college students similarly begin mentally quitting before they actually drop out. Stange (2012) applied investment theory to college persistence research and found that students "weigh short-term costs against future benefits and choose the schooling level that maximizes welfare" (p. 49). So, given the earning gains from graduating from college are high, dropout should be low, but it isn't. Stange (2012) posits that in the student persistence process students refine their expectations over time as they discover the costs (e.g. financial, opportunity cost, emotional, required effort) of college attendance. If a student begins to feel their investment toward completing their long-term goal of college

graduation is no longer a worthwhile proposition, they will quit since college attendance is optional. Again, freshmen are at the greatest risk because they are apparently making this internal judgment call within the first year of their college journey. And on what basis?

Stange (2012) found that a student's sequential decision-making process to persist happens as they learn about their own academic abilities and that "approximately 60 percent of this value comes from the information received in the first year of college" (p. 51). This finding was further tested and supported by Stinebrickner and Stinebrickner (2014), economists with access to unique comprehensive longitudinal student expectations data from the Berea Panel Study (BPS). "Our simulations show that 45% of dropout in the first two years of college can be attributed to what students learn about their academic performance" (Stinebrickner & Stinebrickner, 2014, p. 601). They provide three avenues through which a student's grades affect his dropout decision: "The first avenue is that poorly performing students would like to stay in school but are forced out of school by grade progression cutoffs. The second avenue is that poor grade performance lowers the financial return to remaining in school. The third avenue is that poor grade performance reduces how enjoyable it is to be in school" (Stinebrickner & Stinebrickner, 2014, p. 604). Thus, given the importance of a freshman's perceived academic performance on his dropout decision, helping him achieve early academic success is crucial. An important part of this early academic success is the confidence and belief that he possesses the capabilities to succeed in college. This belief is known as self-efficacy.

Self-Efficacy

Bandura (1977) defined self-efficacy as a person's expectations about their own capabilities to succeed in a given environment. Tipton and Worthington (1984) expanded the definition to "perform competently across a broad range of situations which are challenging and

which require effort and perseverance" (p. 545). Zajacova, Lynch and Espenshade (2005) found academic self-efficacy to be a strong and consistent predictor of first-year college GPA. Bandura (2001) noted that perceived self-efficacy is shaped by a person's experiences (actual or observed) with success and failure. Olson and Herganhan (2016) explained that self-efficacy is affected by a variety of sources which include a person's accomplishments and failures, seeing peers who are viewed as similar to oneself succeed or fail at various tasks, and verbal persuasion. Self-efficacy is always a perception (Bandura, 1977). Students who excelled in high school may be overconfident in their capabilities for college academic success. Other students may lack self-efficacy because they question whether or not they have the mental capabilities, self-regulation capabilities, or whether they belong in college. Each successful semester that students have under their belt reinforces to them the belief that they can "do college" and be successful. This is why a student's freshmen year is so crucial. Freshmen must believe, early on, that the long-term benefits of attending college are worth the short-term costs and that they possess the capabilities needed for success in their new (foreign-to-them) learning domain.

Long-term Goal Commitment

Grit is defined as "passion and perseverance for a long-term goal despite setbacks, failures, and competing pursuits" (Eskries-Winkler, et al., 2016). College graduation is the pre-set long-term goal for every freshman who has chosen to pursue a bachelor's degree at an institution of higher learning. Commitment to the goal of graduating from college is vastly different from a student's previous academic domain of high school. While earning a high school degree does reflect achievement of a long-term goal, how many students consciously committed to that goal on the front end of the journey during their freshman year? Their support system may have been more committed to that goal for them than they were. Earning a college degree,

however, is indeed a major long-term goal, requiring most students four to six years to complete, which represents a large percentage of a student's life who may be beginning college as an 18-year-old. Working toward a degree requires a significant investment of time, money, and energy on the student's part, since a bachelor's degree can only be achieved individually through personal mastery of the college journey. To commit to a goal means the person is promising to follow-through and make it happen, as much as it depends on herself. The stronger the goal commitment, the more a person will persist toward achieving the goal.

The common sense assumption of students attending college is that they have set graduation as a goal. Why else would they invest their time, money, and energy? Yet, studies that examine a student's motive for attending college are extremely limited, so this should not be an assumption. Perhaps the student didn't know what to do after high school and college seemed like a logical choice. Some students may not have had any "choice" in the matter; their parents decided for them. For students who qualify for full financial aid, college is "free" and they might even receive a substantial check for attending. Other reasons might be so superficial they are never vocalized, such as a female attending college for an M.R.S. degree, a student looking for an avenue to party, to find "happiness", or because it seemed easier than working at a physical labor job post high-school. Dropout that happens in the early weeks of a student's college career implies a major disconnect between what the student thought college would be like (expectation) and what it is in reality. Universities and college instructors have little control or influence over students without any goal commitment. Highlighting the benefits of college attendance and a college degree will hopefully remind students that attending college and earning a degree is an amazing opportunity that requires an ongoing commitment to success. As commitments should

always be made with care, freshmen should understand their role, and the role of their institution in their education.

Personal Vision of Future Self and *(L)Earning a Degree*

The word education is from the Latin root, *edu*, which means to lead. Institutions of higher education and institutions of higher learning exist to "lead" students through a transformative process of learning, skills development, and persistence to graduation. Once graduated, the student's degree is evidence of all three parts of this process: the cognitive learning of the classroom; the array of noncognitive skills developed through college, and grit because the student persisted and achieved the long-term goal of college graduation. A subtle distinction lies between an institution of higher education and an institution of higher learning. The former could include institutions conferring Associates degrees such as a community college, or schools offering vocational programs and occupational certifications. In contrast, students pursuing a bachelor's degree from an institution of higher learning have essentially decided on pursuing an education for a professional career which includes a foundation of liberal arts and/or general education courses. En route to a Bachelor of Arts degree or a Bachelor of Science degree, half of the coursework prepares the student to be a well-rounded, educated member of society; the second half of the coursework, in the student's major, specifically prepares him or her with the transferable skills necessary for fulfilling the student's calling in their chosen career. Seemiller and Grace (2016) noted that Gen Z students desire an education that will be useful in getting a job after graduation.

It is acknowledged that some college students are non-degree seeking, but for freshmen who are just beginning a four-year bachelor's degree, having correct expectations of the function of higher education (i.e. learning, skills development, job readiness, conferring degrees on those

who persist) and the length of the commitment ahead is worthy of clarification and pertinent to the discussion of college persistence. College freshmen should understand the educational path they have chosen and know what a bachelor's degree from their institution represents. Studies on the motivation for attending college are limited, but based on common sense, the majority of students are attending to earn a degree. Earning a degree is a noble venture, however, it is a performance goal instead of a learning goal, so it misses the significance of the learning which a degree from an institution of higher learning represents. This paper will use the term *(L)Earn a degree* to highlight the importance of this learning, which should be a simultaneous outcome as one earns a degree. Helping students make this connection is a way of clarifying their expectations for college, so it is important to college persistence.

Attending college also means the opportunity to become part of an environment characterized by a love of learning, growth, and exploration and begin a life-changing, transformative process as a freshman. College is the perfect opportunity to become the future self that the student envisions. Senge (2014) notes that "if learning is related to a person's own vision, then that person will do whatever he or she can to keep learning alive" (p. 193). He recommends a three-stage process designed by composer/teacher Robert Fritz which includes "articulating a personal vision, seeing current reality clearly and choosing: making a commitment to creating the results you want" (Senge, 2014, p. 194). Presenting college attendance and persistence in this manner highlights a benefit of college that freshmen may not have considered.

Self-Regulated Learning

Self-regulation arguably represents the most significant academic adjustment for freshmen, yet likely the most important to learning, success, and grit. Self-regulation in the

context of higher learning refers to the degree that students are "metacognitively, motivationally, and behaviorally active participants of their own learning process" (Zimmerman, 1989, p. 329). This means students are self-initiated, independent learners who discover and use a variety of learning strategies (Kitsantas, Winsler & Huie, 2008; Zimmerman, 2008). Extensive evidence suggests a link between student achievement and level of self-regulation (Kitsantas, et al., 2008; Schunk & Zimmerman, 2012). Grit, too, is a (sustained) self-regulatory construct (Eskreis-Winkler, 2016). Wolters and Hussain (2015) found each of the aspects of grit (perseverance of effort; consistency of interest) to be associated with self-regulated learning and that self-regulated students proactively adapt their thoughts and behaviors to make learning and achievement easier. Zimmerman (1990) identified the two essential characteristics of self-regulated academic learning as a student's use and monitoring of strategies and their perceptions of self-efficacy. As previously noted, there is also a link between student self-efficacy and college persistence because freshmen students persist or dropout as they learn of their academic performance. Thus, self-regulated learning (SRL) and self-regulation are important factors in *(L)Earning* a degree (learning how to learn in college), earning a degree (how to do college), and ultimately sustained student success which translates into college persistence. Understandably, many freshmen students do not possess self-regulation skills and must learn how to develop them.

When freshmen students enter the undergraduate academic environment, they face a steep learning curve in a new domain. They must learn the landscape, protocols, vernacular, technology, and the standards for each college course, perhaps four, five, or six different sets of criteria and rigor. The previous academic domain of high school is the only one students have been exposed to, so it no wonder that freshmen may have inaccurate academic expectations. Yet,

high school learning and college learning are fundamentally different in important ways. First, college students are considered adults who are voluntarily pursuing a higher education. Taking responsibility for one's own individual learning requires a mindset change for many students. In high school, "learning" (and homework) is often time-regulated by teachers through daily homework and scaffolded assignments. Most of the time the content is easier and sometimes it is spoon-fed to the student. In college, students must self-regulate their own learning by studying between classes, studying an appropriate amount of time for the level of content, and through planning and completing assignments independently. Second, student motivation in high school is usually positively affected through teacher accountability and parental encouragement. A student who was successful in high school might not realize how much of his success resulted from a strong support system versus intrinsic motivation to self-regulate.

Who will motivate me? How will I make success happen? The most significant words in these questions in terms of self-regulation are me and I. Each freshman arrives at college with a unique set of cognitive abilities (i.e. intelligence, intellect, critical thinking skills), noncognitive abilities (such as study skills, time management, grit), personal qualities (such as people skills), and motivation levels. Much success in the classroom requires students to figure out how to approach each learning task and challenge by capitalizing on personal strengths and opportunities, and minimizing weaknesses and threats. While every freshman has (or should have) the same goal of college graduation, each individual's college journey will be unique and challenging in different ways. Each course, assignment, classroom situation, social situation, and living environment will require the student to learn how to best apply his personal resources (i.e. time, energy, focus) to the task at hand, great or small, and with repeated personal stamina. Each task either will be navigated with success or will represent an obstacle which threatens the

student's academic success, outlook, and personal college journey (i.e. persistence to graduation).

Self-regulated learning is crucial to academic success in college (Cohen, 2012; Kitsantas, et al., 2008; Wolters & Hussain, 2015; Zimmerman, 1990; Schunk & Zimmerman, 2012). Grit, too, is a self-regulatory construct (Eskreis-Winkler, et al., 2016).

Purpose of the Study

The purpose of this study was to explore how freshmen students could learn grit through pedagogical devices in the college classroom. While grit research in the undergraduate domain is becoming more prevalent in recent years, few studies have designed and tested pedagogical interventions to foster grit and college persistence with a course's cognitive content.

Given the complexity of the construct of grit and today's college freshmen, I will review literature from a variety of disciplines including education, psychology, and communication. Working on the premise that individuals are unique and complex, especially freshmen transitioning to a new environment, I will use a multi-faceted approach through creating a variety of pedagogical devices. Ideally, all the interventions will be meaningful to each and every student, however in reality only particular interventions will resonate with particular students. Thus, this study will also seek to gain feedback from students on each particular grit intervention to see which were meaningful to students in order to improve the pedagogical devices going forward and to inform the creation of additional grit interventions.

Researcher position

In addition to being the researcher in this study, I am currently filling several life roles which are relevant to the study of college freshmen and grit. These four roles include: 1)

graduate student; 2) instructor of a general education course as a Graduate Teaching Assistant; 3) parent of three college students, one who is currently a freshman; and 4) a person with my own past story of being a college freshman (thirty years ago at I.U. Bloomington) who almost dropped out. In filling these roles simultaneously as I have researched grit, I have been privileged to examine the topic from multiple vantage points which has generated ideas, spurred questions, and created empathy for today's college freshmen.

Communication Course and Classroom Context

College students live and learn within a variety of settings and contexts on a college campus. All of these are relevant to a study on college persistence and grit since any number of factors, either internal or external, can influence a freshman's academic performance. External factors include social, economic, academic, and institutional factors. Internal factors are those shaping a student's thought processes (e.g. expectations, attitudes, and beliefs) about the undergraduate learning environment. Obviously, internal thought processes and external factors are not mutually exclusive since any external factor can shape and influence how a student is feeling and thinking about his situation, especially a freshman in transition. So, while the broader college environment plays an important role in freshmen persistence, the context for this study was narrowed to the college classroom, specifically that of a general education course heavily comprised of freshmen students.

The four classes which comprised both the experimental and control groups for this study were enrolled in Fundamental of Speech Communication, a hybrid course with learning objectives for communication and public speaking. Content topics include intrapersonal, interpersonal, and group communication, communication theory, and student development and delivery of an informative, persuasive, and group presentation. This communication content (not

grit or freshmen success) was the primary focus in developing the interventions for the experimental group in this study. For this reason, the majority of interventions were course assignments with grit-related adaptations.

Hypothesis and Research Question

To measure the possible effect of the grit interventions, I used an experimental design. The experimental group received six grit interventions throughout the semester, the control group did not. The study's hypothesis is as follows:

H: Students in classes which include grit-fostering interventions will report significantly higher gains in grit scores than students in classes without grit-fostering interventions.

The second part of the study explored student perceptions of the effectiveness of the each of the six interventions in contributing to student grit. The study's research question is as follows:

RQ: Which grit interventions do students perceive as being effective?

Basic Assumptions

The following assumptions were made by the researcher in this study:

1. Grit is a self-regulatory construct that can be cultivated in a student.

   Researchers vary on the terminology they use for grit. Some refer to grit as a personality trait or tendency which would mean a person is gritty no matter what the situation (i.e. domain general). In contrast, grit is often perceived as domain specific (i.e. a person is gritty in a particular, specific situation or

context.) Eskreis-Winkler, et al. (2016) refer to grit as a self-regulatory construct.

2. Undergraduate freshmen are complex and diverse, so a variety of pedagogical interventions is needed in order to resonate with individual students.
3. While this paper highlights the importance of teaching grit to freshmen, the goals and requirements of the communication course in this study received priority. Thus, the majority of interventions were communication assignments with grit-related adaptations.
4. Students are attending college voluntarily and enrolled in a course voluntarily.
5. Every student wants to succeed academically and eventually graduate.
6. The most common and significant academic adjustment for a freshman in transitioning to college is to master self-regulated learning (SRL).
7. This study assumes the construct of grit is good and equates to success in long-term goal achievement, specifically degree achievement in the college context.
8. This study assumes classroom pedagogy includes methods of instruction, homework assignments, in-class activities, communicated messages and modeling by the instructor.

Organization of Thesis

This study aims at creating and implementing interventions in the college classroom that will help freshmen learn grit. Specifically, the aim is to teach grit in the context of the undergraduate domain, so students will succeed and persist semester after semester until they have earned a bachelor's degree. The term, grit-to-graduate, coined by the researcher, is being

used to express grit specifically in the context of college persistence, as opposed to other contexts in which grit has been studied (i.e. workplace, marriage, military, high school) (Eskreis-Winkler, et al., 2014).

I will first provide an overview of the construct of grit and explain how it is particularly relevant to the college persistence discussion since it is a long-term success factor. I will briefly contrast it to other short-term success factors such as conscientiousness and self-control. Given the broader context is the academic domain of an institution of higher learning, and the narrow context of this study is the college classroom, I will explore how learning might occur in a social context of approximately 25 freshmen who are meeting in a face-to-face, 16-week semester course. In choosing a relevant theoretical learning framework, I chose one that accounts for human agency given the importance of self-regulation and self-regulated learning (SRL) to college success. In fact, I worked under the assumption that SRL is arguably the key to short term and long term college success (and thus the grit-to-graduate) yet represents a difficult and significant mindset shift for most college freshmen. Bandura's Social Cognitive Theory (2001) will inform how this SRL might occur through interactions and observations in the college classroom. One premise of the theory is triad reciprocal determinism where the person (student), environment (classroom), and student's behaviors interact and influence one another to create the student's consequential behavior (Bandura, 2001). These social interactions influence a student's observational learning from "models" in the environment. An examination of how students might learn from these different classroom models will inform interventions on student academic success and thus grit.

To inform how to best teach grit, (also a self-regulatory construct), I will examine two theories currently informing grit pedagogy. These include a psychological theory of achievement

(Expectancy-value theory [EVT] also known as the Logic of Consequence) and the Logic of Appropriateness (Eskreis-Winkler, et al., 2016) which works off the premise that people think and act in ways related to their identity or future envisioned identity (Oyserman, 2007). Finally, based on a synthesis of both observational learning and grit intervention pathways, I will explain how the literature and research informed the creation of the six grit interventions tested in the experimental group of this study.

CHAPTER 2. LITERATURE REVIEW

Overview of Grit

Grit is a complicated construct with a simple definition: "perseverance and passion for long-term goals" (Duckworth, et al., 2007). Grit, however, is far from simple or easy. "Grit entails working strenuously toward challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress" (Duckworth, et al, 2007, pp. 1087-1088). As widely noted in the literature, grit predicts success in a variety of contexts. However grit predicts a particular type of success, making it a unique success factor for a variety of reasons.

Grit assumes a long-term goal, one that is future-oriented, requires forward focus, and usually takes years to accomplish. (Duckworth, et al., 2007; Eskreis-Winkler, et al., 2014; Eskreis-Winkler, et al., 2016). This goal represents a substantial achievement, a higher-level (superordinate) goal of personal significance. "Higher-order goals are fewer, more abstract, and more valued, whereas lower-order goals are more numerous, less abstract, and more interchangeable" (Eskreis-Winkler, et al., 2016). Finally, achievement of the long-term goal could require achievement of hundreds, maybe even thousands, of smaller goals which must be accomplished in the days, weeks, months, and years en route to the superordinate goal. These smaller challenges might require deliberate practice or overcoming obstacles which threaten this personal goal. These obstacles could be internal and/or external forces; anticipated and/or unanticipated. Achievement of each smaller goal may require a new learning curve specific to that particular challenge, or it may be daily, routine practice of an already learned skill in order to achieve an expertise level of skill. Kaufman and Duckworth (2017) express the success equation for this expertise as Expertise = Talent x Effort where effort counts twice, and talent refers to the rate at which a person learns. The equation represents both cognitive skills

(intelligence quotient, intellect, critical thinking, mental processing rate) and noncognitive skills which multiply a person's effort (i.e. how hard he tries, how much time she invests). In other words, every person (student) has a unique combination of cognitive and noncognitive skill sets which must be personally manipulated and honed to meet the smaller success goals in order to ultimately meet the challenging, superordinate goal of graduation.

Interestingly, talent does not always predict success. This intelligence/effort success quotient is especially interesting in terms of higher learning. Obviously, cognitive abilities affect a person's ability to learn which is a primary goal of a college education. Admissions departments make the call of whether students have the minimum cognitive abilities necessary for college coursework, so by the time freshmen students are sitting in a classroom it can be assumed they are capable of mastering the learning. Furthermore, the most intelligent students are not always the ones who succeed at college because for whatever reason, they may not try. In contrast, students who feel they are challenged learners might compensate by working harder. Part of learning (especially self-regulated learning) is figuring out how to best maximize personal strengths and abilities to meet each learning task. And to repeat this process again and again. This determination to not quit, to maintain stamina, to keep showing up—day after day, project after project, semester after semester—for the typical 120+ credit hours needed for a bachelor's degree is what the grit-to-graduate and *(L)Earning a degree* demonstrates. How can this grit be cultivated in every unique freshman student who arrives at campus with varying levels of cognitive and noncognitive abilities? Can students be taught to be grittier? The answer is yes because every student has potential. Each admitted college student can learn to grow in both cognitive and noncognitive abilities given the malleable nature of each.

When grit was first studied by psychologists, it was suggested to be a personal quality, tendency, or trait more germane to an individual's personality. This implies a person naturally exhibits grit regardless of the domain at hand (i.e. domain general). However, grit's fundamental presence of a superordinate, long-term goal means a person is focused on one (or maybe two) challenging goals in a particular context. Thus, a person cannot be gritty at everything. In other words, grit can also be domain specific, if there is a preeminent, superordinate goal clearly within a particular context. A gritty person focuses on this future goal, has a desire to achieve this goal (i.e. passion) and makes it happen through goal striving (i.e. perseverance of effort).

Consistency of interest and perseverance of effort are the two mindsets reflected in grit scale measurements (Duckworth, et al., 2007; Duckworth & Quinn, 2009). The consistency of interest mindsets include long-term goal setting, passion toward a certain idea or project, and the ability to not be distracted by other new ideas or projects (Duckworth & Quinn, 2009). Notably, the passion items "do not measure intensity of commitment to a goal" (Eskreis-Winkler, et al., 2016, p. 381) but rather the focus on a single, higher level goal that is chosen over other lower-level goals and pursued over long stretches of time. The perseverance of effort mindsets include finishing what is begun, not allowing setbacks to discourage, and being diligent and hard-working en route to a goal (Duckworth & Quinn, 2009). In other words, the perseverance items seem to measure a person's stamina en route to the long-term goal, as well as, the everyday hard work required for the short-term successes which build to the long-term goal.

Two short-term success factors strongly related to the perseverance of effort mindsets are conscientiousness and self-control. In fact, critics of Duckworth's grit scale claim it is measuring these and other related success constructs already in the literature (Credé, 2018; Muenks, et al., 2017). Duckworth et al. (2007) acknowledge grit is related to these short-term success factors,

but contend the consistency of interest and perseverance of effort scale items together predict long-term goal success. Given the grit-to-graduate requires a number of short-term successes (i.e. projects, courses, semesters) which build to the future long-term success of college graduation, the factors of conscientiousness and self-control are necessary but not sufficient for fostering grit. For example, a conscientious, self-controlled, hardworking student could excel for a number of semesters, yet lack the stamina needed for the years of completion required for a bachelor's degree. Furthermore, obstacles and setbacks can occur at any point in a student's college journey threatening dropout.

Grit and the short-term success quality of conscientiousness overlap in several ways. Conscientiousness, a Big Five personality trait, is defined as "hardworking, responsible, self-disciplined, and thorough" (John & Srivastava, 1999) and as the "self-regulation of impulses in order to plan and pursue goals or tasks" (Fite, Lindeman, Rogers, Voiles & Durik, 2017, p. 191). Eskreis-Winkler, et al. (2014) found conscientiousness to demonstrate "positive associations with achievement and negative associations with high school and college dropout" (p. 2). Poropat (2009) found a significant correlation between academic performance in college and conscientiousness. Both conscientiousness and self-control have been found to be strong predictors of academic and life outcomes, even when controlling for other factors such as cognitive ability and demographics (West, et al., 2016; Poropat, 2009).

Self-control is also a related success factor that differs from the long-term achievement of grit. Self-control is more associated with everyday success and self-regulation: doing what currently needs to be done in service of a long-term goal and not doing what will hinder the long-term goal (Eskreis-Winkler, et al., 2016). Thus, self-control includes regulating behavior and impulsivity, cognition, and emotion (Duckworth & Seligman, 2017; Miller, Furr, Knobel, &

Fleeson, 2015) as well as resisting temptation and making moral choices (Baumeister, 2005). While there is considerable overlap with self-regulation and self-discipline, self-control is more about one's ability to say "no" to oneself in a given situation. For example, when a student chooses to do academic work over an activity that is more entertaining or takes less effort, he is exhibiting self-control. Duckworth and Seligman (2017) found self-control predicted fewer absences, less procrastination, more time studying, and less time watching television.

Grit Applied to College Persistence and Success

Grit is relevant to the college persistence discussion at hand in a few significant ways. First, as previously mentioned, graduating from college is indeed a long-term goal for a student. In fact, for many students the goal of college graduation may be their first long-term goal since attending college is optional, whereas attending high school was not. Second, college graduation should be the higher, superordinate goal of every incoming freshmen, and also upperclassmen, since attending college requires a significant investment of time, money and energy. Obviously, a person is going to have a greater desire to focus on and achieve a goal which he values and has personally set. However, as it pertains to college persistence, the goal of graduation is inherently part of the undergraduate academic domain, so it is not student-set. Also, it slightly contradicts the definition of a higher order goal in that it is not abstract. (Eskreis-Winkler, et al., 2016). Yet, in order to cultivate passion for the grit-to-graduate in college freshmen, graduation must first be emphasized as the superordinate goal, and second, commitment to the goal must be emphasized through highlighting all of the benefits of attending and persisting in college. Third, college is considered a challenging and personally meaningful context for most freshmen, given they are not familiar with the requirements of college-level coursework. Finally, successfully achieving the long-term goal of graduation necessarily requires successful completion of the shorter

milestones which consist of coursework and semesters in the undergraduate domain. The model in Figure 1 below, coined by the researcher, encompasses the important factors needed for the grit-to-graduate and college success:

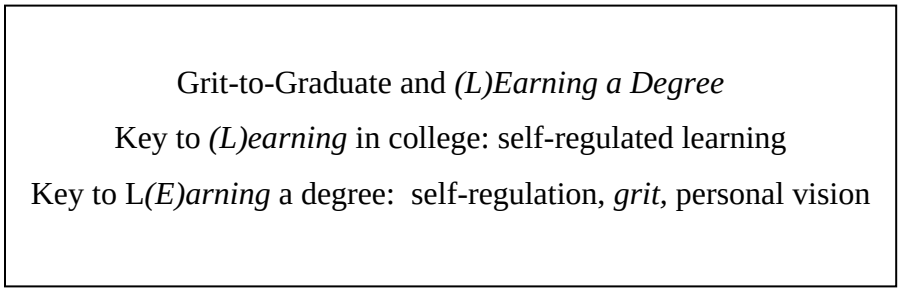

Figure 1. Grit-to-Graduate and *(L)Earning a Degree* visual representation.

Theoretical Framework for Social Learning

How does one learn? This question is particularly relevant to this study because the context for examining the cultivation of grit in young adults is expressly those who are entering the undergraduate academic domain at an institution of higher learning. Merriam-Webster (2019) defines learning as 1) "the act or experience of one that learns, 2) "knowledge or skill acquired by instruction or study," and, 3) "modification of a behavioral tendency by experience, such as exposure to conditioning" (www.merriam-webster.com). A student's learning in college happens in a variety of settings and ways (Kolb & Kolb, 2005). Some learning is content-based and can include lessons requiring rote memorization, critical thinking, and application learning (learning by doing). Other college learning is derived from interactions and experiences with peers, faculty, and university staff (Kolb & Kolb, 2005; Seemiller & Grace, 2016). Regardless of the learning task or context, learning is an active, personal process requiring students to think, process, engage, and self-regulate. How might students, surrounded by other freshmen, learn self-regulated learning (SRL) in the social environment of the college classroom? Bandura's Social Cognitive Theory (2001) provides a relevant theoretical framework for this analysis

because it addresses learning, motivation, personality, and influences on future behavior in social contexts (Bandura, 2001).

Bandura (2001) theorized that much of learning happens through observations and interactions with other people. This social learning can be a result of observing the consequences of one's own behavior or learning from a model's behavior, where the model is defined as anything or anyone that conveys information. One of the processes occurring in this observational learning is a person's internal evaluation against performance standards that the person has personally experienced or vicariously experienced through someone else. For example, if a person feels his performance has met or exceeded the given standard, he will have a positive self-evaluation; if he doesn't meet the standard of the situation, or doesn't meet it at the level of his personal expectation, he self-evaluates negatively (Olson & Hergenhahn, 2016). Based on this continuous feedback, a person learns to adjust his approach which in turn affects how he behaves and interacts with his environment in the future, to determine new behaviors, in a process known as reciprocal determinism (Bandura, 2001). Each of three entities influences the other two in congruent ways. "It is as valid to say that behavior influences the person and the environment as it is to say that the environment or the person influences behavior" (Olson & Hergenhahn, 2016, p. 323). As applied to this study, examining this three-way interaction between the student, behavior, and environment/models will be useful to inform the desired subsequent behaviors of SRL and the self-regulatory construct of grit, especially given the social nature of the classroom.

The Student Learner - Expectations, Self-efficacy and Growth Mindset

Bandura (2001) emphasized that most of observational learning comes from interactions with other people, yet he also emphasized human agency, meaning people regulate their behavior

through choices and motivation which are greatly influenced by their self-efficacy (Bandura, 1997). Human agency for a college freshman would include his expectations, academic self-efficacy, and his academic mindset (growth or fixed).

As highlighted in the introduction, freshmen students are complicated Gen Z learners and individuals who are also transitioning to a new, unfamiliar academic environment. They arrive at college with a set of expectations of the college environment, the rigor of college coursework, and the student's own perceptions of his ability to succeed in this new learning environment (i.e. perceived self-efficacy). These expectations and perceptions are understandably sometimes inaccurate and in need of alignment to the realities of college. This learning happens as students observe academic performance standards, conduct internal self-appraisals against the standards, and accordingly make adjustments to their academic behaviors and their learning mindsets.

The importance of a student's academic self-efficacy to college persistence was previously noted in Chapter One. Students must believe they have the capabilities to succeed in their new academic environment. Each new learning task will test this self-belief and greatly affect their attitude/mindset, what they will attempt in the future, and their self-regulation. "Perceived self-efficacy influences self-regulated behavior in several ways: It determines what is attempted, how long one persists at task, and what is hoped for" (Olson and Hergenhahn, 2016, p. 338). A closely related concept to academic self-efficacy, SRL, and success of any learning task is a student's learning mindset (i.e. growth or fixed), which is profoundly significant to the discussion of college success.

A person's mindset is how they think about their capabilities, intelligence, and personal qualities (Dweck, 2016; Hochanadel & Finamore, 2015). People with a growth mindset believe they have the potential to develop these attributes in order to become different in the future. In

contrast, people possessing a fixed mindset expect their current traits, performance, or behaviors to continue. Dweck (2016) says people can be a complicated mixture of growth mindset and fixed mindset on the two categories of intelligence mindset, which comes into play when a situation involves mental ability, and personality mindset, which comes into play in situations that involve personal qualities, such as "how dependable, cooperative, caring, or socially skilled you are" (p. 13). This definition seems to highlight a student's self-efficacy for the higher learning required of college, as well as the self-regulation of SRL in college and shows how student internal processes play a huge role in their success and *(L)Earning a degre*e.

A growth or fixed mindset affects how a student approaches learning in college in profound ways. It determines whether learning goals or performance goals are set and how feedback is received. Fixed mindset people tend to set performance goals that ensure short-term validation of the self, whereas, growth mindset people set learning goals that are about personal mastery and self-improvement (Dweck, 2016; Oettingen, Sevincer & Gollwitzer, 2018). Students with a growth mindset receive critical feedback as part of the learning process, whereas students with a fixed mindset become offended and feel their personal worth has been judged and attacked (Dweck, 2016). "The fixed mindset makes you concerned with how you'll be judged; the growth mindset makes you concerned with improving" (Dweck, 2016, p. 13). Of course, someone with a fixed mindset is more likely to quit as a result of a setback or obstacle, thinking, there's no point in trying harder if I can't change my inherent intelligence and qualities (Dweck, 2016). Obviously, training students to reject a fixed mindset, and embrace a growth mindset, is fundamental to their self-efficacy, SRL, and grit. One's personal ability to change his mindset is now supported through neurological proof.

Recent groundbreaking discoveries in neuroscience prove that a person's brain plasticity (i.e. physical component) actually changes as a person thinks (Doidge, 2007; Schwartz & Begley, 2013). This is profound and significant because a person's thoughts and cognition precede his choices, motivation, and behavior which obviously will affect his SRL and college success. When learning feels difficult, a student can realize their brain muscle is changing and growing as a result of their cognitive efforts. Through MRI data, Myers, Wang, Black, Bugescu and Hoeft (2016) identified distinct regions in the brain where both grit and growth mindset occur. Sarrasin, Nenciovici, Foisy, Allaire-Duquette, Riopel and Masson, (2018) conducted a meta-analysis of ten peer-reviewed studies where neuroplasticity was used to teach a growth mindset and found an "overall positive effect on motivation, achievement, and brain activity" (p. 2). Thus, educators are now using this neuroscience to teach growth mindset (and grit) to students.

While grit and growth mindset were terms coined after Bandura's Social Cognitive Theory (2001), he posited that the sensory, motor, and cerebral systems of the human brain were the cognitive tools people use to "accomplish the tasks and goals that give meaning and satisfaction to their lives" (p. 4). Furthermore, Bandura (2001) noted how human agency includes intentionality and forethought, quality of functioning, and the meaning and purpose of one's life pursuits to enable the "conscious planning and intentional execution of actions that influence future events" (Olson & Hergenhahn, 2016, p. 335). This emphasis that people are "agents" who create their own futures through their thoughts and actions is reminiscent to a student's goal of college graduation, grit, and college success.

In summary, a student learner approaches learning in college with a number of relevant and significant intrinsic characteristics which include expectations, self-efficacy, and growth or

fixed mindset. All of these qualities must be considered in the development of pedagogical interventions to instill SRL and the self-regulatory construct of grit. Now, we will look at how a student learns from the environment of the college classroom.

Learning from Peer Students as Models

Bandura (2001) posited that learning happens when a person observes and interacts with "models" in their environment which include anything or anyone that conveys information such as "a person, film, television program, demonstration, picture, or instructions" (Olson & Hergenhahn, 2016, p. 316). While models in the environment of the college classroom could include any and all of these, the ones most pertinent to this study and the creation of pedagogical grit interventions will be peer students, demonstrations, the instructor, instructions, and technology. Models that are most influential are those similar to the observer, respected, have high status and competence, and are thought of as powerful and attractive (Olson & Hergenhahn, 2016).

Peer students would be the model most similar to the student learner in a classroom. An entry-level communication course, such as the one in this study, is a particularly relevant context for helping freshmen learn SRL through observation and interaction since the course is heavily comprised of other freshmen probably with similar apprehensions about college and public speaking. To foster this interactive observational learning among students, classroom contexts that facilitate collaborative learning or learning in teams would be best. However, these teams must be created with care so each group has a clear leader(s) whose behavior is worthy of observation and thus influence. Through working on team projects, freshmen will (hopefully) observe other students contributing to the team's workload and determine they too will do their part. Another crucial part of observational learning for a public speaking communication class is

the model of "demonstration" since students will give speeches in front of the class. Again, if freshmen students see their freshmen counterparts giving high-standard speeches in a supportive classroom context, they may be motivated to meet that standard. Or, if they see an unprepared student struggling with his speech, it could motivate them to want to prepare so they don't have the same result.

Other potential benefits of group learning, beyond observational learning, would include helping freshmen develop personal relationships, so they feel a sense of belonging in the classroom, and have accountability for class attendance to their team members. A final benefit of working in groups, which is related to self-efficacy and grit, is the camaraderie and encouragement that a team can communicate to a fellow student who wants to quit. Duhigg (2014) noted that part of the success of groups such as AA is that they believe together that they can succeed in coping with stress without alcohol. "There's something really powerful about groups and shared experiences. People might be skeptical about their ability to change if they're by themselves but a group will convince them to suspend disbelief. A community creates belief" (p. 85). A final benefit of effective group learning is that students learn valuable people skills which will prepare them to collaborate and work in teams in their future careers.

Learning from the Instructor and Instructions as Models

Instructors have the potential of playing a significant role in helping freshmen students learn how to learn in college and lay the foundation for success and grit. As leaders in the classroom, instructors play a crucial role in creating a learning-friendly environment by making it safe, supportive, and engaging so students want to attend class and learn. Instructors facilitate learning through creating quality pedagogy that is relevant and interesting to students. Finally, instructors who are organized, communicate clearly, and provide timely feedback provide

freshmen a necessary foundation for academic success. In addition to these important teaching standards, college instructors (and instructions) are "models" for student learning (observational and social) as described by Bandura's (2001) Social Cognitive theoretical framework. For example, an instructor who models a love and passion for learning, her subject matter, and her job can potentially influence how a student views the course, the subject matter, or even the larger college environment.

Through a caring, yet professional, relationship with students, an instructor can model the protocols and standards of the college classroom environment. Again, freshmen are aligning their expectations with their new learning environment, so it is crucial instructors create standards that realistically reflect what a college course requires. For example, as freshmen are learning SRL, there may be individual instances when accepting late work is appropriate, however, if it becomes the "rule" instead of the "exception" students might weigh their expectation against an improper collegiate standard, which will ultimately hinder their success in other classes and in college. Future employers will also require similar SRL and self-regulation, so helping students view their college learning as career training could remind them of their long-term goal of college graduation.

The course syllabus is usually the model (or instructions) that instructors use to communicate parameters related to SRL in the course and classroom (e.g. attendance policy, project deadlines, late-work policy). Often the syllabus is communicated "as a contract" that the student must mentally consent to versus making a commitment to achieving the learning goals for the course. While subtly different, personal goal commitment terminology is relevant to SRL, both short-term completion and success (i.e. projects, courses) and long-term completion and success (i.e. grit, college persistence). To commit means to give mental ascent up front to a goal

and then following-through to achieve the goal to the best of one's ability. How does an undergraduate achieve the long-term goal of *(L)Eearning a degree*? Through commitment and achievement of a number of smaller, short-term learning and completion goals en route to the superordinate, long-term goal of college graduation. Encouraging students to make commitments with care, whether great or small, after an internal analysis of weighing costs and benefits will help them determine the effort and follow-through needed on their part to complete the learning task.

Learning from Technology as a Model

Bandura (2001) noted that technology was a model for observational learning. Gen Z college freshmen have grown up with technology such as smart phones (Seemiller & Grace, 2016) and are adept at playing video games, surfing the Internet, texting, listening to music, watching TV, and buying online. The majority are constantly connected. In fact, a recent study showed that 51.9% of students are addicted to the Internet (Pontes, Szabo & Griffiths, 2015). Seemiller and Grace (2016) noted that Gen Z perceives their ability to split time and focus among multiple screens as being positive, when in reality it is an inability to focus. These conclusions are concerning because learning requires focus, attention, and retention (Olson and Hergenhahn, 2016). Thus, positing technology as a learning tool versus a distraction to learning seems foundational.

Interaction with some specific types of technology are important to both short-term and long-term student success. E-book texts, online study tools, and University Learning Systems (i.e. Blackboard) are important vehicles for freshmen to master as part of SRL and short-term success within a given course. It is possible today's freshmen feel overly confident in their talent (i.e. rate of learning) to learn technology and thus neglect thoroughly developing a knowledge of

the elementary technology needed for college success. Some examples include learning how to print class projects on university printers, accessing and learning to critically read e-textbooks, and checking grades on Blackboard in order to monitor personal progress. A student's long-term success and future is also critically linked to technology in today's world.

Social media use is already part of the curriculum in the communication classes in this study. Students learn the uses of media and technology in constructing relationships and online identities. Discussion of online identity construction presents an opportunity for stressing to freshmen that the online identities they create during their college years can impact their futures, for good or bad, in significant ways. Specifically, the importance of creating an online professional identity is highlighted in this course as it relates to organizational communication and job interviewing. Since most freshmen today desire a college education that will be useful in getting a job after graduation (Seemiller & Grace, 2016), student interaction with professional and career technology should affect their futures in positive ways. The professional website LinkedIn has emerged as the dominant leader for corporate hiring and recruitment (Peterson & Dover, 2014; Slone & Gaffney, 2016).

Student interaction with the website LinkedIn will facilitate relevant learning in a number of ways. First, a student's research and knowledge of their future dream job and the professional world beyond college is greatly facilitated through LinkedIn. LinkedIn is the "world's largest professional network with more than 562 million users in more than 200 countries and territories" (LinkedIn, 2019). Second, LinkedIn helps students ponder becoming their future selves through creation of their professional online identities via their LinkedIn profiles (Florenthal, 2015; Peterson & Dover, 2014; Slone & Gaffney, 2016). Finally, since a LinkedIn profile is a dynamic online resumé showcasing the accomplishments of a student's college

journey, it must routinely be attended to and updated. Each of these student interactions with the website throughout their college years provides an opportunity for students to observe, learn, and prepare for their professional futures. However, most students do not yet understand the value of LinkedIn.

Florenthal (2015) found most students reported barriers to LinkedIn usage due to "students' ignorance of the network and the erroneous perception that a presence on LinkedIn should be initiated and/or developed only after graduation" (p. 17). Given the fact that building a professional presence online through LinkedIn takes time, it should be "viewed as a priority and should be commenced as early as the freshman year in college" (Florenthal, 2015, p. 1). Peterson and Dover (2014) found requirement of a student assignment which facilitated creation of LinkedIn profile was reported by students as a "promising and productive exercise." Slone and Gaffney (2016) recommended using class time "to guide students through creating and completing their LinkedIn profiles, especially regarding what experiences students should include and how to communicate their accomplishments" (p. 212).

The Student Learner - Academic Behaviors

What does a student study to learn SRL and self-regulation? Self! According to Bandura's (2001) reciprocal determinism, a student's interactions with their environment will both influence and determine their subsequent behavior and their own "person" (their expectations, self-efficacy, mindset). Through observing standards, a student self-evaluates and learns to change current behaviors to influence subsequent behavior (Bandura, 2001). The ingredients of these feedback-loops of self-regulation are standards (i.e. ideals), monitoring (i.e. testing), and the operate phase, where people make a change if they have fallen short of the standard (Baumeister & Heatherton, 1996). Freshmen who are learning to personally master their

new learning environment are essentially going through this self-awareness process of trial and error based on observed performance standards (Bandura, 2001), and seeing multiple avenues toward goal achievement if one path (or strategy) yields failure (Dweck, 2016; Eskreis-Winkler, et al., 2016). Given each freshman possesses a unique set of cognitive abilities, noncognitive abilities, skills, strengths, weaknesses, motivation levels, and mindset (i.e. growth or fixed), each student must answer the question: What strategies and behaviors will work best for me? Every college assignment and course will require a student to learn how to best capitalize on their personal strengths and utilize their resources (i.e. time, energy, university services such as tutoring, speech and writing labs) in order to figure out how to complete and successfully meet the learning task at hand. Given the personal nature of SRL and the self-regulatory construct of grit, pedagogical devices should encourage self-awareness and self-reflection.

The strategies for SRL include a number of variables that include study skills, habits, and attitudes. Credé and Kuncel (2008) narrowed the self-regulation components to concentration, self-testing, study aids, and time management. Kitsantas, et al., (2008) noted the variables included metacognitive processes (planning, monitoring, and regulating), time management, task value, self-efficacy, and test anxiety. Again, self-efficacy also influences students' academic behaviors because their motivation for doing academic tasks is influenced by whether they feel they will be successful at that task (Pajares, 2008). In studying undergraduates, Klassen, Krawchuk, & Rajani (2008) found that "although other self-variables are related to procrastination, self-efficacy for self-regulation is most predictive of procrastination tendencies" (p. 915). Students who had higher levels of daily and task procrastination had significantly lower GPAs (Klassen, et al., 2008). Class attendance is a student behavior strongly associated with student academic success (Credé, Roch, & Kieszczynka, 2010; Gump, 2005). In fact, Credé, et

al., (2010) found class attendance "a better predictor of college grades than any other known predictor of academic performance, including scores on standardized admissions tests such as the SAT, high school GPA, study habit, and study skills" (p. 272). Consideration of all of these behavioral elements are particularly important in the creation and delivery of pedagogy while freshmen are learning self-regulation. Arguably, the most critical student behavior to success is also the most elementary: showing up to learn.

The idea of *showing up* captures a number of these self-regulation elements. It can mean physical attendance (class attendance), mental attendance (concentration/focus), and making study appointments with a personal computer in order to begin and finish a project by deadline (procrastination, time management, meeting deadlines). Sustained *showing up* (year after year toward a long-term goal) is the equivalent to grit (Duckworth, et al., 2007, Duckworth & Quinn, 2009; Perkins-Gough, 2013). Bandura (2001) noted that learning was a constant process and that in order for a person to learn from a model (i.e. peer students, instructor, technology) he must give attention to the model. Giving attention to something requires some form of *showing up*. In order to learn in a given class session, stay abreast of course details and deadlines, and actively participate, students must be present physically and mentally. Class attendance is one of the easiest behaviors for students to control, but critically important to their college learning and success. "Students who wish to succeed academically should attend class, and instructors should likewise encourage class attendance" (Gump, 2005, p. 24). Thus, interventions to encourage SRL and success in freshmen should include attendance standards.

Teaching Grit through the Logic of Consequence

The logic of consequence is one path for teaching grit because it encapsulates a dominant theory of goal achievement known as Expectancy-Value theory (EVT) (Eskreis-Winkler, et al.,

2016). EVT explains the relationship between a person's expectancies, internal costs and benefits analysis, and consequential behavior en route to a goal. Similar to Bandura's (2001) reciprocal determinism, EVT defines expectancy, as the "extent to which people believe they can achieve their desired goals" (Eskreis-Winker, et al., 2016, p. 387), which is similar to self-efficacy. EVT seems particularly applicable to this study in light of the previously highlighted cost and benefit analysis that a freshman goes through as they align their expectations to their new academic environment. Furthermore, grit interventions using EVT are now being used in academic settings.

Grit interventions informed by EVT highlight benefits and downplay costs in order to increase goal commitment (Eskreis-Winker, et al., 2016). Considering the benefits and value of a goal strengthens the person's commitment. In contrast, understanding the costs can either clarify the effort needed for the goal, or cause the person to quit if he perceives he can't achieve the goal (i.e. expectancy, self-efficacy). To this end, as applied to the college domain, the two strategies of EVT are: 1) to positively alter a student's level of belief that she can achieve the goal (i.e. mindset; expectancy, self-efficacy); and/or, 2) highlight the benefits of the goal so the student understands how valuable achievement of the goal will be. These strategies have been applied to both short-term and long-term goals in the academic domain. For example, interventions to affect growth mindset in students have been effective (Eskries-Winkler, et al., 2016) as well as interventions where students must "articulate connections between their desired future and the material they are learning in class" (p. 387). These interventions work because they help students increase their value for school. Eskreis-Winkler, Shulman, Young, Tsukayama, Brunwasser and Duckworth (2016) developed a similar intervention to target students' false expectancy that success and talent just comes naturally for some people. To counter this expectancy they

highlighted the hours of invested deliberate practice (often hidden) and the difficulty of this practice which usually accompanies extraordinary success and related it to learning. Eskreis-Winkler, et al. (2016) found students who received the intervention were more likely to embrace the idea that deliberate practice promotes success; and that one cost of this deliberate practice—frustration during learning—was a positive sign of growth.

The mental contrasting implementation intentions (MCII) process is a similar self-reflective cost and benefit analysis. Mental Contrasting is a goal setting strategy based on fantasy realization theory (Oettingen, Pak & Schnetter, 2001). Fantasy realization theory suggests that when people thoughtfully contrast their desired futures with their present realities, it clarifies the personal expectations of the effort it will take to reach the goal (Oettingen, Pak & Schnetter, 2001) and it includes mentally anticipating obstacles which could prevent the goal from being achieved (Almeida, 2016; Duckworth, Grant, Loew, Oettingen & Gollwitzer, 2011; Oettingen, et al., 2001).

Implementation intentions, the second part of the MCII process, are the person's plans for how to overcome the setbacks and obstacles that will occur en route to the desired future goal (Oettingen, Mayer, & Thorpe, 2010; Oettingen, et al., 2001). It consists of forming if/then statements for each visualized setback, both great and small. For example, a student might envision video games as something which could threaten her higher goal of achieving a college degree. Her if/then statement could be, "if I want to play a video game, then I will wait until I finish my homework." This process equates to the person setting rules for herself, which explains the increase in goal commitment. In fact, MCII has been found to increase strength of goal commitment, as well as behavioral outcomes such as effort and quality of performance (Oettingen, et al., 2001). Implementation Intentions are also effective because they increase self-

regulation strategies (Duckworth, et al., 2011), and they are considered a mental substitute for willpower (Almeida, 2016). Thus, MCII self-reflection exercises could be useful in developing the short-term success factors of self-control and conscientiousness as well as a student's long-term personal vision planning.

Teaching Grit through the Logic of Appropriateness and Prosocial Emotions

In recognizing that some individuals are not motivated by incentives, costs, or benefits, an alternative path which says people act in ways that line up with their identities is now informing grit interventions. The logic of appropriateness posits that people internally ask, "Who am I? What is this situation? What does someone like me do in this situation?" (Eskreis-Winkler, et al., 2016, p. 387). Oyserman (2007) says this internal processing cues a future identity by setting in motion a succession of associated cognitive and behavioral tendencies which are "script-like" more than deliberate, such as priming a stereotype if it is positive, or role playing.

Role playing encourages self-control (Eskreis-Winkler, et al., 2016) which, again, is a short-term success factor associated with academic success and grit. While grit role plays have not yet been studied, Eskreis-Winkler, et al., (2016) highlight several studies where students have better outcomes on academic tasks as a result of role playing. For example, students wearing a costume (white lab coat, red Superman cape, nurse's uniform) or college students pretending to be successful attorneys interviewing at a prestigious firm, presumably "see" their potential success and have better outcomes.

Cueing a future identity in college students could also include helping them envision the personal qualities and sense of well-being they would possess as a result of persisting through the transformative process of college (i.e. Who do I want to become?). Again, Dweck (2016) noted one's "personality mindset" (in addition to "intelligence mindset") comes into play in

situations involving personal qualities such as "how dependable, cooperative, caring, or socially skilled" (p. 13) and neuroscience has confirmed an individual's cognition/thinking affects their mindset, which in turn, motivates their future cognition and actions. Villhauer (2014) claims Future Directed Therapy (FDT) enables individuals to think forward and thrive by anticipating desired future results including personal qualities. FDT is defined as a "dynamic state of growth and of moving forward toward improved life circumstances from wherever one is in the present" (Vilhauer, 2014, pp. 3-4). Again, grit, the grit-to-graduate, and *(L)Earning a degree* encapsulates a student's future, forward, and focused personal vision, SRL, and self-regulation to achieve the long-term goal of college graduation. This includes what they will do with their degrees and what kind of person they hope to become through the process (i.e. personal qualities). DeSteno (2018) argues the way to teach grit is through interpersonal relationships and pro-social emotions such as gratitude, compassion, and (good) pride that leads to the "self-control that builds relationships with others and benefits our own future selves" (p. 143). A study by Kleiman, Adams, Kashdan and Riskind (2013) found that when gratitude and grit interact over time, undergraduates experience a "near absence of suicidal ideations" and increased "meaning in life" (p. 539). Thus, pro-social emotions which encourage students to ponder the meaning of their life helps them envision their college journeys as part of a greater purpose.

Yeager, Henderson, Paunesku, Walton, D'Mello, Spitzer, and Duckworth (2014) found a correlation between the development of a self-transcendent purpose for learning in undergraduates and increased self-regulation and college persistence. Those motivated by "service to others, an ideal, a social justice, or a spiritual entity" (p. 560) persisted longer on short-term boring academic tasks and were less likely to drop out of college. Self-transcendent means the personal goal is greater and beyond oneself. While it is motivated by self-interest, it

also seeks connection to the world beyond itself in order to make a difference in others. For example, a student may seek a personally-fulfilling and enjoyable career as an engineer, while also wanting to build bridges that help people. Or, students might view college attendance as a necessary part of fulfilling their life purpose, making their goal commitment of persisting to a higher power (e.g. God) in order to become all they are supposed to be and do.

Cueing future identities is also related to creating a sense of "belonging" in college freshmen. Leading Stanford researchers agree that students often don't live up to their potential because of fears, anxieties, and doubts related to two sets of thoughts: belonging and ability (Tough, 2014). Thus, when freshmen students internally ask themselves, *do I belong in college?* they are asking it in two ways. First, in the self-efficacy way of questioning whether they have the capabilities to be successful in college, and second, whether they will "fit in" with other college students socially. Yeager, Walton, Brady, Akcinar, Paunesku, Keane, . . . Dweck (2016) found social-psychological interventions, called lay theory interventions, helped students realize they were not alone in doubting their prospects of belonging and success in college. Specifically, a social belonging intervention taught students that "many students feel that they do not belong at first in college but come to do so over time" (Yeager, et al, p. E3343, 2016). Materials for the intervention were written with great care, adapted to the particular context (i.e. university) and delivered before matriculation. Walton and Brady (in press) found the messages which most resonated with freshmen appealed to social norms (e.g. "Most college students do not binge drink"), were delivered in ways that allowed students a sense of autonomy and to self-persuade (i.e. decide for themselves), and were internalized by students through a carefully worded and crafted intervention. Freshmen students would watch a video, or read an essay written by an upperclassman, conveying a particular message. They would then produce their own essay/video

to persuade future students about the message. Examples of effective messages included, “When I got to college, I thought I was the one who felt left out, but then I realized everybody feels that way, and I got over it.” Or, “People change. If someone is being mean to you or excluding you, it doesn’t mean it’s because of a permanent trait in him or you.” (Tough, 2014). As related to this study, it is noteworthy that these interventions are a practical (modern-day) example of Bandura’s (2001) observationally learning from a peer student model.

It is well noted in the literature that freshmen students need to feel a sense of belonging in order to adjust to college and persist. Given the depression and anxiety levels of today’s college freshmen, DeSteno (2018) purports teaching grit through social bonds is by far the best way because it also helps freshmen combat loneliness to feel this sense of belonging. Thus, pedagogical grit interventions which promote interpersonal relationships, collaborating with peers, and small group communication should help freshmen adjust and succeed.

Design of Pedagogical Interventions Based on Literature

The literature reviewed in this chapter informed the design and creation of the six grit interventions. Through a synthesis of findings on student expectations, grit, SRL, social learning through interactions and observations, and theoretical frameworks for teaching grit, two directional themes for increasing student grit emerged, both which address student success in the context of higher learning: short-term success and long-term success.

Again, grit assumes the presence of a superordinate, long-term goal, one which requires focus and stamina to achieve. In this case the goal is persistence that leads to college graduation. Based on the literature, ideas for positively affecting a student’s long-term success toward this goal could include: 1) highlighting graduation as the long-term goal of college; 2) strengthening students’ goal commitment for college graduation through highlighting the benefits of attending

and completing college; and 3) encouraging self-awareness and personal vision of their future lives, careers, and selves. Essentially, the two student questions of long-term college success include, "What do I want to do with my degree and acquired knowledge?" and "Who do I want to become through the transformative process of college? This long-term success must be built through the perseverance of effort and short-term success required to master the hundreds of learning tasks of each course and each semester of college. Thus, achievement of short-term academic success precedes grit, so interventions must also help students, especially freshmen, adjust to college and learn how to succeed in the early days of their college journeys.

Based on the literature, fostering short-term academic success in the college classroom could include fostering: 1) self-regulated learning (SRL); 2) self-efficacy so students believe they have the abilities to succeed in college; 3) growth mindset; and 4) a sense of social belonging and interpersonal relationships. Self-regulated learning (SRL) encompasses helping freshmen realign their expectations with college requirements, rigor, and protocol, as well as, helping them learn self-regulation skills such as time management, study habits, task value, and showing up (physical attendance, mental attendance/focus, and project commencement and completion).

Kahn and Nauta (2001) found that self-efficacy was enhanced by a career-planning course and resulted in better course grades and longer persistence in science and engineering majors. This link between career planning and self-efficacy is particularly relevant to the cultivation of grit, given most students are attending college in preparation of professional careers; Gen Z students desire an education that will be useful in getting a job after graduation (Seemiller & Grace, 2016); and a student's self-efficacy affects his college persistence, as noted in the literature.

Bandura's (2001) reciprocal determinism said most of the information a student learns comes from interactions and observations from models in the environment (i.e. classroom). Thus, interventions which include use of these models should positively affect student learning and their consequential behavior. Again, the college success equation in Figure 1 captures some of the main objectives in positively influencing both long-term success, short-term success, and thus student grit and college persistence.

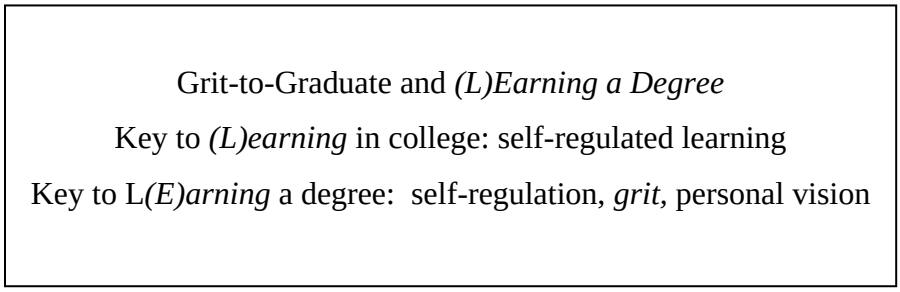

Figure 1 (reproduced)

The necessity of addressing two sets of success timeframes in positively affecting the complicated self-regulatory construct of grit means a multi-pronged pedagogical approach will be most effective. Furthermore, given today's college classroom audience is comprised of complex, unique, and diverse freshmen, one-size-fits-all approaches are not realistic for creating grit. Hopefully, all of the interventions will be meaningful to each student in some way, but likely what impacts one student may not impact another. A related consideration is the feasibility of intervention implementation to large groups of freshmen students, which is often the case in general education courses. While instructors need to develop a caring, yet professional relationship with each student, they must also maintain healthy relationship boundaries. Instructors cannot (and should not) be 1:1 grit mentors, life coaches, or counselors to individual students. Instead, a better approach is to focus on creating pedagogy that will reach as many freshmen as possible.

Again, the interventions created for the experimental group in this study were designed to meet the learning objectives of the Fundamentals of Speech Communication course while concurrently fostering grit in college freshmen. A brief rationale for each intervention follows.

Team Based Learning Instructional Method

Team Based Learning (TBL) is an instructional strategy that relies heavily on small group interaction (Michaelson & Sweet, 2008) and promotes positive student attitudes toward group work (Parmelee, DeStephen & Borges, 2009). In TBL, students spend most of the time in the classroom working on course content application activities with their team, which consists of the same five to seven students for the entire semester. As such, TBL should be an effective intervention for fostering interpersonal relationships and a sense of social belonging in freshmen students who are adjusting to their new academic environment. Ofstad and Brunner (2013) found TBL to encourage attendance and participation at a much earlier stage of the learning process, so this intervention also holds promise for class attendance accountability to a student's team, observational learning from peer models, and development of workplace competencies such as teamwork and communication (See Appendix A).

Job-as-Student Classroom Simulation

Helping students learn SRL, self-regulation, and course parameters are the intended goals for this grit intervention designed by the researcher (See Appendix A). As well noted in the literature, self-efficacy, (the belief students have the capabilities to succeed) is important for student academic success. While freshmen have never "worked" as a student in the college environment, many of them have worked at jobs. They understand jobs have learning curves and certain job functions and require effort and showing up. In this simulation, students are playing

the role of a recently hired "communication recruit" who will be going through on-the-job training throughout the semester. The instructor is a co-professional, learning facilitator, and supervisor who is leading the team(s) through a number of learning projects which have assignment parameters and deadlines. The classroom is (hopefully) a welcoming, interesting, yet professional working environment similar to an office setting. This intervention facilitates communication of the following messages (from the literature) which should help students bring their academic expectations in alignment with college requirements and course parameters: 1) Take ownership of your learning (SRL); you are the leader of your college education; 2) True learning often feels difficult. The way to combat this is to "work" harder at your job of being a student by studying more effectively; 3) Since you are in training, your supervisor understands if you need clarification on how to do the functions and assignments of your job. Ask questions and ask for help if needed by visiting your supervisor's office (i.e. attend office hours); and 4) Effective time management and focus is needed for this job. You are expected to show up during your scheduled work hours (i.e. class attendance); pay attention and engage with your peers and instructor (i.e. showing up mentally); and complete outside work projects (assignments) by a deadline through problem solving and critical thinking (i.e. job functions of this job). To help students understand the requirements of their new jobs, I will explain that deep learning requires uninterrupted focused thinking and blocks of scheduled study time outside of class, and share the widely repeated standard that "each in-class hour of college work should require two hours of preparation or other outside work" (Purdue.edu, 2017, p. 2).

Mental Contrasting Implementations Intentions (MCII) Homework Exercise

The power of the MCII intervention is that it will provide a framework for freshmen students to critically reflect on their college journeys ahead. Specifically, the desired result of the

MCII assignment is to create goal awareness, goal commitment, and goal striving for the student's long-term goal of college graduation. To this end, the MCII facilitates student mental processing to create self-awareness in three ways. 1) Students will dream about the positive, beneficial outcomes of attending and graduating from college. These self-reflections could include what the student wants to do with her degree or the person he wants to become as a result of persisting through college. Pondering these beneficial outcomes will hopefully increase commitment of the long-term goal of college graduation because students will reflect on the front end that the costs of college (effort, time, money) will be a worthwhile investment when the long-term goal of earning a degree is achieved. 2) Students will mentally anticipate what obstacles they could potentially encounter in their particular college journeys. Then, through creating implementation intentions, they will "pre-solve" problems by writing if/then statements, so potential solutions will be at-hand should the obstacle or setback occur. At the time of the administration of the MCII assignment, the instructor will provide an overview of university resources that exist to help students overcome some of their obstacles. (i.e. academic support services, mental health services, advising). Hopefully the implementation intentions process will help students feel empowered that they will know how to navigate the obstacles they will encounter in college. 3) Finally, based on the Stanford interventions (Tough, 2014; Walton & Brady, in press; Yeager et al, 2016), students will write a motivating letter to a younger student who has the same beneficial outcomes and obstacles for graduation they do. Students will explain to this younger student how he or she can be successful in college and persevere toward graduation (See Appendix B).

LinkedIn Profile Creation

LinkedIn's forward and future focus, specifically on a student's post-college career, is what makes it a promising grit intervention. The benefits of creating a LinkedIn profile, and doing this as a college freshman, are supported in the literature. These include exploring future careers, building an online professional identity, adding to a dynamic resumé (the LinkedIn profile) throughout college, and making connections with fellow peers and professionals. Given LinkedIn is the primary vehicle being used for recruitment and hiring of professionals in today's world, it is important technology for student mastery and interaction. As it pertains to the experimental group in this study, this assignment also serves as exploration of a student's potential dream job(s) in preparation for the persuasive speech job interview presentation.

Diploma Job Interview Preparation Assignment

This grit intervention also serves as preparation for the persuasive speech job interview presentation, but it contains unique elements designed to help students reflect on both short-term and long-term college success and practice articulation of this learning (See Appendix C). Students will include some of the articulations from this assignment when they role play their persuasive speeches as an interview candidate for their future dream jobs. Side one of the assignment is a mock college diploma from the university in this study, giving students a visual representation of the tangible document they will receive upon achieving their goal of college graduation. This mock diploma is an opportunity to help students understand the value of their future degree and how it will reflect their mastery of knowledge acquisition and self-regulation skills. Side two encourages student reflection and awareness by providing a framework for mentally processing and articulation of the following grit-related concepts: 1) realization and appreciation of the fact that attending college is an opportunity, thus students should try their

best to be successful; 2) articulation of connecting the benefits of college learning to a future career; 3) articulation of SRL and self-regulation skills through reflection of *showing up* including articulation of physical class attendance, mental attendance, and project completion; 4) student reflection of the set long-term goal of college graduation and commitment to achieving it; and 5) student reflection on what perseverance means to them.

Persuasive Speech Job Interview Presentation

The persuasive job interview speech is an assignment adaptation which I have used in prior semesters. It is possibly a strong intervention for the cultivation of grit in college students because it requires students to write personal, compelling content about their futures which is then articulated through the role play of delivering the speech. Preparation requires a significant amount of self-reflection and personal research which helps students understand the potential benefits and costs required for their dream jobs, which they can pursue with their bachelor's degree in the future. The LinkedIn profile creation assignment and the college knowledge job interview assignment guide student preparation for the speech. One of the goals of the project is to create excitement in students for their futures and dream jobs, hopefully increasing their goal commitment to graduation. Students from past semesters have expressed they enjoy the personal applicability of the assignment, enabling (and requiring) them to think about their futures and their reasons for attending college. For students who are undecided about their college major and future career path, the project facilitates career exploration.

Observation and listening to twenty-some peer speeches (i.e. learning from demonstrations and peer student models) yields a number of secondary, grit related benefits. First, students learn about potential career paths they may not have considered, potentially motivating their own personal career exploration. Second, students are exposed to peer students

with amazing skill sets, work experience, and extracurricular activities, which hopefully encourages them to begin building their own job qualifications and portfolios as college freshmen. Finally, students in the audience are role playing that of a future employer's hiring committee, giving them the opportunity to judge a candidate's hire-ability and persuasive skills, while hopefully raising the bar for their own internal standards which they will strive to achieve.

CHAPTER 3. METHODS

Introduction

How can grit be cultivated in college freshmen so they will persist? This represents the simple question which motivated this research study, yet its answer is complicated for a number of reasons as previously noted. First, today's college freshmen are complex individuals. Second, freshmen are in transition to the new (to them) challenging domain of higher learning. Success in this domain requires self-regulated learning (SRL) and self-regulation, which is not learned overnight. Third, the self-regulatory construct of grit is also complicated, since it necessitates both short term success of many smaller goals in service to long-term success of one superordinate goal (in this case college graduation). Fourth, human beings are unique individuals; their behavior is not always predictable and what resonates with one person will not affect another. With the recognition of these complicated factors, this study sought to find ways to foster grit in college freshmen, specifically through pedagogical devices in the college classroom.

To measure the possible effect of the grit interventions, I used an experimental design. The experimental group received the six grit interventions throughout the semester, the control group did not. The study's hypothesis follows:

H: Students in classes which include grit-fostering interventions will report significantly higher gains in grit scores than students in classes without grit-fostering interventions.

The second part of the study sought to determine the effectiveness of the each of the six interventions in contributing to student grit. The study's research question follows:

RQ: Which grit interventions do students perceive as being effective?

Thus, this paper will report the methodology, results, and discussion for the hypothesis separately from the methodology, results, and discussion for each of the grit interventions. Chapter 3 will report the methodology for both parts of the study; Chapter 4 will report the results and discussion for each part.

Participants

IRB approval was requested and granted for this study (See Appendix D). Participants consisted of students enrolled in a Fundamentals of Speech Communication course at a Midwestern university (*N*=79). The course is a hybrid communication course emphasizing interpersonal relationships, small group communication, and public speaking; fulfills a general education course requirement; and is typically heavily comprised of freshmen.

The experimental group consisted of two sections of business-major students enrolled in the course as part of a business learning community and taught by the researcher who is a third-year graduate teaching assistant. Ages of the 29 males and 18 females ranged from 18 to 20 years (Pre-test *M*= 18.32; *sd*=.57). The control group consisted of two sections comprised of students from various majors (or undecided) and also taught by a third-year graduate teaching assistant. Ages of the 29 males and 22 females ranged from 18 to 27 years (Pre-test *M*=18.54; *sd*= .90; one outlier of 27).

Experimental Design and Procedures

This study examined whether certain types of pedagogical instruments and interventions could increase grit in college students, as self-reported and measured with the Grit-O scale created by Duckworth, et al., (2007) (Appendix E). Based on the literature of how to foster grit and college persistence in the undergraduate domain, I designed and implemented a number of

course interventions which were delivered to the experimental group through the semester with the regular course content for an entry-level communication class. The control group students were taught the course content in the usual manner, without the grit interventions.

I administered the Grit-O scale via a handout (Appendix E) to the experimental group on the first day of class (pre-test score) and again during the penultimate week of the semester (post-test). During the first administration, I explained the meaning of grit, the purpose of the study, and that participation was voluntary. Students were encouraged to respond honestly to the scale questions, given there are no right or wrong answers. Since I was also the instructor for the experimental group, and to eliminate any possible bias, students were assured that their grit scales would not be observed or tallied by me until after final semester grades were posted. Students who did not want to participate could turn in a blank scale at the time of collection, which was the end of the class period. A research statement was also included in the syllabus (Appendix A).

Data from 47 students (all chose to participate) were gathered from the experimental group. Pre-test and post-test grit scores were paired from 41 students. One female student did not have a pre-test score because she enrolled in the class late. Five students (two males; three females) did not have post-test scores. Three of these students dropped the course within the first two weeks of the semester and one at mid-term. One student failed the attendance requirement two weeks before the end of the semester.

The Grit-O scale (Appendix E) was administered to the control group in a similar fashion as to the experimental group during its second class session (pre-test) and again during the penultimate week of the semester (post-test). I explained the meaning of grit, the purpose of the study, and that participation was voluntary. Students were encouraged to respond honestly to the

scale questions, given there are no right or wrong answers. Again, students who did not want to participate could turn in a blank scale at the time of collection. Students were assured that their instructor would not see their grit scores and he stepped out of the classroom while students completed the scale. On the second data collection, students in the control group could request to see their paired grit scores (pre-test and post-test) by filling out a slip of paper with their name and the request. Students were also told they could visit Duckworth's website (www.angeladuckworth.com) to complete the 10-item grit scale and immediately learn their score. I hand-scored the grit-scale requests (six students), wrote the scores on the slips of paper, and placed each one in a sealed envelope so the instructor could give the envelopes to students after their final exam.

Data from 52 students were gathered from the control group. Pre-test and post-test grit scores were paired from 38 students. Two female students did not have pre-test scores because they enrolled in the class late. Twelve students did not have post-test scores. Of these students, one male dropped the course and seven males and four females were absent from class the day of the post-test, per the instructor of the control group.

Instrument for Grit Measurement

Student grit was measured using Duckworth's et al. (2007) Grit-O scale which I retrieved from Duckworth's (2019) website. Administration of the scale, per the website, is allowed for non-commercial purposes by researchers and educators. My modifications to the scale included the addition of demographics information for this study (See Appendix E). Duckworth's (2019) directions for taking the scale, as listed before the first question, were as follows: "Here are a number of statements that may or may not apply to you. For the most accurate score, when responding, think of how you compare to most people—not just the people you know well, but

most people in the world. There are no right or wrong answers, so just answer honestly!" Respondents answered each of the twelve items by choosing one of five responses: Very much like me, Mostly like me, Somewhat like me, Not much like me, Not like me at all. The scale consists of six *Consistency of Interests* factors and six *Perseverance of Effort* factors. The *Consistency of Interests* items included the following statements: 1) I often set a goal but later choose to pursue a different one; 2) New ideas and projects sometimes distract me from previous ones; 3) I become interested in new pursuits every few months; 4) My interests change from year to year; 5) I have been obsessed with a certain idea or project for a short time but later lost interest; and, 6) I have difficulty maintaining my focus on projects that take more than a few months to complete. The *Perseverance of Effort* items included the following statements: 1) I have achieved a goal that took years of work; 2) I have overcome setbacks to conquer an important challenge; 3) I finish whatever I begin; 4) Setbacks don't discourage me; 5) I am a hard worker; and 6) I am diligent.

After final grades were entered into the university system, I collated all student grit scales, matching individual pre-test scales with post-test scales and stapling them together. The experimental group yielded 41 pairs; the control group yielded 38 pairs (N=79). I then color-coded each question to facilitate the scoring of each scale based on the directions from Duckworth's (2019) website. Six questions on Duckworth's (2007) scale are reverse-scored as denoted by an asterisk on the scale (i.e. 2, 3, 5, 7, 8, 11). I used a red pen to circle questions 1, 4, 6, 9, 10, and 12 on each scale and wrote the answer's point value next to the student's response. Then, on a second pass, I used a green marker to circle questions 2, 3, 5, 7, 8, and 11 and wrote the reverse score point value next to the student's response.

Validity and Reliability

Duckworth's et al. (2007) 12-item grit scale demonstrates high internal consistency (Cronbach Alpha = .85) for the overall scale as well as for each factor (Consistency of Interests, Cronbach Alpha = .84; Perseverance of Effort, Cronbach Alpha = .78) (p. 1091). Duckworth's team (2007) found the two factors together "were more predictive than either alone" in measuring grit. For this study, the scale also demonstrated high internal consistency for the sample (*N*=79) with a pre-test Cronbach Alpha of .78 and a post-test Cronbach Alpha of .82.

Grit Interventions

The six pedagogical grit interventions received by the experimental group incorporated one or more of the broader vehicles for mental contrasting of the future, superordinate goal achievement, personal mastery, and self-regulation as noted in the literature based on the theoretical frameworks of the Logic of Consequence (expectancy/value theory, EVT), the Logic of Appropriateness, and Bandura's (2001) Social Cognitive Theory. These interventions included two methods of instruction, which included elements of Team Based Learning and a Job-as-Student Simulation (Appendix A), and four course assignments which included the MCII homework assignment (Appendix B), student creation of a LinkedIn profile, the College Knowledge/Degree Interview Prep assignment (Appendix C), and the Job Interview persuasive speech adaptation (Appendix F).

Instrument and Procedure - Intervention Effectiveness Survey

To measure the effectiveness of each intervention, I created the Intervention Effectiveness Survey (Appendix G) and administered it as a handout during the penultimate week of the semester, during a different class session than the Grit-O scale. Students were given

in-class time for completion. I explained the survey was part of the broader grit research study, reminding them of the study from the first day of class, and previewing the following class session as the second administration of the 12-item grit scale. I explained participation was voluntary, but strongly encouraged students to provide feedback to help improve class activities and assignments for students taking the course in future semesters. The survey included three-four questions for each intervention, which were answered using an "effectiveness rating scale," a Likert scale with the following ratings: 1=Strongly Disagree; 2=Disagree; 3=Undecided; 4=Agree; and 5=Strongly Agree. Several blank lines followed each intervention effectiveness rating scale, so students could also provide short qualitative comments, further highlighting their perceptions of each intervention. Intervention ratings and qualitative comments will be reported in the Results section of Chapter 4. A description and procedures for each intervention follows here.

Team Based Learning Instructional Method

TBL puts an emphasis on in-class application activities, team problem-solving, and critical thinking through using a "4S" problem-solving framework which include problem-solving a significant problem, the same problem, a problem with a specific choice, and simultaneous report by teams (Michaelsen & Sweet, 2008; Sibley & Ostafichuk, 2015). In other words, during class TBL teams are presented a course relevant problem, with a specific answer, which requires them to apply course concepts for solution. Teams report their choices simultaneously to the class and then verbally defend their choices to the larger group. Given the emphasis on problem solving and critical thinking, TBL is frequently used in business, health, and engineering classes more often than in communication/public speaking courses which require individual student presentations, such as the one in this study. Thus, to adapt TBL for this

study, I relied heavily on LeFebvre's (2016) TBL adaptation for the basic communication course where he effectively replaced the in-class problem solving with content and delivery application workshops.

TBL also changes the college classroom from a lecture-based model to a team-based, flipped classroom model, so implementation of TBL usually requires a comprehensive course redesign (Michaelsen & Sweet, 2008; Sibley & Ostafichuk, 2015). Thus, to implement TBL in this course as a grit intervention, I completed a comprehensive course redesign the summer beforehand, organizing the course content into five TBL learning modules which included Learning Module (LM) 1: Characteristics of Communication & Argument Formation; LM #2: Creating Compelling Content & Speech Delivery; LM #3: Interpersonal Communication Concepts of *The King's Speech*; LM #4: Organizational Communication and Job Interviewing, and LM #5: Persuasive Job Interview Presentations. This redesign also included converting my prior assessment method of three exams and a final, to the TBL Readiness Assurance Process (RAP). In the RAP process, students are assessed on their initial reading and understanding of the concepts in the upcoming learning module. Students first take an iRAT (individual test) with a Scantron form and then a tRAT (team test) over the same questions with a special type of TBL exam card, similar to a scratch-off lottery ticket. The team process encourages team discussion and engagement since teams must agree which answers to choose, resulting in the same team score for everyone. In designing my course, I planned five RAPs and one oral exam, each worth 50 points, with the opportunity to drop the lowest score (RAPs =250 course points; Final Exam=150 course points). I included this provision since I did not allow make up of missed RAP exams in order to encourage class attendance.

To implement TBL, I explained the method to students during the first class session as I was giving an overview of the syllabus (Appendix A) and created a document entitled, Ten Elements of Team Based Learning which I posted on Blackboard for the duration of the semester. I explained to students that there would be a Readiness Assessment Process the next class session over the syllabus and Team Based Learning.

I formed TBL teams using several best practices found in the literature. Michaelsen and Sweet (2008) recommend making teams as diverse as possible so teams will have members who bring different perspectives to each learning task. This diversity can be represented by any number of factors, but the rule for TBL is that the more diversity in a team, the better. Other best practices include not allowing students to choose teams; forming teams very early in the semester so bonding can begin; and creating teams of 5-7 individuals (Michaelsen & Sweet 2008; LeFebvre, 2016). To form my teams, I administered a survey to measure communication apprehension for public speaking and group communication (Booth-Butterfield & Gould, 1986) and partially used these scores to make sure each team had at least one-two individuals with low communication apprehension. I also used sex in forming diverse groups. The teams were announced during the second class session, and each team received a different colored durable folder with the individuals' names, my business card, and a TBL tRAT scratch off exam card for the first Readiness Assurance Process (RAP).

Part of my course design also included creating in-class team activities and the TBL application workshops for content creation and speech delivery. Examples of these workshops include argument formation, speech outline creation, speech introduction, speech conclusion and speech body. LeFebvre (2016) says the application workshops allow students to receive peer feedback from teams and to practice public speaking (in front of peer teams) before presenting to

the larger entire class. Specifically, during the third class sessions, students did "speed rounds" in their teams where they each delivered their one-minute introduction (or artifact) speech to their teams before delivering it to the entire class. During the second week of the course, in-class activities enabled individuals within the teams to get to know each other, and teams were encouraged to brainstorm a team name in order to create team identity.

Team names were added to the folders. Any handouts for a class session were placed in the back of the folder. This simple action helped increase peer student accountability of attendance. For example, when students were absent, they would often ask what they missed in an email or in person at the next class session. My response was always, "Any handouts will remain in the back of your team folder," and, "Check with your team to learn what you missed."

A moderator for each team was appointed each class session (via the folder) to save class time so teams could immediately get immersed in the class session's application activity; to allow each student an opportunity to practice leadership; and so teams could eventually choose the most effective leader for their team. Every student moderated approximately two class sessions before the team voted. This vote happened around midterm, the same time students provided an individual midterm peer review of each member on the team, which accounted for 3.5% of students' final grade. After the mid-term review, I communicated to students to now "wipe the slate clean" for the second part of the semester, and for the next peer review (also 3.5% of the final grade) which would happen at semester-end.

Job-as-Student Classroom Simulation

Implementation of the Job-as-Student classroom simulation was largely through messages I communicated verbally and through the syllabus (Appendix A). The simulation was not referred to every class session, but rather occasionally throughout the semester. Again, the

simulation was a way of drawing parallels between course expectations and the workplace such as physical attendance, mental attendance, project completion and working in teams. The two main functions of the simulation were: 1) to create a professional relationship with students; and 2) to communicate classroom and course parameters that foster SRL and self-regulation in freshmen. The simulation places the student in the role of a "communication recruit" who has just been hired and is beginning a semester-long, on-the-job training program designed to equip them for "future success as a college student and career professional" (Appendix A).

My role in the simulation was being a "supervisor, facilitator, and communication professional." Again, this grit intervention was trying to instill SRL in college freshmen. As such, I was trying to create a respectful, professional relationship from adult-to-adult which fostered the self-regulated learning and necessary self-regulation of their new academic domain. I didn't want to create relationships where freshmen viewed me as similar to their former high school teachers, their parents (i.e. babysitter, helicopter), or their best buddy, but rather as a fellow professional.

Hagenfeld and Olson (2016) noted a number of characteristics which enable models (i.e. role models) to be effective in an observational learning situation. Essentially, learners will "attend to" or pay more attention to a model who is similar to them (i.e. same sex, age, etc.), respected, has high status, demonstrates high competence, is attractive, and is thought of as powerful. In terms of similarity, my age is quite different from my students in that I am old enough to be their parent. This factor, as well as their opinion of my attractiveness, is out of my control. Yet, I believe my age was also an advantage in helping students view me as someone who was to be respected, with high status, and with power, since supervisors at jobs are usually viewed in this manner, and students understood I would be grading their work. In fulfilling my

role of a communication professional in the simulation, I tried to demonstrate high competence by being a confident public speaker, dressing professionally, and being punctual and organized. This modeling, while not perfect, attempted to show students how to approach the college classroom as a workplace in the career-world, post-college.

While age was not a point of similarity, I was able to capitalize on my similar status as a student to strive for effective modeling. During this study, I shared with students that I too was a student (graduate student) who could identify with some of the challenges they were experiencing as freshmen. For example, I shared how my learning tasks, albeit different from theirs, required me to study, learn, ask questions, and self-regulate. I also shared how my graduate teaching assistant job as their instructor, like their future careers, required constant learning and working toward demonstrated high competence.

MCII Homework Assignment

I developed the MCII homework assignment (Appendix B) based on the literature and researched its effectiveness as part of an independent study (Bleed, 2017). It provides students a self-reflective framework for envisioning their future college journeys through mental contrasting implementation intentions, a goal setting and goal striving exercise (Oettingen, et al., 2001). As stated in the introduction, many freshmen don't think about the specific long-term goal of college graduation in their early days as freshmen. This exercise tries to increase goal commitment for college graduation by helping students internally process their personal benefits and costs of college graduation; mentally contrast the present reality with their futures (i.e. What do I want to do with my degree? Who do I want to become through the process of attending college?), and brainstorm solutions to potential obstacles they could encounter. Based on fantasy realization goal theory, mental contrasting suggests that when people thoughtfully contrast their

desired futures with their present realities, it clarifies the personal expectations of the effort it will take to reach the goal (Oettingen, et al., 2001). To facilitate this self-reflection, students first brainstorm two positive outcomes associated "with your graduation from college" and two obstacles "in your life that could personally prevent you from graduating from college" (Appendix B). After listing two responses for each prompt, students are then asked to elaborate on each beneficial outcome in writing after imagining it as vividly as possible, and to do the same type of elaboration for their two obstacles. The implementation intentions portion prompts students to rewrite each of their obstacles and propose a specific solution using if/then statements. (e.g. "If [obstacle] then I will [solution].) Finally, in the space provided, students are prompted to "write a motivating letter to a student who is younger than you and who has the same outcomes and obstacles that you do. Explain to the student how he or she can be successful in college and persevere toward graduation" (Appendix B).

The MCII homework exercise was assigned during the second week of class over the Labor Day weekend. Students were encouraged to think of their responses over the course of several days and then to spend a minimum of one hour recording their thoughts in pencil, so they could revisit and revise their responses through their thought process. The assignment was worth 20 points, 2% of the student's overall grade for the class. Students were told their grade would be based on completion and evidence of thought processing, not over content, in order to provide an opportunity for an early, "small win" grade in order to foster student self-efficacy. A secondary benefit of administrating the MCII in the early days of the semester is that it provides the instructor a means of getting to know students based on their responses in order to form relationships. Thirty-nine students completed the homework exercise.

LinkedIn Profile Creation

The LinkedIn Profile Creation and the College/Knowledge Job Interview preparation assignments were part of the course's organizational communication and job interviewing learning module and primed students in preparing for their persuasive speech job interview presentations (Appendix F). To further enable student preparation, I requested and distributed a copy of the university's career guide to each student.

One class session was devoted to communicating the importance of LinkedIn and showing students how to set up their LinkedIn profiles. Students were encouraged to bring their laptops to the session. During the demonstration, students referred to page 24 and 25 of the career guide (Appendix H) which also highlighted the process. Again, creating a profile as a freshman allows a student to research future jobs and internships, to build her profile throughout college, and to make professional connections with peers and instructors, but it takes time. Given this, students were shown how to make their profiles "private" (not public) and encouraged to keep this status until later in college when they had at least 50 connections (recommended) and their profiles were stronger and more complete.

The assignment was worth 20 points (2% of final grade) and required four criteria: 1) a professional profile picture and background (5 points); 2) creation of a custom URL (for use in an online resumé and/or email signature) (5 points); 3) seven skills chosen for potential endorsements; and 4) connections with at least ten classmates. For project completion/grading, students could either take a screen shot of their created profiles (and turn in a hard copy) or connect on LinkedIn with the instructor. The student's score for this assignment was listed as a section on their persuasive speech rubrics.

College Knowledge/Diploma Job Interview Preparation Assignment

The two goals of this assignment were: 1) to help students practice articulation of their college learning, self-regulation, and perseverance for future job interviews; and 2) to help them create content for their persuasive speeches, specifically the third main point of the speech, where they would choose development of one skill from this assignment to highlight.

As Appendix C shows, the front of the assignment is a mock college diploma. Side two encourages student reflection and awareness by providing a framework for mentally processing and articulation of the following grit-related concepts: 1) Realization and appreciation of the fact that attending college is an opportunity, thus students should try their best to be successful (i.e. Question 1: Please explain how you acquired the opportunity to attend college?); 2) Articulation of connecting the benefits of college learning to a future career and articulation (i.e. Question 2: Please tell me about your cognitive learning abilities. Is there a particular course that has prepared you to do this job for which you are applying? Tell me a few things that you learned in this course and how they apply to your future career); 3) Articulation of SRL and self-regulation skills through reflection of showing up including articulation of physical class attendance, mental attendance, and project completion. Questions three, four, and five are designed to help students self-reflect and self-evaluate their semester performance to date on the three aspects of showing up. 4) Question five encourages student reflection of the set long-term goal of their new academic domain which is college graduation, and how to commit (or realign) en route to achieving the long-term goal (i.e. Question 5: Tell me about a time where you set a long-term goal with mile markers? What kind of self-reflection and evaluations did you do at each mile marker en route to your goal?). The final question simply asks students to reflect on what perseverance means to them.

A grade was not given for this assignment. Rather, students practiced articulation of their answers in their teams as an in-class application activity.

Persuasive Speech Job Interview Presentation

The persuasive speech job interview presentation represented a "final project" (worth 15% of the student's final grade) which integrated cumulative prior learning of the course (See Appendix F). On the day the project was formally assigned, I provided an overview of the assignment parameters and a rubric, which was similar to the informative speech rubric used earlier in the semester. Students who were present in class that day chose their speech dates (one-two speakers from each team per speech day); absent students were assigned their speech date via a Blackboard post.

Students prepared a 6-8 minute persuasive job interview presentation by researching their potential dream jobs post-graduation and role-played delivery to a hiring team from the company (i.e. their classmates), trying to persuade the audience as to why they were a great fit for the position. In general, the framework for the main points of the presentation were to include three parts. Part one exhibited the student's research and knowledge of the position's job responsibilities, the typical salary range, and the company's current activity in the marketplace. In part two, students explained why they were interested in the position and why they were a good candidate. In part three, students were to include articulations of at least one of their answers from the College Knowledge Job Interview Preparation Assignment (Appendix C) for elaboration. For example, some students highlighted a particular class they were taking and explained how the cognitive or noncognitive learning of the class would apply to their future careers. Other students explained what the word perseverance meant to them and how they would develop this perseverance through college to earn the bachelor's degree qualifying them

for this desired post-college job. Student presentations were graded in the usual manner; students received confidential, individual written feedback on their rubrics.

Data Analysis - Hypothesis

The data collected to test the hypothesis for this study included pre-test and post-test Grit-O scale (Duckworth, et al., 2007) data for both the experimental and control groups. The hypothesis sought to determine if students in the classes which received the six grit interventions would report significantly higher gains in grit than students in the classes without the grit interventions. The hypothesis required comparing pre-test/post-test difference scores of the experimental group to the control group.

I entered student pre-test responses for each of the twelve scale questions and post-test responses for each of the twelve scale questions, coding the experimental group as group 1 and the control group as group 2. I then ran a repeated measures ANOVA to compare the difference scores between the two groups.

Data Analysis - Intervention Effectiveness

The Intervention Effectiveness Survey (Appendix G) provided both quantitative and qualitative data. A total of 42 students in the experimental group, 15 females and 27 males ages 18 to 20, completed the survey (M=18.71, sd =.60). (There was one additional survey over the 41 paired grit scores due to a student joining the class after the pre-test grit scale administration.) Some intervention data was not completed by every student resulting in the following number of responses by intervention: TBL = 42; Job-as-Student = 42; MCII assignment = 39; LinkedIn Profile = 41; College Knowledge/Degree Prep assignment = 42; and Persuasive Speech Job Interview Presentation = 42.

To analyze the quantitative data, I ran descriptive statistics on students' effectiveness ratings for each intervention from the Likert scales on the survey. These results will be reported in the Results section of Chapter 4.

To analyze the qualitative data, I hired a college senior from a different university to consolidate the comments from each survey, by intervention, into one document for my review (Appendix I). (Student responses of "N/A" were omitted.) Next, for each intervention, I read through the comments multiple times, combing the data to identify common themes. These results will also be reported in the Results section of Chapter 4.

CHAPTER 4. RESULTS AND DISCUSSION

Hypothesis Results

H: Students in classes which include grit-fostering interventions will report significantly higher gains in grit scores than students in classes without grit-fostering interventions.

$$F\ (1, 77) = 2.14, ns$$

A repeated measures ANOVA showed the difference in student grit between the classes receiving grit-fostering interventions was not statistically significantly higher than the classes which did not receive the grit-fostering interventions, thus the hypothesis was not supported.

Table 1.

Tests of Between-Subjects Effects

Source	Type III Sum of Squares	*df*	*M* Square	*F*	Sig.
Group_EXP1_CONTROL2	.03	1	.03	.05	.83
Error	42.14	77	.55		

Table 2.

Descriptive Statistics Between Groups

Grit Scores (0-5)	EXP *M* (*N*=41)	CONTROL *M* (*N*=38)	EXP *SD*	CONTROL *SD*
Pre-test Grit Measurement	3.43	3.47	0.53	0.54
Post-test Grit Measurement	3.55	3.46	0.59	0.59

Discussion of Hypothesis Results

In recent years, the general public, parents, and education practitioners have become interested in grit, especially in exploring the possibilities of cultivating grit to make a person more successful in goal achievement (Muenks, Wigfield, Yang & O'Neal, 2017). Given the college dropout rate of freshmen, this study sought to apply grit to the undergraduate learning environment, specifically the college classroom, in order to foster student success and thus persistence in college students from the first day of their college journeys. Did the students in this study learn grit? Based on the results of the hypothesis, the simple answer is no. In fact, some students in the sample appeared to even decrease in grit. However, given the complex factors in this study, a simple answer of "no" may not tell the whole story. Some of the relevant factors making this study complicated included the complex construct of grit with its focus on both short-term and long-term success, a one-semester timeframe, the number of interventions (six was a lot), and the first-time implementation of some of the interventions. In addition to these factors, other considerations of the null hypothesis are also worth exploration. These include the measurement of grit, its appropriateness for measuring freshmen success and college persistence, and the effectiveness and choice of the grit interventions in this study. The measurement of grit and the hypothesis results will be explored in this section; an analysis of the interventions will follow in the section pertaining to the research question.

Can grit be taught to college students? The consensus among scholars is that students can learn grit, but it's not easy. Grit is complex. Fostering grit in the context of college persistence (grit-to-graduate) requires equipping students to achieve both short-term success (which requires a number of skills) and long-term success en route to graduation (which requires graduation to be the single, superordinate goal of future focus and stamina to get there). Fostering grit requires effecting a combination of academic mindsets, which overlap and intersect with study behaviors

and learning strategies which are intangible and difficult to measure (Almeida, 2016; Farrington, et al., 2013). The participants in this study were complex freshmen transitioning to a new academic environment, one completely unfamiliar to them. They had yet to establish academic mindsets, study behaviors, and learning strategies for the domain of college and had not yet begun the internal processing of aligning their expectations with their new academic realities (i.e. rigor and self-regulation). Perhaps their grit scores measured their amount of grit in general, but not for the specific context used for this study. Furthermore, there is debate whether a person's grit can be accurately measured.

Before Duckworth et al. (2007) developed the 12-item grit scale (Grit-O) and later the 8-item grit scale (Grit-S), grit had never been measured. However, researchers cannot study something that can't be measured, so when the grit scale predicted success in several challenging domains (Duckworth, et al., 2007), it was groundbreaking. The new fascination with grit also led to criticism of Duckworth's scale. Several researchers have claimed the scale is measuring other closely-related success factors, especially the Big Five conscientiousness (Credé, 2018; Muenks, et. al., 2017) and that the scale's predictive ability comes only from the perseverance of effort items (Credé, 2018; Muenks, et al., 2017). Duckworth et al. (2007) acknowledge grit is closely related to conscientiousness (Credé, 2018; Eskreis-Winkler, et al., 2014; Muenks, et al., 2017), however, they contend both the consistency of interest and perseverance of effort scale items together predict behavior that is action oriented for a long-term goal, which gets at something beyond what conscientiousness describes. In addition, there is considerable overlap in how success constructs are defined depending on the body of literature that is explored (i.e. personality, self-regulation, goal achievement). For example, the consistency of interest items focus more on a person's interest toward a single, long-term goal rather than interest in a

particular topic or situational interest (Muenks, et al., 2017). Credé (2018) refutes that grit is a predictor of success and performance in educational settings, or that it can be increased through interventions, claiming his prior research on study skills, study habits, academic adjustment, class attendance, effort regulation and metacognition are better predictors of college achievement. However, this study was not trying to predict college achievement, but rather positively affect college achievement through examining the construct of grit.

I chose the grit measurement and Duckworth's scale to inform how to increase college persistence in freshmen, given so many of them quit just as they are starting their long-term college journeys. Since approximately four out ten freshmen quit by the end of their freshman year (Almeida, 2016), there is an urgency for instilling grit from day one. College persistence requires students to personally master their own learning and individually earn a bachelor's degree through perseverance [*(L)Earn a degree*]. The construct of grit seemed appropriate for facilitating student reflection of their long-term goal of college graduation and self-evaluation of how they would get there. Duckworth (2019) supports using the two grit scales (Grit-O and Grit-S) for this type of self-reflection and grit research in general, but strongly advocates against using grit scale measurements for any high-stakes uses (i.e. employee selection, college admissions). For example, Duckworth's website (2019) cautions researchers not to draw conclusions from quantitative changes in grit scores, especially based on individual data. "These scales were originally designed to assess individual differences rather than subtle within-individual changes in behavior over time" (Duckworth, 2019, Research). For this reason, cause and effect of interventions from pre-test and post-test quantitative grit scores cannot be assumed. While this study did measure pre-test and post-test individual grit scores, the goal was to see if grit increased on a group basis as a result of the classroom pedagogical interventions received by

the students comprising the experimental group. Obviously, the findings of this study do not make cause and effect claims for individuals nor groups, given the null hypothesis, and actually further validate Duckworth's acknowledged limitations of the grit scales and self-report scales in general.

Psychological measures via self-report scales have a number of limitations including social desirability bias (i.e. students can fake a score to look good); "reference bias" (i.e. a distortion that comes from people holding different standards for self-judging their behavior); and differences in emotional state when a person self-reports (Eskreis-Winkler, et al., 2004; Eskreis-Winkler, et al., 2016; Duckworth, 2019). These valid limitations shed light on the fact that grit is indeed a personal measurement based on a person's self-reflection. All of these biases could have been present in the freshmen in this sample given they self-reported during the first week of college, a significant and transitional time in each of their lives.

Again, Duckworth's Grit-O scale (Duckworth, et al., 2007) consists of six consistency of interest and six perseverance of effort questions. The consistency of interest factors include long-term goal setting, passion toward a certain idea or project, and ability to commit and focus on a higher goals without being distracted by other new ideas or projects (Duckworth, et al., 2007; Duckworth & Quinn, 2009). The perseverance of effort factors include finishing what is begun, not allowing setbacks to discourage, and being diligent and hard-working en route to a goal (Duckworth, et al., 2007; Duckworth & Quinn, 2009).

While this study did not find a significant difference in grit measurements between the experimental and control groups, analysis of student scores on the two subscales (i.e. consistency of interest; perseverance of effort) yielded interesting (though not statistically-significant) results. For example, students in both groups decreased in their consistency of interest subscale

scores. As Table 3 indicates, students in both groups slightly decreased in consistency of interest scores and slightly increased in perseverance of effort scores.

Table 3.

Subscale Descriptive Statistics within Groups

Subscale/Group	Pre-test *M*	Pre-test *SD*	Post-test *M*	Post-test *SD*
Consistency of Interest Questions				
EXP (*N*=41)	3.05	3.87	3.03	3.81
CONTROL (*N*=38)	3.19	4.65	3.06	4.28
Perseverance of Effort Questions				
EXP (*N*=41)	3.81	3.44	4.07	4.4
CONTROL (*N*=38)	3.75	3.28	3.86	3.83

The decrease in consistency of interest may suggest students were happier and more care-free on the pre-test because it was the first or second day into their classes before they understood the workload ahead. On the post-test, however, they may have been exhausted and less optimistic about how their semester grades would turn out. Or, they may have subconsciously resisted thinking big-picture about their goal having now realized the effort required for completing a semester of college (i.e. “I have to do at least seven more semesters like the one I just completed”). In contrast, the increase in perseverance of effort may have reflected a slight increase in student confidence “to do” college. Perhaps on the pre-test, during the first week of college, students did not yet understand the rigor and self-regulation required of college. However, by the time they took the post-test scale the week before finals, they may have felt a sense of accomplishment and pride that they had made it through and would soon have

their first semester under their belts (i.e. “This wasn’t easy, but I did it”). The slight increase in perseverance of effort scores would also seem to support the criticism that the grit scale’s predictive ability comes mainly from the perseverance of effort items (i.e. short term success factors previously measured before the grits scales) and not the entire scale (which claims to predict long-term success) (Credé, 2018; Muenks, et al., 2017).

Given the long-term nature of grit, and the learning curve of college (especially SRL), a one-semester measurement may not adequately reflect grit that is beginning to grow in a college freshman. While grit can be learned, it’s not a one-time event or a linear project that can be completed by going from A to Z. In fact, long-term success is more of a zigzag. Every college journey will have unique challenges which will require learning by trial and error through application of the student’s unique strengths and skill sets. Grit won’t necessarily be needed until a setback, obstacle, or inflection point occurs on the journey; this could happen at any point in college. Hopefully, the grit seeds planted during a freshman’s first semester will fuel the stamina and the self-efficacy he needs to persist and overcome obstacles versus giving up and quitting.

In contrast, the freshmen in this study might learn grit in the future based on information, interactions, or their observations from this semester. Bandura (2001) noted that a person could learn observationally in the future based on interactions or information received from a model in the past through internal recall. Obviously, potential grit was not captured in the pre-test, post-test measurement of grit in this study, however future grit could have been fostered in these freshmen. As a graduate student, I have experienced “learning” from a class well after the semester was over. For example, in a previous semester I took a strategic management and systems thinking class. One of the premises of systems thinking is that when an individual is part of a system, his choices/behavior can affect the rest of the system for good or bad (Senge, 2014).

This is an example of Bandura's (2001) reciprocal determinism from the literature review of this study which states a person's behavior both predicts and determines future behavior based on interactions with her environment (i.e. models). A further application is how students who refuse to interact with their class teams cause detriment to the team. Without my prior learning from the strategic management class, I may not have made these connections or applications to my current learning. The point is that learning, like grit, is often a process of building off of prior information or experience. Likewise, the resulting fruit from the cultivation of grit may not be observable in the short-term but perhaps later in the college journey. Thus, in order to enhance the study of grit in college freshmen, longitudinal studies which reevaluate grit levels throughout their college journey would be beneficial. Persistence to the next semester would also seem to be an indicator of this growth of potential future grit.

Retention by a university is a measurement of student persistence. While this study did not seek IRB approval for this type of post-analysis of these freshmen, investigating their retention to the second semester could have provided further relevant information. Did the freshmen in the sample (N=79) who dropped the course drop out of college? Did any of the students who successfully completed the course drop out of college? If so, were the causes related to internal grit-related factors or external factors outside of the students' control?

While early success by a freshman is necessary for the long-term success of grit and is related to a student's internal processing (i.e. self-efficacy), one cannot assume dropout is always due to a lack of grit. Again, college persistence is a function of both internal and external factors. Internal factors are those shaping a student's thought processes (e.g. expectations, attitudes, and beliefs) about the undergraduate learning environment. External factors can include social, economic, academic, and institutional factors. Obviously, internal thought processes and external

factors are not mutually exclusive since any external factor can shape and influence how a student is feeling and thinking about his or her undergraduate academic situation. For example, external factors beyond a student's control (e.g. finances, health, needed at home) could cause dropout in any given semester. This discussion sheds light on the importance of longitudinal studies which track a college student's persistence one semester at a time, such as the Berea Study Panel (Stinebrickner & Stinebrickner, 2014). Similarly, fostering the grit-to-graduate in college freshmen necessitates helping them take a futuristic, long-term view of *(L)Earning a degree* and college completion. A student's strategy in achieving this completion can also affect, or be affected, by these internal and external factors.

A student's achievement of the long-term goal of graduation necessitates strategy, pacing, and funding considerations. Sometimes the wisest strategy may be to take a semester off en route to the goal. For example, if a student is paying his way through college, instead of taking out student loans, he likely will not be able to take a full course load. His college journey may take longer to complete, however his personal superordinate goal of graduation may include achieving this goal without debt. Other students may choose to fund their education through student loans. This situation makes college dropout extremely risky because these loans will have to be paid back even if the superordinate goal of graduation is not achieved. Pacing is another important part of college completion. The saying, "Better late, than never" applies. It is far better to successfully complete less credit hours than to partially or unsuccessfully complete more credit hours. One freshman in a prior class of mine was taking 18 credit hours her first semester. Of course, it was beyond overwhelming. Given it was her first semester, when she was aligning her expectations with the rigor and self-regulation required for college success, she was in danger of incorrectly concluding what a normal course load requires, leading to an incorrect

conclusion of her self-efficacy, or her belief she was capable of college success. While it is true that students need to evaluate their appropriate course loads, based on their personal strengths, weaknesses, and skill sets, history has proven that many freshmen students can successfully complete 15 credit hours. Thus, this is an appropriate bar for most freshmen to strive for in aligning their efforts with the self-regulated learning (SRL) of college. College journeys that linger and are too long-term, are also risky.

Sometimes wise strategy en route to the long-term goal includes goal realignment. A lot of freshmen have not had the privilege of exploring potential careers or undergoing personality assessments in high school. By virtue of their age, they haven't been exposed to a lot of careers which may be of interest to them. Yet, a student's confidence in their chosen major is an important part of their superordinate goal of college graduation because grit assumes a future, focused goal. The stronger the commitment to this goal, the more likely the goal will be achieved. A student without this clear goal could be at risk for thinking, "Why am I spending this time, money, and energy at college when I don't even know why I'm here." Stange (2014) and Stinebrickner and Stinebrickner (2014) noted the link between college persistence and a student's internal evaluation of costs, and opportunity costs, of college attendance. Yet, most eighteen-year olds today, like generations before, don't have their lives completely figured out, so college can be this vehicle for helping them. Others who have declared majors may find a different major would be a better fit. However, freshmen need to understand the appropriate way and time to change course en route to their long-term goal. As a parent, instructor, and adult, I have witnessed a phenomena related to freshmen grit. When college gets difficult (usually a few weeks in the first semester), or a student encounters a boring class they don't find interesting, they incorrectly assume, "I must have chosen the wrong major." So, they switch to a different

major and when that one gets difficult, as it inevitably will, they incorrectly assume again, "This major must not be the right one for me either." On one occasion several years ago, I complimented a beauty school student on the haircut she had just given me, saying she was very talented at doing short haircuts. Her response was, "Yes. I've finally discovered my dream job. I love being a cosmetologist. I just wish I hadn't attended college, changed my major seven times, and graduated with a general studies degree and about $80,000 worth of debt." Thus, part of fostering the grit-to-graduate in freshmen is encouraging them not to make adjustments to their superordinate goal in isolation, but rather to seek wise counsel about the best future course of action and timing of it. For example, instructors of freshmen can communicate this grit-related message in the earliest days of class, encouraging students to be proactive in meeting with their advisors or discussing their thoughts with an adult who will show them the implications of their goal adjustment. If they do need to change their major, doing so upon the completion of a semester (or year) will save a lot of already invested time, money, and energy. Furthermore, having them provide a rationale for their new choice, based on career exploration and research of alternative majors, will ultimately help them to persist.

In summary, while the results of this study cannot point to a measurable increase in student grit, it is hoped that four years from now (or more) the freshmen students in this study will be seniors because of some small grit learning that fostered their self-efficacy, short-term success, and long-term success.

Research Question Results and Discussion

RQ: Which grit interventions do students perceive as being effective?

The second conclusion to consider from the null hypothesis of this study is that the chosen interventions were not effective in fostering grit, or at least not a significant amount of

measurable grit. While I acknowledge this is a real possibility, in the following sections of this paper, I will explain the value of these interventions first as they applied to the goals of the communication course in this study and, second to the fostering of grit. Again, this study took place in an entry-level communication course with its own classroom learning objectives, requirements, and policies which were the first priority. However, as the proverbial saying goes, I had hoped to "kill two birds with one stone" since the course is heavily comprised of freshmen, given it is a general education course. To this end, I incorporated communication-relevant assignments with grit-related course adaptations, and did this in the context of normal classroom activities. At semester end, I was pleased with the achievement of course objectives from the majority of students in each class of the experimental group. While it's too early to conclude whether these students have enough grit to persist to college graduation, the majority successfully completed the course (with a grade of A, B, or C) providing small evidence that they are on their way.

Which interventions were most effective in fostering grit? The answer to this question could be all of them, or, none of them. All of the interventions could have had a positive effect in helping a freshman in some small way that might not be recognized until later in his college journey, or maybe not consciously recognized at all. What resonated with one student may not have resonated with another. As previously noted, students could potentially develop grit later from something they learned from one of these interventions.

Perhaps other interventions would have been better. In the Conclusion and Recommendations section of this paper, I will provide additional pedagogical ideas for fostering grit which warrant further exploration. Some of these ideas are based in the literature for which I did not have class sessions available to try. Others are based on the extant learning from the six

interventions in this study. Similar to learning in general, creating effective pedagogy is also a process of learning-by-doing, trial and error, making adjustments, and learning from feedback. I fully recognize the possibility for bias in both the quantitative and qualitative feedback of the Intervention Effectiveness Survey, because students were given class time to fill out the survey and encouraged to provide both types of feedback. In retrospect, I should have made the survey anonymous to gain purer data. Nevertheless, the feedback gleaned from the effectiveness survey (as shown in Table 4) can be useful for informing the improvement and creation of new pedagogy which will hopefully be effective in fostering college success, grit, and persistence going forward.

Table 4.

Summary of Intervention Scales Descriptive Statistics and Alphas

Scale	*M*	*SD*	*N*	Cronbach Alpha
Team Based Learning	4.65	2.12	4	.87
Job-as-Student Simulation	4.55	1.54	3	.49
MCII Homework Assignment	4.10	3.20	4	.90
LinkedIn Profile Creation	4.25	3.16	4	.88
College Knowledge/Degree Job Interview Prep	4.30	2.82	4	.93
Persuasive Speech Job Interview Presentation	4.45	2.63	4	.80

Team Based Learning Instructional Method

Out of the six interventions of this study, I believe TBL to be the most effective in affecting early, short-term freshmen success, thus contributing to the long-term success of grit and persistence. As previously noted, the TBL instructional model was chosen as a grit intervention primarily to facilitate freshmen belonging (identity and social), interpersonal

relationships, small group communication, and observational learning from peer student models. The course redesign up front to implement TBL was a big time investment but definitely worthwhile. As shown in Table 5, students rated TBL positively in terms of fostering a sense of belonging, helping them grow in character as a person, improving class attendance, and helping them communicate within a team.

Table 5.

Summary of Perceived Student Effectiveness of Team Based Learning (TBL)

Team Based Learning (TBL)	*M*	*SD*
TBL helped me feel a sense of belonging as a new freshman.	4.71	.60
TBL was effective in helping me grow in character as a person.	4.60	.73
TBL helped my class attendance.	4.60	.66
TBL helped me learn how to communicate better in a team.	4.70	.47

Note. Likert Scale of Strongly Disagree=1; Strongly Agree=5

Qualitative comments about TBL which were listed on the Intervention Effectiveness Survey (Appendix G) were also mostly positive. Based on the student comments listed in Appendix I, four themes about TBL emerged which included: 1) fostered relationships; 2) enjoyed method/made class fun; 3) improved communication and public speaking; and 4) facilitated teamwork.

TBL's team framework facilitated early student interaction which was especially crucial for freshmen. Teams were formed the second day of class as freshmen were experiencing their first week of college classes. As noted in the introduction of this paper, college freshmen transitioning to college are often nervous and stressed about their new learning environment which is so different from high school. Aside from the rigor and self-regulation required for

college courses, the college classroom also presents social challenges for students, especially in the early days of class for a number of reasons. First, most students will not know a single person in their classes, unlike the days of high school where they knew everyone. Second, students may arrive at college, particularly in the Midwest, with limited exposure to other individuals of a different, race, ethnicity, gender, or other characteristic. Finally, many students are shy or prefer to interact with their phones instead of people (i.e. some of Gen Z) making it difficult to initiate conversations. TBL provided a framework for addressing some of these social issues and for mitigating some of the awkwardness of meeting peer classmates for the first time. One student commented, "TBL helped me make new friends in people I thought I would be uncomfortable around," and another, "TBL helped me break my shyness a little bit. Plus, I love working as a team."

Being part of a team appeared to also promote a sense of belonging in freshmen as shown in Table 5, question one (M=4.71, sd=.60). TBL's practice of assigned teams means every student does indeed belong to a group of individuals for the duration of every class session and throughout the semester. Again, belonging can have an identity meaning (i.e. I can see myself as a college student), and, a social belonging meaning (i.e. I am a part of a group of people that accept me). TBL fosters the former because students come to realize that while they may be different from their teammates, they are going through similar transitions and challenges as freshmen. This helps them believe they are not the only ones feeling stressed and giving them a sense of, "We're all in this together." One student commented, "TBL was my favorite part of the semester. It really helped me feel welcome." This sense of social belonging also seemed to prime interpersonal relationships, which was a significant benefit of TBL communicated by students.

The majority of students reported that TBL helped them interact, meet, and get to know more people in the class. Several students even reported developing friendships with classmates. (i.e. “I enjoyed TBL because it helped me make a lot of friends,” and “TBL is great. I made new friends that helped and encouraged me throughout the year.”) The majority of students also commented that TBL was enjoyable and made class fun (See Appendix I). In my opinion, the primary reason students enjoyed the class was because of the interpersonal relationships they formed within their teams. TBL facilitates the interaction needed for these relationships through gentle (yet required) team engagement. Bandura (2001) noted how learning is constantly happening through interactions between a student and his environment, specifically models which include peer students.

Significantly, a number of students reported TBL as helping them engage and learn better. (i.e. “I liked this a lot. It helped me learn better.”) Again, the context of this study was a communication class which requires students to learn public speaking. Often freshmen experience communication apprehension when delivering speeches. Through the TBL application workshops, students were able to practice parts of their speech in front of their teams before delivering to the larger class. Several students reported this as an effective part of TBL (i.e. “TBL helped me to become more comfortable with my class, resulting in less anxiety when giving speeches”). Students also reported TBL as helping them learn how to communicate better in a team (M=4.70, sd .47); helping their class attendance (M=4.60, sd=.66); and contributing to a team (i.e “Helped me become more of a team player than I was in the past”). As the instructor, I observed very few social loafers, presumably because of positive peer pressure and team accountability. Perhaps attendance was positively affected because students felt their absence would be noticed by teammates, and they would be missed.

Finally, in my opinion, my relationships with students were also enhanced as a result of TBL. From the classroom management standpoint, I found it easier to interact with four teams versus twenty-five students. I was able to learn names faster and talk with individual students as I visited teams during in-class application activities. When students were absent, I encouraged them to ask their teams what they missed and to refer to the team folders for any handouts. These secondary benefits made my job as an instructor more fun and fulfilling which enhanced the classroom environment.

Job-as-Student Classroom Simulation

The two main functions of the Job-as-Student simulation were: 1) to create a professional relationship with students, and 2) to communicate classroom and course parameters that foster SRL and self-regulation in freshmen. The simulation also aimed at increasing self-efficacy in freshmen, since many college freshmen have successfully held prior jobs and understand the basic tenets of job success (i.e. showing up, doing the work, working with people, having a good attitude). Thus, to the extent that the simulation fostered SRL, self-efficacy, and the habit of class attendance, it potentially could contribute to a student's long-term college success and her grit-to-graduate.

The following student comment crystallizes the goal of the simulation in cultivating grit: "In order to be successful in anything you must show up" (See Appendix I). Bandura (2001) noted that in order for a person to learn from a model in his environment, that model must be given attention. Students miss out on learning from peers, the instructor, and the course content delivered in a class session when they are not present. They also miss important details, which can be simple in nature but crucial to success on course projects (i.e. deadlines, exam study tips).

Based on my experience, physical class attendance is the best path to college success and the most-desired habit for a student to form in self-regulated learning (SRL).

Table 6 below shows the quantitative results from the Intervention Effectiveness Survey (Appendix G). As previously shown in Table 4, the scale for this intervention yielded a Cronbach Alpha of .49 which was less than the desirable .70 standard. Given the possibility these scale results are unreliable, I will base my intervention analysis on the qualitative data of Appendix I.

Table 6.

Summary of Perceived Student Effectiveness of the Job-as-Student Classroom Simulation

Job-as-Student Classroom Simulation	*M*	*SD*
My attendance was better because I knew it was a course requirement.	4.40	.99
I learned the importance of showing up (physically) to college success.	4.64	.53
I see being successful in college as requiring the same amount of work as a full-time job.	4.60	.59

Note. Likert Scale of Strongly Disagree=1; Strongly Agree=5

Only one dominant theme emerged from the student comments in Appendix I, but significantly it was related to class attendance. The majority of the class reported that the Job-as-Student simulation affected their attendance in a positive way. Comments included, “This helped me get the importance of always showing up in class”; “Attendance being mandatory helped me be here more and helped me with the class”; “I definitely showed up more because it was required” (Appendix I). Thus, for some freshmen the attendance component of the intervention may have played an important role in helping them establish good habits and SRL. In contrast, a

few students said the intervention did not affect their attendance decisions (i.e. “Attendance didn’t make a difference for me since I would have come every day regardless”; “I would have shown up anyway, but I can see that this helps people”). Beyond attendance, some students commented on other parts of the intervention. For example, a few students commented on the simulation’s attempt to draw upon parallels between the roles of a college student and a career professional. Comments included: “This helped me be prepared for job settings in the future”; “This taught me how an actual job would want me”; “I think more classes should be this way. Being a college student is like a job, and showing up to class taught me more” (Appendix I).

The third question in Table 6 (i.e. I see being successful in college as requiring the same amount of work as a full-time job) represents a time management part of the simulation which could be developed for improvement. While I did not have an extra class session available, having students “schedule” their college work weeks might be a beneficial success activity for creating self-regulation. Explain how employees have to commit large blocks of time to their employers. In fact, most jobs typically require a minimum of a 40-hour work week. The job function of learning in college also requires uninterrupted, focused blocks of time which must be scheduled in order to be successful in the job of being a student. Share the widely repeated standard that “each in-class hour of college work should require two hours of preparation or other outside work” (Purdue.edu, 2017, p. 2) and explain how these study blocks must be allocated within a given week. For example, fifteen hours of class should equal thirty hours of study and class preparation. Students can then create a 45-hour work schedule for their semester. Such a schedule might be: 8:00 a.m. - 5:00 p.m., Monday through Friday, and Noon - 5:00 on Saturday. Students “report” to work (campus) in the morning, attend classes (“meetings”) during the day, study in between classes, and then return home for dinner. Obviously students who work

part-time or full-time, or have personal obligations, will have to be realistic about how many credit hours they can successfully complete each semester, because “college” requires a significant time investment.

In terms of fostering a professional relationship with students, I found that playing the role of a facilitator/supervisor (versus a teacher) fostered a healthy relationship between two adults, which is an important part of aligning student expectations with the protocols of the college classroom. I explained to students that I approach my job as their instructor as a “professional” working person who likes to work with other “professionals” who also care about their jobs. Some of these messages included: 1) “How many class sessions each semester can I not show up for my job of being your instructor?” (Answer: zero. While I am a human being who may have to call in sick or have an emergency, students will notice if I don’t show up to do my job.) 2) “Part of doing my job is to enforce the policies of our organization (i.e. classroom). I will do this in a just and fair way across the board.” This doesn’t mean I won’t work with a student who has established a reputation for showing up and trying, but then has an emergency. However, I have learned not to waste mental energy, time, and email notices on students who don’t care about my class until their eleventh hour. A few examples from past experience include students who are absent six times in the first month of class; students who don’t show up to class until the third week; or students who incorrectly believe their situation is a disability that warrants an accommodation (that I personally could provide). 3) I explain how to “quit right.” In the work world, people sometimes change jobs. However, they protect their professional reputations to their employers by communicating their intentions to leave; they don’t “ghost” their employers (i.e. stop showing up without any notice). While not a perfect correlation to the professional world, I explain to freshmen how to “give notice” to their employer (i.e. the

university) if they need to quit a class by sharing the difference between an “F” and a “W” on their college transcripts. Finally, I explained to students that doing a job in the real world is essentially completing projects and problem solving according to the specifications, parameters, and deadlines given to them by their employers or customers. Sometimes this includes giving presentations to a team or a larger audience over a specific topic. This particular application was especially appropriate for the class in this study, given it was a public speaking course. Again, one of the course requirements is student preparation and delivery of an Informative speech, which usually occurs in the first month of the class. As part of this simulation, I directed students to choose topics from categories related to student success (i.e. time management, benefits of a college degree, dangers of multitasking, benefits of exercise, etc.). This part of the simulation proved beneficial because students personally researched success topics and then shared their findings with their fellow freshmen classmates. Receiving these success messages from peer models hopefully had an impact on freshmen short-term success, and thus, long-term success potentially leading to persistence and the grit-to-graduate.

Mental Contrasting Implementations Intentions (MCII) Homework Exercise

The goal of the MCII homework assignment was twofold: to help students envision their long-term goal of college graduation and to anticipate obstacles they could encounter in order to pre-problem solve. Students were encouraged to spend at least an hour in self-reflection in order to complete the assignment. This powerful self-reflection has potential for fostering grit because students are envisioning the costs and benefits of their superordinate goal of graduation.

Based on the quantitative data shown in Table 7 and student comments in Appendix I, this intervention was the least meaningful to students and as such probably least effective in cultivating grit. Several students reported not remembering the assignment (i.e. “Don’t remember

this assignment"; "Forget what this is?") and several more wrote strange comments indicating they likely didn't remember the assignment either (i.e. "No opinion"; "I agree"). These comments reflected approximately half of the student responses. Granted, the assignment occurred within the first two weeks of class and this feedback was gathered the last week of the semester. However, a large number of students also responded positively to the intervention, indicating it helped them think about their college goals and future. For example, comments included: "MCII helped me reflect and think about why I am in college"; "Gave me some perspective on long and short-term goals"; "Helped me really become proactive with thinking about my future". Given the dichotomy of this feedback causes me to question whether the students who did not remember the assignment actually spent an hour in self-reflection while completing it. Yet, in order for interventions to positively affect grit, they must engage and interest students, so the MCII homework should be revised and improved to better accomplish this.

Table 7.

Summary of Perceived Student Effectiveness of the MCII Homework Assignment

Mental Contrasting with Implementation Intentions Homework Assignment	*M*	*SD*
The MCII self-reflection homework exercise was effective in helping me learn.	4.00	.86
The MCII helped me think about college graduation as my long-term goal.	4.33	.90
The MCII helped me to persevere to the end of the semester.	4.08	.98
The MCII helped me learn how to articulate/communicate about my future.	4.10	.88

Note. Likert Scale of Strongly Disagree=1; Strongly Agree=5

When I created the MCII homework exercise as part of an independent research study (Bleed, 2017), the focus of the study was to see which beneficial outcomes and obstacles-to-

graduation were most frequently listed by college freshmen, not whether the instrument would be effective in cultivating grit. However, the findings provided insights which were relevant to this grit study and its inclusion as a potential grit intervention. Bleed (2017) found the most frequently listed beneficial outcome for college attendance was the Careerist-Materialist motivation (Côté & Levine, 1997) (i.e. seeing college as a means of gaining money, status, a career, success, and the finer things in life) and the most frequently listed obstacle-to-graduation was academic-related matters which included "concerns about academic performance and/or ability to succeed at college, course difficulty, staying focused, poor class attendance, time management issues leading to poor study habits, not prioritizing schoolwork" (p. 19). The MCII exercise helps with short-term and long-term success planning, so I thought it might be an effective grit intervention.

Based on my review of the completed homework assignments, in order to assign completion grades, student responses of outcomes and obstacles were similar to my previous findings. However, my review of the MCII as a grit intervention for this study focused more on the students' thought processes about achievement of their goal of graduation (i.e. mental contrasting; implementation intention formation) rather than their responses. My review of the 39 four-page assignments yielded a relevant grit theme. Students could "vividly imagine" good outcomes from graduating from college, but many of them struggled with identifying realistic obstacles. Appendix D shows how the question was worded on the assignment: "List two obstacles in your life that could personally prevent you from graduating from college." Instead of considering what their personal obstacle-to-graduation could be, they brainstormed random obstacles that could prevent "a person" from graduating from college. For example, one student reported that if he died it would prevent his graduation; another student said an extended hospital

stay would be an obstacle, however, neither of these students had any medical issues. When I asked them about their responses, their replies were that "they couldn't think of anything." These two student responses were particularly enlightening because as the semester progressed, I could see they were excellent students who genuinely tried to complete the assignment, but who could not envision realistic, practical obstacles. Other examples of this "obstacle" phenomena included: "wanting to quit," "being lazy," "partying," "failing classes," "not finding enough motivation," "homework," and again, some of the elaborations referred to students in general, rather than to themselves. Based on these observations, I came to a conclusion which I hope will be helpful in improving the MCII instrument as a grit intervention in the future. The conclusion, though not profound, is that freshmen, by virtue of being freshmen, don't know what to expect of college. Furthermore, given they are stressed and in transition, contemplating what could go wrong might add to their stress instead of pre-problem solving, which is the goal of implementation intentions.

In response to this conclusion, I created and planned an in-class team problem-solving exercise where teams brainstormed if-then statements to typical problems a freshman could encounter (Appendix J). Each team brainstormed solutions to three scenarios and reported their solutions to the class-at-large which interactively discussed the scenarios and possible solutions. This broader discussion was an opportunity for me to highlight university resources (i.e. what's available, where to find it) and to clarify academic expectations for the college domain. For example, most students could not see any problem with the first scenario which was, "Joe is loving the college life. He and his roommate have a common interest in video games and are spending about 4 hours a day playing FortNite." Thus, this scenario was used to explain that a

full-time college student generally does not have 28 hours per week of discretionary time to play video games instead of studying.

In summary, the obstacle portion of the MCII homework exercise will need revision to make it a more meaningful exercise for instilling grit. However, the part which helps students envision and dream about the outcomes associated with college graduation hopefully creates goal awareness and commitment in freshmen as they begin their college journeys. A similar idea would be to have students create personal vision boards for their college journeys. The last part of the MCII exercise, where students write a motivating letter to a younger student, could be the foundation for a separate grit exercise with promising results given the Stanford research noted in Chapter 2.

LinkedIn Profile Creation

The goal of the LinkedIn profile creation as a grit intervention was to help students think beyond college about their future career goals. Beyond the profile creation, this activity gets students on the LinkedIn website where they can explore careers, learn about companies, and get excited about their future employment post-college. Landing a dream job or career is a benefit of earning a college degree, so highlighting this has the potential of increasing student goal commitment to graduation and thus the grit-to-graduate.

Of the six grit interventions, the LinkedIn Profile Creation (and the MCII homework exercise) received the lowest effectiveness ratings. Yet, based on the quantitative data in Table 8 and the qualitative data in Appendix I, most students found the exercise to be a beneficial learning activity (*M*= 4.17, *sd*=.97); helped them think about their long-term goal of college graduation (*M*=4.15, sd=1.01); helped them see the value of going to college (*M*=4.17, *sd*=.95); and helped them think about their future professional self (*M*=4.51, *sd*= .71).

Table 8.

Summary of Perceived Student Effectiveness of the LinkedIn Profile Creation

LinkedIn Profile Creation	*M*	*SD*
Creating a LinkedIn profile was a beneficial learning activity.	4.17	.97
Creating a LinkedIn profile helped me think about college graduation as my long-term goal.	4.15	1.01
Creating a LinkedIn profile helped me see the value of going to college.	4.17	.95
Creating a LinkedIn profile helped me think about my future professional self.	4.51	.71

Note. Likert Scale of Strongly Disagree=1; Strongly Agree=5

The qualitative comments in Appendix I also suggested that students felt creating a LinkedIn profile was beneficial in helping them prepare for their professional futures and careers after college. For example, comments included: “This helped me prepare for my future”; “LinkedIn is definitely important for my future and my career path”; “Showed me the benefit of finishing out college and gave me a view of my future” (Appendix I). Another theme that emerged from the student comments was an awareness of how LinkedIn can facilitate networking and connections (i.e. “Really helps networking. I’m happy we did it.”; “Creating a LinkedIn really allowed me to make new connections”). A connection on LinkedIn is similar to a friend on Facebook. One of the benefits of creating a profile as a college freshman is that students can build their number of connections throughout college. This assignment facilitated students “connecting” with their classmates who were also completing this project. Another benefit is that students can add accomplishments, both academic and extracurricular, to their profiles during the next few years of college.

One of the subtle motivations of the profile creation exercise is to encourage students to begin creating their future selves as successful college students—those who are involved in extracurricular activities, community service, and outside jobs. Students are encouraged to post evidence of their best work throughout college, which hopefully gets freshmen striving for excellent work (i.e. papers, speeches, projects) that they can post. When students realize they don't have much to add to their LinkedIn profiles (since high school activities and accomplishments are not usually listed unless they were extraordinary), it will hopefully encourage them to view "college" as more than just career preparation and get involved at shaping the person they want to become. To this end, one idea for improving this exercise as a grit intervention is to present it earlier in the semester as an online identity creation exercise, instead of as career preparation. Presenting it earlier in the semester would allow students to build their profiles during the course of the semester (instead of a one-assignment event), and make LinkedIn connections with more of their classmates.

An improvement for assessment of this project would be to have students bring their laptops to class for profile grading, instead of allowing them to choose between turning in a profile screen shot or connecting with me on LinkedIn. Some students struggled with printing a screen shot that captured the assignment criteria; and neither I nor some students felt comfortable becoming "connected" on LinkedIn before the end of the semester.

College Knowledge/Diploma Job Interview Preparation Assignment

The mock diploma on the front of this assignment (Appendix C) provided students a visual representation of a college degree. While a diploma is actually just a piece of paper, the degree it represents is significant evidence that a student possesses the grit-to-graduate. This tangible visual representation was intended to help students envision their superordinate goal of

graduation in order to increase goal commitment. Another goal of the project was to encourage students to practice articulation of the college learning (i.e. cognitive, noncognitive), self-regulation, and perseverance their degrees will represent to a future employer in a job interview.

As shown in Table 9, most students found value in the project and rated the grit-related functions of the assignment as being effective. Students reported the activity as helping them think about the effort required in college (*M*= 4.23; *sd*= .77); long-term goal achievement of graduation (*M*= 4.24, *sd*= .82); the value of going to college (*M*=4.33, *sd*= .82); and articulation of what the student's diploma will represent in the future (*M*= 4.36, *sd*= .70).

Table 9.

Summary of Perceived Student Effectiveness of the College Knowledge/Degree Job Interview Prep Assignment

College Knowledge/Degree Job Interview Prep Assignment	*M*	*SD*
This activity was effective in helping me learn about the effort college requires.	4.23	.77
This activity helped me think about college graduation as my long-term goal.	4.24	.82
This activity helped me see the value of going to college.	4.33	.82
This activity helped me articulate/communicate what my degree will represent in the future.	4.36	.70

Note. Likert Scale of Strongly Disagree=1; Strongly Agree=5

The qualitative data in Appendix I suggested similar findings. The three main themes that emerged from student comments included: 1) helped me think about my future and goals; 2) prepared me for job interviewing; and 3) was thought provoking. A number of student comments specifically mentioned goals in their responses which is an important part of grit. For example, "This assignment helped me think of goals"; and "It was nice to see me set goals". Some

students connected their college effort to the requirements of a successful future (i.e. “Helped me recognize my skills and showed me what college required”; “Helped me learn about college and what I have to do to become successful”) and a couple of students alluded to the value of a college degree (i.e. “Helps you understand why a degree is important and how it helps you”; “Showed me that my degree will be good for my future”). Several students focused on the assignment as good job interview preparation (i.e. “Helped me think about getting interviewed”; “This helped me better my resumé and prepare for any future interviews I may have”). Students practiced verbal articulations of their assignment responses within their teams during a class session. They were to role play being in a job interview where they communicated examples of their college learning (cognitive and noncognitive), self-regulation, and perseverance. Students were also supposed to incorporate one or two of their responses into the development of the third main point of their persuasive speeches. Only a few students did this, which means I must have been unclear when assigning this part of the project. So, a proposed improvement is to note this required inclusion on the assignment itself.

Persuasive Speech Job Interview Presentation

This study represents the fourth semester I have used this persuasive speech adaptation in my communication class. In general, students have loved this assignment. This makes sense because human beings generally like to think about their personal success and talk about themselves. Students inherently know their future careers are important to think about, but as freshmen they are too busy adjusting. Thus, if their personal research and thinking process is extracurricular, it probably won’t happen. In contrast, students complete assigned projects in order to earn the attached course points, which was 150 points in this case (15% of the final grade). Two more added benefits of this project have to do with learning from peer student

models, as Bandura (2001) noted as observational learning. First, students learn more about their classmates' hopes and dreams for the future, which further strengthens the relationships they have developed throughout the semester. They also learn about exciting career paths which they may not have considered. Second, every student is presenting on the same topic, though each of their presentations are unique to them. Occasionally, students will choose the same dream company to work for (i.e. Amazon, Google), however they are usually pursuing different positions within those companies. In these cases, I strive to have those students present the same day to ensure they do their individual research and content organization. In semesters before this adaptation, some students would choose highly controversial topics and strive to persuade the audience in 6-8 minutes toward their viewpoint. While a few students were successful in accomplishing this, most students alienated and offended their fellow student audience. Since incorporating this adaptation, I have never had a student complain about the topics or any classmate speeches.

Based on positive student feedback, this intervention shows promise for fostering grit, specifically the grit-to-graduate. Again, envisioning a positive future and thinking about the benefits of a college degree helps increase goal commitment for graduation. Landing one's dream job is one such benefit. As shown in Table 10, students reported the assignment as helping them get excited about their chosen career path (M=4.23, sd=.77); seeing the value of going to college (M= 4.24, sd=.82); learning persuasive public speaking (M= 4.33, sd= .82); and envisioning themselves as a successful professional person (M= 4.36, sd=.70).

Table 10.

Summary of Perceived Student Effectiveness of the Persuasive Speech Job Interview Presentation

Persuasive Speech Job Interview Presentation	*M*	*sd*
Doing the research for this assignment got me excited about my chosen career path.	4.38	.99
This activity helped me see the value of going to college.	4.43	.80
This activity helped me learn persuasive public speaking.	4.55	.71
Based on this activity, I can see myself as a successful professional person.	4.43	.83

Note. Likert Scale of Strongly Disagree=1; Strongly Agree=5

Student qualitative comments about the project suggested similar results (Appendix I) with three main themes emerging from the data. These included: 1) liked the assignment/favorite project; 2) helped me learn about my chosen career or potential careers; and 3) helped me get excited about my future and/or future career. While many students did not elaborate on why they liked the assignment, it is likely they perceived high task value. While all the students in this group were declared business majors, the career research, exploration, and self-reflection of the project appeared to either clarify or question their chosen career paths (not a bad realization to come to as a freshman). For example, some students reported the assignment as helping them choose a career path (i.e. “This project helped me think about what I want to do because I’m undecided”; “This made me sit down and think of what I want to do in the future”; “Without this, I would still be a little clueless on what I wanted to do after college). In contrast, a couple of students reported the project as making them question their current career choice and outlook for the future (i.e. “Got me worried if this is the right path for me”; “I have no dreams”). The majority of students, however, reported that the project helped them get excited about their future

career (i.e. “This helped me realize what I will have to do to be an actuary and got me excited about it”; “This project was really fun to put together and got me really excited for my future”; “The persuasive speech helped me realize how passionate I was about my dream job”).

Student responses to the activity helping them learn persuasive public speaking (*M*= 4.55, *sd* .80) is interesting in light of the grit conversation, especially in terms of perceived self-efficacy and aligning student expectations with reality. In preparation for their speeches, we talked about incorporating Aristotle’s artistic proofs of persuasion: ethos (speaker credibility), pathos (using emotion), and logos (providing personal examples and resumé data) into their interview presentations in a confident, yet humble, fashion so as to not sound like a know-it-all; a college graduate willing to rescue a Google or Amazon by hiring in as their CEO; or someone who expects to earn $400,000 right out of college.

One idea for enhancing this project would be to video tape each student’s presentation for their future use and future class use. If students received a digital copy, they could revisit it throughout college to renew their excitement for their futures. Also, if students gave permission, their presentations could be shown to future classes as quality examples to emulate and possibly speak as an upperclassman to freshmen students in the course.

CHAPTER 5. CONCLUSION AND RECOMMENDATIONS

Purpose of Study and Summary of Hypotheses

The purpose of this study was to explore if and how college freshmen could learn grit through pedagogical devices in the college classroom. The six pedagogical interventions designed and implemented into the course in this study targeted an aspect, or aspects, of grit; either the consistency of interest or perseverance of effort factors. These included short-term and/or long-term success factors specific to the college environment, such as self-regulated learning (SRL), self-regulation, expectations alignment, goal commitment for graduation through career planning, goal commitment through personal vision, role playing, and learning from models (i.e. peers, instructor, technology, demonstrations, instructions). The six interventions included two methods of instruction (i.e. Team Based Learning, Job-as-Student simulation) and four course assignments (i.e. MCII homework assignment, LinkedIn Profile Creation, Diploma/Job Interview Prep assignment, Persuasive Speech Job Interview presentation). To measure the possible effect of the grit interventions, I used an experimental design. The experimental group received the six grit interventions throughout the semester, the control group did not. The study's hypothesis was not supported because the difference in student grit between the classes receiving grit-fostering interventions was not statistically significantly higher than the classes which did not receive the grit-fostering interventions.

This study also sought to gain specific feedback regarding each intervention. Even though an increase in measurable grit was not observed in these classes, the quantitative and qualitative feedback which students provided for each intervention will be useful for improvement and future creation of additional grit pedagogy.

It is my hope that these interventions will contribute to current scholarship on grit, college persistence, and student success. Grit research in the undergraduate domain is becoming more prevalent in recent years, yet the majority of studies seem to be predictive in nature. This study sought to positively affect undergraduate grit. The practical interventions created and implemented for this study can be adapted for other college courses and classrooms, especially general education courses heavily comprised of freshmen.

Limitations of Study

Limitations of the study are as follows:

1. Grit is a complex self-regulatory construct representing both short-term and long-term success factors which include consistency of interest and perseverance of effort factors (Duckworth, et al., 2007). The complicated nature of grit makes it difficult to study.
2. Generalizability will be limited due to a small sample size (N=79) comprised of students from a Midwestern university. The student population at this university reflects limited diversity and is heavily comprised of first-generation students and commuters. Undergraduate populations at different types of institutions of higher learning (e.g. Ivy League schools, institutions with highly competitive admissions standards; gender-specific universities; military schools) may respond differently to the grit interventions introduced in this study.
3. All students in the experimental group were Business majors. The effect of knowing one's major is relevant to goal commitment, and thus grit.

4. Sex differences in grit were not explored in this study, however, some research shows that female undergraduates are grittier than their male counterparts.
5. Psychological measures and self-report scales, such as the Grit scale (Duckworth, et al., 2007) used in this study, have a number of limitations including social desirability bias (i.e.students can fake a score to look good); and "reference bias" (i.e. a distortion that comes from people holding different standards for self-judging their behavior); and differences in emotional state when a person takes the scale (Eskreis-Winkler, et al., 2004; Eskreis-Winkler, et al., 2016; Duckworth, 2019).
6. Duckworth (2019) cautions against using the Grit-O and/or Grit-S scales for grit measurements in pre-test and post-test intervention studies, such as was done in this study. She maintains the scales were designed to assess individual differences but not subtle behavior changes within an individual over time. Instead, Duckworth (2019) advocates using the scales for goal reflection, also done in this study to create the interventions.
7. The researcher is a third-year graduate student and graduate teaching assistant with limited college instruction and pedagogical development experience.
8. The number of interventions (six) may have impeded isolation of variables in the experimental design.
9. This was the first time Team Based Learning was implemented as an instructional strategy by this instructor.

10. The study examined grit in the context of college persistence and was only one semester long. Longitudinal studies which collect student data throughout college and in exit interviews provide better measures of college persistence (Stinebrinker & Stinebrinker, 2014).
11. This study did not look directly at persistence to the next semester.

Cautions and Criticism of Grit

Not everyone believes grit should be taught to students. Some critics oppose cultivation of grit, particularly in education settings, arguing it is a form of character education that creates further socioeconomic, racial, and character barriers between students (Bonfiglio, 2017; Saltman, 2014). Students from these challenging sociocultural contexts may have higher levels of stress and limited support systems for academic achievement compared to other students. DeSteno (2018) argued that the majority of freshmen students are stressed, so grit should always be taught through pro-social emotions and relationships rather than goal achievement. “Emotions such as gratitude, compassion, and pride give us the self-control that builds relationships with others and benefits our own future selves” (DeSteno, 2018, p. 143). These criticisms are a good reminder that both student well-being and student success must precede all fostering of grit. Success, including earning a college degree, is not an achievement worth any price. However, as noted in the introduction, since freshmen have enrolled and voluntarily chosen college attendance as their current life path, instructors must assume every freshman wants to succeed. Teaching them grit is showing them how. Perhaps “success” (short term and long-term) is a better term to use with freshmen students, instead of grit. Framing “grit” as success removes the possibility of students misinterpreting a low, self-report grit score which could inadvertently cause a self-fulfilling prophecy instead of a cultivation of consistency of interest and perseverance of effort. Still, part

of teaching success is helping students figure out alternative ways to reach their superordinate goal if one path is blocked or a setback/obstacle occurs en route. Every student's journey will be unique and every student will have to figure out how to best utilize their personal strengths to maximize their resources of time and energy. Yet every student's journey holds great potential.

College instructors are uniquely positioned and privileged to help students envision their futures and achieve success as they begin their college journeys. Inspiring this success and a love of learning in freshmen can change more than their college years, it can change the trajectory of their lives. Thus, learning how to foster success and grit in students is a noble goal worthy of continued exploration. Presently and fortunately, grit research is shifting from predicting success to helping people achieve personal success. In the following sections of this paper, I will share my own ideas and contributions to grit scholarship as well as highlight resources which offer research-based interventions for fostering success in students of all ages.

Resources and Additional Ideas for Fostering Grit in the Undergraduate Environment

Character Lab Website

Characterlab.org shares research-based pedagogy on grit and related socio-emotional qualities such as purpose, gratitude, curiosity, and self-control. Character Lab is a nonprofit organization and lab research network founded by Duckworth and two educators in 2013 with the mission of "working toward a world in which all kids thrive" through teaching them character, defined as "the intentions and actions that benefit both the individual and others" (www.characterlab.org). While the activities appear to have been created for middle or high schoolers, they are relevant and applicable for any age group. Each activity was developed based on research from the organization's lead researchers which include twenty prevalent researchers

of grit, growth mindset, and student success including Dweck, Duckworth, Eskreis-Winkler, Galla, Oettingen, and Yeager. Examples of the grit activities, which include directions and printable handouts for educator use, include "Two Stories" (Jones, Destin, McAdams, 2018), "My Values" (Cohen & Sherman, 2014), and "Expert Practice for Classrooms," designed by Ericsson, a professor of psychology from Florida State University internationally known for his work on expert performance and deliberate practice (www.characterlab.org). Character Lab (2019) offers a blog subscription with weekly thoughts and ideas for instilling each character quality, including grit. As previously noted, Duckworth and her team received a grant by the Gates Foundation to develop and research the College Persistence Survey, evidence of the broader national interest in cultivating grit in college students.

Growth Mindset

Given the particular relevance of growth mindset on learning, pedagogical devices focused on affecting growth mindset could definitely contribute to fostering student success and grit in the undergraduate domain. Growth mindset is closely related to both self-efficacy and grit because a student's mindset plays a key role in their motivation and achievement (Dweck, 2015; Dweck, 2016; Eskreis-Winkler, et al., 2016). Students who approach learning with the idea that they can grow, change, and develop their intelligence (a growth mindset) outperform students who don't believe this (a fixed mindset). Dweck (2016) provided a comprehensive overview of growth mindset; how to positively affect it, and how adults (i.e. teachers, instructors, parents) can communicate it to students of all ages. "Simply learning about the growth mindset can sometimes mobilize people for meeting challenges and persevering" (Dweck, 2016, p. 234.) To accomplish this learning, Dweck (2016) recommends lectures, workshops, and structured programs which focus on teaching students the process that leads to learning, such as "hard work

or trying new strategies" (Dweck, 2015, p. 20) In communicating growth mindset to students, Dweck says it's important not to equate growth mindset exclusively to effort, even though effort is an important factor in achievement. Students must also try new approaches and get feedback from others when they're stuck in order to learn and improve (i.e. "What could you try next?"). Growth mindset pedagogy is also designed to show students how the brain grows and changes as it learns, and how to maximize their brain's performance (through sleeping enough, eating right, and using good study strategies) (p. 232). Recent neurological breakthroughs proving the power of one's ability to change his mindset and physically change the plasticity of the human brain, provide instructors compelling evidence on which to design these pedagogical devices.

Healthy Coping Mechanisms Pedagogy

Given the number of students with anxiety and depression, stand-alone class sessions which help freshmen adopt healthy coping mechanisms and new routines in the early days of college could be instrumental in helping them adjust, cope, and succeed. A student's personal resources of time and energy profoundly affect their ability for self-regulated learning. Similar to how Dweck's mindset information communicates the mind/body link, students could learn information such as the benefits of exercise and adequate sleep, how to create a new routine, or the effect of binge drinking on class attendance. Workshops could highlight university resources such as student gym memberships, student life activities, and mental health support services. Through interactive team discussions or problem solving of freshmen scenarios (see Appendix J), freshmen could learn from their classmates that they are not the only ones feeling down or stressed, and hear messages of what is working for other students. In prior semesters, I have had students personally testify about how adding workouts to their schedules improved their academic performance.

Understanding Cost and GPA Pedagogy

GPA and college funding affect college persistence, so freshmen need to understand how their self-regulated learning and academic performance are linked to these important factors. Too many freshmen don't understand their financial aid is linked to their academic performance, and how their overall GPA is calculated. It's better for them to know this at the beginning of freshmen year, so they learn SRL, to attend class, and try their best so they don't end up on academic probation, which will likely hurt their self-efficacy and success trajectory. Students who pay their own way understand the costs associated with the opportunity to attend college. Students who receive full financial aid or have their way paid by someone else don't always make this connection. Yet, they need to hear that someone is paying for their opportunity to *(L)Earn a degree*. It is not free and there are academic strings attached. Given this reality, freshmen also need to understand how their GPA's at their universities are figured. For example, if a freshman understands how earning a B+ in a four credit class affects his GPA more than earning an A in a one credit class, it might help her focus appropriate time and effort to aid in self-regulated learning (SRL). Or, if students understand the damage that one F can do to their college GPA, they may exert more effort to turn their grade around or at least appropriately withdraw from classes.

Success Messages from Older Students

Interventions where older students give "success" messages to freshmen, such as in the Stanford studies, appear extremely promising. Specific messages explaining different tips for short-term success, long-term success, feelings of belonging, etc. . . could strategically be delivered by older students to incoming freshmen throughout first semester. Applications of this could include peer mentor programs where a senior is matched with a freshmen; Q & A

discussion panels where freshmen can ask seniors questions; senior writing projects where welcome letters are written to freshmen; upperclassmen class visitations to general education classes; or weekly senior videos posted to a student's personal university webpage. University faculty and staff, of course, can also deliver these messages, but a freshman's "hearing" of the message appears to greatly increase if the medium is an older, successful student. Perhaps the most important message for freshmen to hear is how to become self-regulated learners.

Success Messages from Classmates

Using a "Question of the Day" to take attendance is a good way for students to hear messages from their peers. For example, "What's your best study tip?" "What are you thankful for that begins with the letter __?" "Why did you decide to attend college?" When I once asked the latter question during a class session, I observed a profound change in one student going forward. This student had not completed any homework during the first half of the semester. While I'm not sure which student response motivated him, I believe it was two responses of students who were his same nationality. One female responded, "Neither of my parents went to school beyond eighth grade. I'm the first one in my family that gets to attend college. They really want me to succeed, so I'm not going to let them down." The second student response was, "I currently work at a foundry where I get lots of burns on my arms. I don't want to work there the rest of my life, so I'm going to college to get a job I like." My messages to the class about the importance of completing homework did not seem to have any effect on this particular student, however, every day after hearing his classmate's responses, he successfully completed his homework and eventually the course.

Life Purpose and Butterfly Effect Pedagogy

One pedagogical idea for helping students self-reflect on how their lives, college attendance, and college choices transcend themselves is to introduce them to the Law of Sensitive Dependence Upon Initial Conditions, also known as the butterfly effect. The butterfly effect shows how small changes within a system (i.e. one person's choices) can have multiple ripple effects with significant consequences to the rest of the system, even changing history. I first learned of this concept through a graduate-level strategic management and systems thinking course. While I did not have time to incorporate butterfly effect pedagogy as an intervention for this study, I developed a related essay assignment completed by two students to earn back course points they had lost due to excessive class absences (Appendix K). The assignment required students to read a short book which recounts human examples of the butterfly effect, entitled, *The Butterfly Effect, How Your Life Matters* (Andrews, 2011). Its message is that every person can live a life of permanent purpose by realizing his life and choices significantly impact the world around him.

Ideas for Fostering Grit at the University Level

Universities have a responsibility and stake in helping students succeed and persist. With the advent of online programs, today's students have higher education options beyond that of previous generations. The national problem of college debt has been widely publicized. Highly successful individuals, such as Steve Jobs, Bill Gates, and Mark Zuckerberg, were college dropouts, casting doubt on the value and necessity of a college education. Thus, every enrolled freshman represents an opportunity for an institution to educate. Students who don't succeed at any point along their college journeys are at risk for dropping out. This prevents a university of higher learning from the opportunity to fulfill its mission. Thus, fostering the short-term student

success and the long-term student success represented by the grit-to-graduate in this paper, represents a necessary priority for every educator and university. Furthermore, this priority must include the two interconnected goals of facilitating the student learning of a college degree while simultaneously developing the success and grit needed to earn that degree (i.e. *(L)Earn a degree*). Universities must be as intentional in fostering grit as they are in educating students. Indeed, the self-regulatory nature of grit makes this a challenge which is why I propose persistence and grit training should be a mandatory part of a student's college education, instituted in a variety of ways at the university level. Universities must be gritty at teaching grit to students. Since learning grit is a process, not an event, this learning must begin day one of freshmen year and be revisited and reinforced many times throughout the years until students achieve their long-term goal. A few ideas for implementation of grit training at the university level follow.

One-Credit Success Courses

Many universities already incorporate mandatory freshmen seminars into their curriculums. These are worthwhile investments because as Benjamin Franklin once said, "An ounce of prevention is worth a pound of cure." Given the significance of a freshman's first semester toward her future college success trajectory, it is far better to present success strategies first semester than to show them what to do differently when they are on academic probation. Again, a student's academic self-efficacy is tied to their college persistence (Stange, 2014; Stinebricker & Stinebricker, 2014). Yet, every student regardless of their year in college is at risk for dropping out if (when) they encounter an obstacle or setback that causes to them to quit. While these obstacles could be external factors unrelated to the university, they also could be extremely related (and thus coachable) to the undergraduate academic environment. For

example, one project, class, or lack of plan of study could be the obstacle which causes the student to drop out before the university notices. Mandatory sophomore, junior, and senior one-credit seminars would facilitate students' continuing education of grit and success. These classes could also facilitate a student's long-term goal setting and monitoring of their progress toward graduation, providing tangible mile markers for recommitment to their overall goal. Advisors obviously provide this function, however, like use of other great university resources, students must be the initiators which often is not the case.

These yearly seminars could also incorporate (and mandate) a number of extracurricular success activities related to college success and career planning (i.e. resumé building, LinkedIn Profile creation, mock interviews) to create ongoing excitement and direction for a student's future beyond college. As mentioned earlier, the classes in the experimental group of this study were part of a business learning community which incorporates a one-credit freshmen seminar, and a mandatory "points" program into its curriculum. In a prior semester I saw a number of freshmen excitedly talking about earning their "points" by attending a weekend leadership retreat, interviewing a professional in their future career field, or attending a speaking event. When I mentioned this positive observation to one of their advisors, she responded, "Gen Z does not do optional." As I have pondered that comment, I have concluded that humans don't do optional—especially overwhelmed college students. In fact, an important part of self-regulation is making wise time management choices based on priorities. When activities (and courses) shift from being optional to mandatory, students will make them a priority. Having structured programs such as these to deliver grit training communicates to students their institution cares about their short-term success, long-term success, and learning.

Pedagogical Grit Overlays in General Education Courses

Freshmen need to hear grit messages often and in a variety of ways. Every instructor of every class shares responsibility in fostering college success, persistence, and the grit-to-graduate in students. As highlighted throughout this paper, there is a variety of grit pedagogy that could be included or adapted for virtually any discipline or college course. Most university courses highlight university resources to students via the course syllabus. What if some amount of specific grit-to-graduate training was incorporated into every college course, especially general education courses? Universities could create pedagogical grit overlays that could easily be incorporated or added into current general education courses. These ideas and learning objectives could be shared with instructors of general education courses as part of professional development training. Student success coordinators or career services representatives could also deliver grit messages to general education students through workshops devoted to specific grit topics.

Institutional Attendance Tracking in General Education Courses

Communicating to freshmen the importance of class attendance will help them align their expectations with the rigor and self-regulation required of college. Given the importance of class attendance to self-regulated learning, institutional-wide attendance recording systems for general education courses could help freshmen develop good academic habits and a success trajectory early on. A simple phone call to a student from a university representative (i.e. advisor, success center administrator) could provide powerful attendance accountability for a freshman prone to skipping class. Again, class attendance is often crucial for course success. Freshmen who do not attend class miss out on the learning that occurs in that class session (i.e. content), the potential observational learning from models (i.e. peer students, instructor), important project instructions, and deadlines. Some of these same students will then complain about instructions being unclear,

or students in attendance will complain that instructions were repeated. Another benefit of institutional attendance tracking includes a university's earlier detection of freshmen at risk, because skipping class usually precedes dropout, improper withdraw from courses, and academic failure. Finally, placing class attendance for freshmen as a university requirement enables instructors to focus on student learning and not be the "bad guy" in enforcing an attendance policy fairly to all students. I recently had a student who had attended the first two class sessions of the semester but missed the next eleven. I assumed she had dropped the course, but when I saw her name still on the roster, I emailed her suggesting she withdraw. Her response was, "I can't afford to drop this course. My employer is paying for this." While her absences sounded legitimate due to a health problem, neither I nor her team mates remembered her nor had she completed any of the coursework. Even if she began regularly attending at that point, other students, especially those on her team, would have questioned my enforcement of the class attendance policy. I first heard about the concept of institutional attendance monitoring when accompanying my son on past college visits. One smaller university (with an engineering-focus) tracked freshmen attendance, claiming it contributed to student success. Their method was very manual in that instructors manually reported attendance to a university official. However, with today's technological advances surely an application to facilitate this idea exists.

Implications for Future Research

The study of grit is only a little over a decade old. Duckworth's (2007) development and testing of the Grit-O and Grit-S scales ushered in a body of exciting research which focused on predicting success in challenging domains. Participants in Duckworth's original study included Ivy League undergraduates, cadets at West Point Military Academy, and finalists in the National Spelling Bee (Duckworth, et al., 2007). Indeed these are challenging domains, but not the

challenging domains of the masses. Recent grit studies (Eskreis-Winkler et al., 2016) seem to represent a shift on two fronts. First, instead of predicting grit, more studies are asking how to cultivate grit. Second, studies are examining how grit can be cultivated in challenging domains more common to everyday people. This kind of future research should continue because it will be more beneficial and generalizable to more individuals.

While the cultivation of grit in college students is becoming more prevalent, future research is desperately needed given the perennial problem of freshmen college dropout. College is indeed a challenging domain for an undergraduate, and especially for a complex freshman who is adjusting to a new, unfamiliar domain. This study applied grit to the college domain in order to foster college persistence and student achievement of the long-term goal of college graduation (i.e. grit-to-graduate) and sought ways to foster this grit at the classroom level through pedagogical interventions. More studies which create practical grit interventions and classroom pedagogy are needed, so educators can adapt, incorporate and implement grit training into their courses with ease. Specific focus should be given to the development of interventions which teach students self-regulated learning and growth mindset. These interventions should be tested, one at a time, for effectiveness and thus improvement.

Universities should explore incorporating success training (short-term and long-term) through structured programs in their educational curriculums. Students, especially freshmen, need to hear the important message of college persistence but also be reassured their university will show them how to learn and how to be successful, so they can earn a degree. More research is needed on how educators positively motivate freshmen class attendance and study the effects of this attendance on college persistence.

Finally, more qualitative studies are needed. Exit interviews of students who drop out could provide rich prevention data. Focus groups and interviews which capitalize on upperclassmen reflections should be conducted to inform the best way to communicate success messages to freshmen, especially of students who almost quit, but then rallied and persevered to graduation.

Conclusion

What is the solution to the problem of college dropout by students just beginning the first leg of their college journey? Self-regulated learning? Academic Success? Adjustment support? Persistence? Grit? Yes. Yes. Yes. Yes. Yes. The solutions are easy to identify but difficult to make a reality for each and every freshman. While pedagogy to foster grit and success early on in the college classroom, can and should be implemented, there are no one-size-fits-all solutions and all dropout cannot be prevented. Yet, behind every dropout statistic there is a student with a story, a future, and an unmet goal. Freshmen should be introduced to the concept of the grit-to-graduate early in their college careers, and the concept should be revisited as students are sophomores, juniors, and even seniors, because all students are at risk for dropping out until they walk across the stage to receive their diploma.

Teaching grit is teaching college persistence. The main conclusion of this study is that the multi-faceted construct of grit captures the critical factors needed for college success. Each college freshman is a unique individual with unique strengths, weaknesses, cognitive abilities, and noncognitive abilities which he brings to the higher learning environment; each must learn to personally master this learning using his abilities through application of time, energy, and effort. Teaching grit shows them how, as the grit-to-graduate captures self-regulation and self-regulated learning (SRL) needed for their personal success. To foster the grit-to-graduate is to foster short-

term success in conjunction with long-term success. It clarifies this long-term success as the superordinate goal of *(L)Earning a degree*, highlighting the prize of a bachelor's degree as evidence of significant learning and student mastery of a diverse set of noncognitive skills, especially persistence.

Educators and universities are privileged to play a crucial role in shaping the next generation of students for success in college and beyond. Many people regret quitting college; no one ever regrets graduating. Fostering grit is fostering success. It is a noble and necessary effort to encourage each and every student toward academic success, persistence, and perseverance toward their goal of earning a degree, for a college diploma will indeed change their life for the better.

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APPENDIX A. COURSE SYLLABUS

Fundamentals of Speech Communication
Public Speaking • Interpersonal Relationships • Teams • Critical Thinking

Purdue University Fort Wayne
Fall, 2018

Section COM 114-10L	M,W, F	11:00 - 11:50 AM	Kettler 239
Section COM 114-14L	M,W, F	2:30 - 3:20 PM	Kettler 247

Contact Information and Course Details

Instructor: Mrs. Lynette J. Bleed ("Lynette") Email: Bleelj01@pfw.edu (best way to reach me)

Office: Neff Hall 239A Office Phone: 260-481-6825

Office Hours: Monday, 3:30 PM - 4:30 PM; Wednesday, 9:45 AM- 10:45 AM and happily by appointment.

Text Book & Course Websites

Communication in Everyday Life, Second Edition: The Basic Course Edition with Public Speaking.
(Digital copy provided by PFW through course fees. Access via Blackboard.)

APA Citation:
Duck, S., & McMahan, D.T. (2017). *Communication in everyday life: The basic course edition with public speaking* (2nd ed.). Thousand Oaks, CA: SAGE Publications.

Blackboard website: www.mypfw.edu

Course Description & Learning Objectives

The goal of this course is to examine, explore, and understand communication in our everyday lives through critical thinking, interactive discussion, classroom practice, and application of theories and research. Through a relational perspective, a supportive class atmosphere, and team-based learning, we will focus on three fundamental areas of the communication discipline including interpersonal communication, small group communication, and public speaking, with an emphasis on creating compelling content and improving delivery skills of a presentation to an audience.

Upon completion of COM 114 students should be able to:

- Use appropriate organization or logical sequencing to deliver an oral message (outcome 2.1)
- Adapt an oral message for diverse audiences, contexts, and communication channels (2.2)
- Identify and demonstrate appropriate oral and nonverbal communication practices (2.3)
- Advance an oral argument using logical reasoning (2.4)
- Provide credible and relevant evidence to support an oral argument (2.5)
- Demonstrate the ethical responsibilities of sending and receiving oral messages (2.6)
- Summarize or paraphrase an oral message to demonstrate comprehension (2.7)

Methods of Instruction

Course & Classroom Context - Think of this class as a job simulation where you have just been hired for the position of Communication Recruit. Your instructor's role is that of Supervisor, Facilitator, and Communication Professional. COM 114 is your semester-long On-the-Job training program designed to equip you for future success as a college student and career professional. Note: You can expect approximately 3-6 hours of work outside of class per week.

Team Based Learning (TBL) - TBL is an instructional method that capitalizes on small-group communication, problem-solving, and application skills. As groups become teams during the course of the semester, students will benefit from interactive discussion, project collaboration, peer review, and individual practice of speeches through in-class workshops (Michaelsen, Knight, & Fink, 2004; LeFebvre, 2016). For more information regarding TBL for this class, refer to the handout on Blackboard entitled, *Ten Elements of Team Based Learning*.

Teaching Philosophy of Lynette J. Bleed

You are the master of your own educational experience! Your effort, attitude, and perseverance will determine your growth and success in this course and beyond.

Improving your communication skills will serve you well in every area of your life including your self-confidence and self-worth, your personal and professional relationships, your leadership and team skills, your job interviews, and your public speaking and presentation skills. So, this class is a great opportunity to grow and improve your speaking and listening skills, regardless of your current level of communication proficiency. I am confident you won't regret the investments you make in becoming a better communicator!

As the class facilitator, I will be a leader who is prepared and patient, and I will try my best to make our learning engaging and interesting through meaningful discussion, challenging assignments, and fair but rigorous assessment. I will share my communication experiences with you, answer your questions, and consider all perspectives, and I ask that you do the same for me as well as each other. I will care about your progress and provide grades, assignment feedback, and email responses in a timely manner. Together, we will strive for excellence (not perfection) as we improve as communicators together. I will do all that I can to ensure your experience in this class is the best that it can be, but please know that learning requires hard work, effort, and changing the way you do things based on critical feedback. Please see me during office hours if you have any concerns.

My expectations for you as a COM114 student are that you will be prepared, engaged, and try your best. Be respectful and professional in how you treat your instructor and fellow classmates. (See Course Policies.) Let's chase success together!

"A goal without a plan is just a wish." Antoine de Saint-Exupéry
"If you aim at nothing you will hit it every time." Zig Ziglar

Course Policies

Classroom Climate - "Respectful, Professional, Supportive"

In order to foster a safe and enjoyable climate for engaging class discussions, please respect others and share your own opinions in a respectful manner. Hostile language, profanity, inappropriate laughing, sighing, mocking, interrupting others, and carrying on other conversations during class discussion or any

electronic communication will not be tolerated. Disruptions including (but not limited to) sleeping in class or using electronic devices for reasons other than to engage with the text are not allowed. Please silence your cell phone at the beginning of class and excuse yourself from the classroom in the case of an emergency.

Absolutely no harassment or discrimination will be tolerated in association with the activities of this class. The Purdue Fort Wayne *Code of Student Rights, Responsibilities, and Conduct* states: "The university believes that diversity among its many members strengthens the institution, stimulates creativity, promotes the exchanges of ideas, and enriches campus life…Purdue University Fort Wayne prohibits discrimination against any member of the university community on the basis of race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability, or status as a veteran." Disrespectful behavior toward other students or the instructor can result in dismissal from class without the opportunity to make up missed exams, assignments, and/or speeches.

Attendance and Participation (Mandatory)

- Treat this class as you would a job in the real world. You cannot perform a job if you are not physically and mentally present. Each class session provides a valuable opportunity to learn communication skills, to practice, to contribute to your team, and to receive peer and instructor feedback.

- Attendance will be taken *at the beginning* of every class. Three "lates" will equal one absence. (A "late" is defined as coming in after the door is shut or after your name is called for the Question of the Day.)

- Within 24 hours of a missed class session, send a message through Blackboard to the Attendance File and attach any relevant documentation. Every absence requires notification. (Note: This is a one-way reporting system from you that registers your class absences throughout the semester with the instructor and university. You will not receive a confirmation email, however, your documentation will remain on Blackboard.)

Attendance Rubric

Absence #1: no penalty
Absence #2: no penalty
Absence #3: no penalty
Absence #4: 25 point penalty of participation points
Absence #5: 35 point penalty of participation points
Absence #6: 55 point penalty of participation points
Absence #7: COURSE FAILURE

The instructor reserves the right to use discretion with absences. Please schedule an appointment (during office hours or at Bleelj01@pfw.edu) if you have extenuating circumstances that require an individual review of your attendance documentation.

"90% of success in life can be attributed to showing up." Anonymous

Bringing Visitors to Class

With the exception of service animals or university aides, please do not bring to class your pet, child, girlfriend/boyfriend, parent, or anyone else whose name does not appear on the roster.

Grade Questions, Emails, and Social Media Policy

Please communicate with me outside of class through PFW email at Bleelj01@pfw.edu. (With the exception of absence documentation, I **do not** check Blackboard messages, only email.) I will respond to all emails on a timely basis. If you do not receive a response within 48 hours, assume your email did not arrive and kindly resend.

If you have a question regarding your grade in the class or on a particular assignment, please see me during office hours—not before or after class and *not by email*—so confidentiality is ensured.

When sending me an email please include in the subject line: "Question/Comment from *YOUR FIRST AND LAST NAME*"

Please do not tape record your peers or instructor during class sessions and post to social media without their consent.

Due Dates, Late Work, and Make-ups

Homework assignments are due at the beginning of class and will be submitted via Blackboard or hard copy, depending on the assignment parameters. *No points will be given for late work.* (Note: "Late" is anything with a time stamp after the class start time.)

Due to the Readiness Assessment Process for individuals and teams, there are **NO MAKE-UPS FOR EXAMS.** Missed speeches due to a legitimate emergency will be evaluated for makeup per instructor discretion. If the absence is excused and email notification and documentation is received by 5 p.m. on the missed presentation date, you will be eligible to give your speech the next time you are present at a 10% reduction per class session. Note: Delivery of the speeches is mandatory to pass the course. In the event that you are presenting a speech for zero points, I will still provide feedback on the speech for your learning benefit.

Academic Integrity

All students are expected to behave honorably throughout this course. Academic Misconduct, including plagiarism (using other people's ideas/words and not giving them credit thus implying the work is your own original work) or using your own work from a previous course without the express permission of the instructor, is taken very seriously at any learning institution. You are responsible for knowing how to maintain academic honesty and for abstaining from cheating, the appearance of cheating, and permitting or assisting in another's cheating. (For behaviors that constitute academic misconduct See Bulletin, Code of Students Right, Responsibilities and Conduct Part II.) Cheating, plagiarism, or academic dishonesty will result in an automatic zero for that assignment and can potentially lead to a zero in the entire course if so advised by the Department of Communication. Any instances of academic dishonesty will be reported to the Dean of Students and your Department Chair and may result in expulsion from the University. Additional potential consequences can be found under: potential consequences (See Bulletin, Code of Students Rights, Responsibilities and Conduct, Part III. A.: i.e., failure of the assignment, failure of the course and/or dismissal from the university) of such behavior.

Disabilities

If you have or acquire a disability and would like to find out what special accommodations and services may be available to you, please contact the Services for Students with Disabilities Office, located in the Walb Union, room 113B (Phone: 260-481-6657; https://www.pfw.edu/ssd/). Upon my receipt of the official written documentation from the SSD office, I will gladly facilitate the recommended individual accommodations. **Please communicate with me about this during the first week of class or as soon as it becomes relevant to your situation**. (Note: Please allow a minimum of at least two class sessions prior to the necessary accommodation.)

Student Resources

- **Purdue Online Writing Lab (OWL)**—great resource for all questions concerning APA style, including papers and in-text citations: https://owl.english.purdue.edu/
- **Helmke Library and Website**—Books, journals, scholarly articles and references. https://library.ipfw.edu/
- **Center for Academic Support & Advancement (CASA)**—Located in Helmke Library, 2nd floor. Student support for study skill development, tutoring, supplemental instruction, English as a Second Language (ESL)
- **Communication Speech Lab**—Located in Helmke Library; 2nd floor. Students can meet with a consultant to practice and get feedback on speeches and presentations.
- **The Writing Center**—Located in Helmke Library; 2nd floor. Trained peer tutors will help you with your writing and formatting for any subject.
- **Studio M**—Located in Walb Union 220 and Helmke Library; 2nd floor. By appointment, customized assistance for your multimedia needs. https://www.pfw.edu/studiom
- **IT Services Help Desk**—located in Kettler 206. Hardware and software support, student e-mail accounts, my IPFW, and Blackboard.
- **Office of Diversity and Multicultural Services**—Located in Walb Union 118. Provides a support system for African American, Hispanic, Native American, International, Asian American, first generation and non-traditional students. (260-481-6608; www.pfw.edu/odma)
- **Personal Counseling Services (PFW/Parkview Student Assistance Program)**—Located in Walb Union 113. Offers free and confidential services to all currently enrolled PFW Students. (260-266-8060; www.pfw.edu/counseling). **AFTER-HOURS CRISIS LINE: 260-446-1867**

Instructional Research Component

In an effort to continually improve upon coursework, class activities, and assignments that contribute to student success, teaching instruments may be introduced, developed and revised throughout the semester. Any content analysis of student responses will have identifiers removed so that in no way will research conducted affect student grades.

Course Requirements

- Graded speeches (one informative, one persuasive, one group presentation)
- Six exams and one final exam that will collectively count for 40% of the student's final grade
- One Media Analysis Paper

Department mandated: A student must have a grade average of 60% on exams and 60% on non-exam assignments in order to pass the course. This means that you must score a cumulative of 240/400 points on the exams in this course, and 456/760 points on speeches, assignments, participation, and the MA paper. (Example: Earning a 50% average on the exams and a 95% average on all other assignments would result in course failure.)

Note: See attendance policy for speeches. Course requirements must be met for a passing grade in the class. (All three speeches must be given, even if for 0 points.)

APPENDIX B. MCII HOMEWORK ASSIGNMENT

Mental Contrasting with Implementation Intentions Exercise (MCII)

This MCII is a self-reflection, goal-setting exercise designed to create self-awareness and individual problem solving. The more thoughtful consideration you put into your answers, the more beneficial the information will be to your future. A *minimum of one hour* should be devoted to completion.

Each student's path to graduation will be unique! Therefore, there are no "right" or "wrong" answers. The key is twofold: 1) to identify *your* specific beneficial outcomes from obtaining your college degree, and 2) to identify obstacles that could restrain your progress toward this goal and brainstorm possible solutions to these obstacles in the form of if/then statements.

This exercise will not be graded based on your content as much as the evidence reflecting your thought processes, your elaboration, and your vivid imagination of your outcomes and obstacles. Complete the assignment in pencil, so you can make revisions as you ponder your responses over several days.

Part One

List two **Positive Outcomes** associated with your graduation from college:

Positive Outcome #1

_____

Positive Outcome #2

_____

Part Two

List two **Obstacles** in your life that could personally prevent you from graduating from college.

Obstacle #1

_____

Obstacle #2

_____

For **Outcome #1,** please elaborate on this outcome in writing after imagining it as vividly as possible.

For **Outcome #2,** please elaborate on this outcome in writing after imagining it as vividly as possible.

For **Obstacle #1**, please elaborate on this obstacle and the reasons *why* it could prevent you from graduating from college.

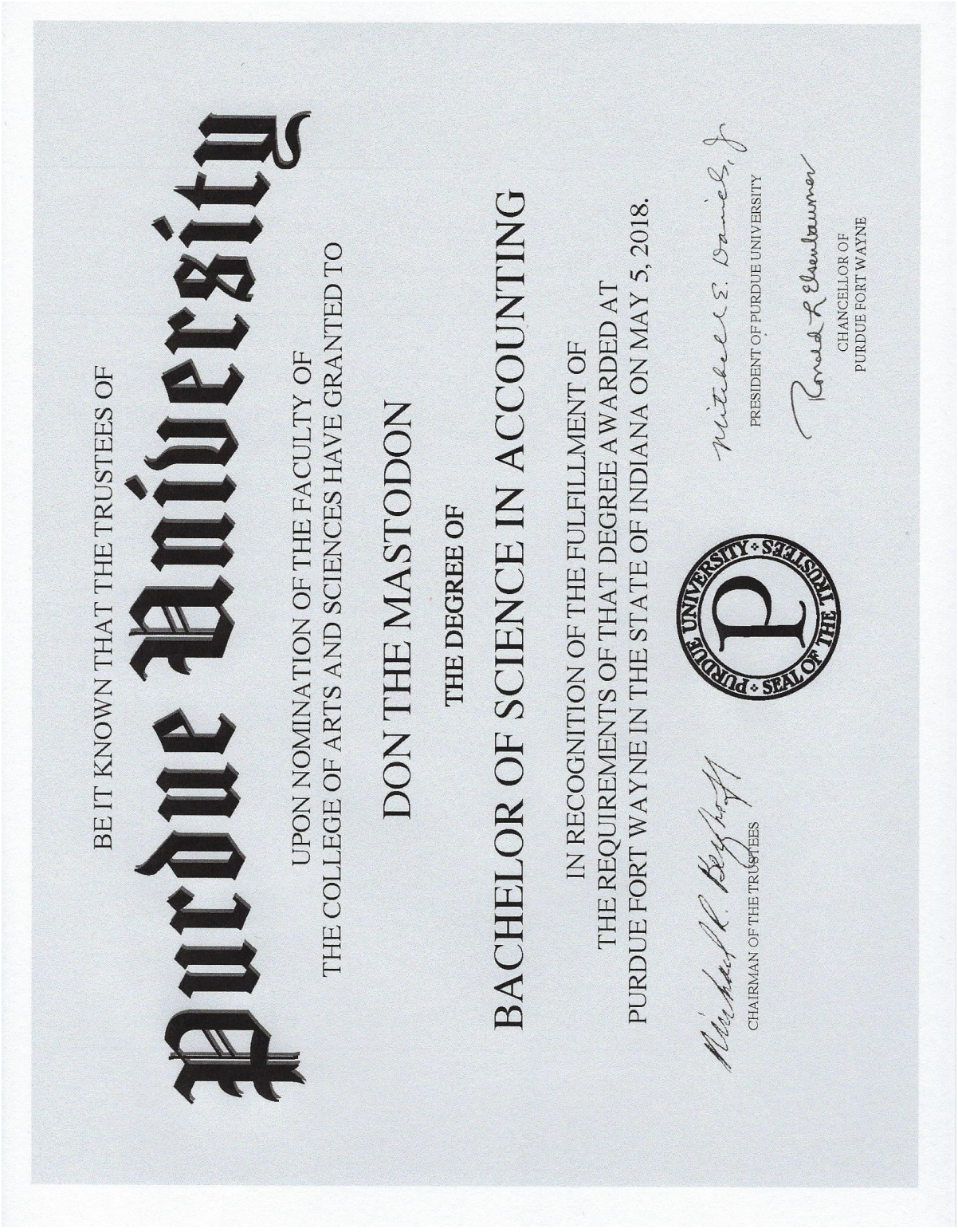
For **Obstacle #2**, please elaborate on this obstacle and the reasons *why* it could prevent you from graduating from college.

Rewrite **Obstacle #1** and propose a specific solution. Example: "**If** [obstacle] **then I will** [solution]."

Rewrite **Obstacle #2** and propose a specific solution. Example: "**If** [obstacle] **then I will** [solution]."

Next, write a motivating letter to a student who is younger than you and who has the same outcomes and obstacles that you do. Explain to the student how he or she can be successful in college and persevere toward graduation.

APPENDIX C. COLLEGE KNOWLEDGE/DEGREE JOB INTERVIEW PREP ASSIGNMENT



BE IT KNOWN THAT THE TRUSTEES OF

Purdue University

UPON NOMINATION OF THE FACULTY OF
THE COLLEGE OF ARTS AND SCIENCES HAVE GRANTED TO

DON THE MASTODON

THE DEGREE OF

BACHELOR OF SCIENCE IN ACCOUNTING

IN RECOGNITION OF THE FULFILLMENT OF
THE REQUIREMENTS OF THAT DEGREE AWARDED AT
PURDUE FORT WAYNE IN THE STATE OF INDIANA ON MAY 5, 2018.

CHAIRMAN OF THE TRUSTEES

PURDUE UNIVERSITY SEAL OF THE TRUSTEES

PRESIDENT OF PURDUE UNIVERSITY

CHANCELLOR OF
PURDUE FORT WAYNE

Please explain how you acquired the *opportunity* to attend college?

Please tell me about your *cognitive* learning abilities. Is there a particular course that has prepared you to do this job for which you are applying? Tell me a few things that you learned in this course and how they apply to your future career.

Will you *show up* (physically) for this job? What would your previous employer or college instructors say about your physical attendance?

Will you *show up* (mentally) for this job? What would your previous employer or college instructors say about your mental attendance?

Please give me an example of how you *show up* to do a project?

Tell me about a time where you set a long-term goal with mile markers? What kind of self-reflection and evaluations did you do at each mile marker en route to your goal?

What does *perseverance* mean to you?

APPENDIX D. IRB EMAILS

PURDUE UNIVERSITY

HUMAN RESEARCH PROTECTION PROGRAM
INSTITUTIONAL REVIEW BOARDS

To:	DIXSON, MARCIA DBLEED, LYNETTE J
From:	DICLEMENTI, JEANNIE D, Chair Social Science IRB
Date:	07/03/2017
Committee Action:(1)	Determined Exempt, Category **(1)**
IRB Action Date:	07 / 03 / 2017
IRB Protocol #:	1706019391
Study Title:	Fostering Undergraduate Grit in an Entry-Level Communication Class

The Institutional Review Board (IRB) has reviewed the above-referenced study application and has determined that it meets the criteria for exemption under 45 CFR 46.101(b).

Before making changes to the study procedures, please submit an Amendment to ensure that the regulatory status of the study has not changed. Changes in key research personnel should also be submitted to the IRB through an amendment.

Refer to our guidance **"Changes Not Requiring Review"** located on our website at http://www.irb/purdue.edu/policies.php. For changes requiring IRB review, please **Create a New Amendment** through the CoeusLite Online Submission System. Please contact our office if you have any questions.

Below is a list of best practices that we request you use when conducting your research. The list contains both general items as well as those specific to the different exemption categories.

General

- To recruit from Purdue University classrooms, the instructor and all others associated with conduct of the course (e.g., teaching assistants) must not be present during announcement of the research opportunity or any recruitment activity. This may be accomplished by announcing, in advance, that class will either start later than usual or end earlier than usual so this activity may occur. It should be emphasized that attendance at the announcement and recruitment are voluntary and the student's attendance and enrollment decision will not be shared with those administering the course.
- If students earn extra credit towards their course grade through participation in a research project conducted by someone other than the course instructor(s), such as in the example above, the students participation should only be shared with the course instructor(s) at the end of the semester. Additionally, instructors who allow extra credit to be earned through participation in research must also provide an opportunity for students to earn comparable extra credit through a non-research activity requiring an amount of time and effort comparable to the research option.

PURDUE
UNIVERSITY

HUMAN RESEARCH PROTECTION PROGRAM
INSTITUTIONAL REVIEW BOARDS

To:	MARCIA DIXSON NF 230G
From:	JEANNIE DICLEMENTI, Chair Social Science IRB
Date:	04/03/2018
Committee Action:	Amended Exemption Granted
Action Date:	04/03/2018
Protocol Number:	1706019391
Study Title:	Fostering Undergraduate Grit in an Entry-Level Communication Class

The Institutional Review Board (IRB) has reviewed the above-referenced amended project and has determined that it remains exempt. Before making changes to the study procedures, please submit an Amendment to ensure that the regulatory status of the study has not changed. Changes in key research personnel should also be submitted to the IRB through an amendment.

Please retain a copy of this letter for your regulatory records. We appreciate your commitment towards ensuring the ethical conduct of human subject research and wish you well with this study.

Ernest C. Young Hall, 10th Floor - 155 S. Grant St. - West Lafayette, IN 47907-2114 - (765) 494-5942 - Fax: (765) 494-9911

PURDUE
UNIVERSITY

HUMAN RESEARCH PROTECTION PROGRAM
INSTITUTIONAL REVIEW BOARDS

To:	MARCIA DIXSON NF 230G
From:	JEANNIE DICLEMENTI, Chair Social Science IRB
Date:	11/30/2018
Committee Action:	Amended Exemption Granted
Action Date:	11/29/2018
Protocol Number:	1706019391
Study Title:	Fostering Undergraduate Grit in an Entry-Level Communication Class

The Institutional Review Board (IRB) has reviewed the above-referenced amended project and has determined that it remains exempt. Before making changes to the study procedures, please submit an Amendment to ensure that the regulatory status of the study has not changed. Changes in key research personnel should also be submitted to the IRB through an amendment.

Please retain a copy of this letter for your regulatory records. We appreciate your commitment towards ensuring the ethical conduct of human subject research and wish you well with this study.

Ernest C. Young Hall, 10th Floor - 155 S. Grant St. - West Lafayette, IN 47907-2114 - (765) 494-5942 - Fax: (765) 494-9911

APPENDIX E. 12-ITEM GRIT SCALE

Research Note: Your participation in this study is voluntary. All identifiers will be removed once the data has been matched.

Name_____

12- Item Grit Scale

Date_____

Directions for taking the Grit Scale: Here are a number of statements that may or may not apply to you. For the most accurate score, when responding, think of how you compare to most people -- not just the people you know well, but most people in the world. There are no right or wrong answers, so just answer honestly!

1. I have overcome setbacks to conquer an important challenge.
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

2. New ideas and projects sometimes distract me from previous ones.*
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

3. My interests change from year to year.*
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

4. Setbacks don't discourage me.
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

5. I have been obsessed with a certain idea or project for a short time but later lost interest.*
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

6. I am a hard worker.
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

7. I often set a goal but later choose to pursue a different one.*
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

8. I have difficulty maintaining my focus on projects that take more than a few months to complete.*
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

9. I finish whatever I begin.
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

10. I have achieved a goal that took years of work.
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

11. I become interested in new pursuits every few months.*
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

12. I am diligent.
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

Age _____ Birthdate_____

Gender_____

Commute to campus? _____

Duckworth, A. (2018). Grit Scale. Retrieved January 4, 2018 from https://angeladuckworth.com/grit-scale/

APPENDIX F. GRIT INTERVENTION ASSIGNMENTS/PROJECTS

Description of Assignments

Detailed information and a rubric will be provided at the time of assignment. In addition to the assignments listed below, students will earn engagement and assignment points throughout the semester for pop quizzes, completion activities, Blackboard assignments, in-class team projects, and Team Based Learning Peer Reviews.

Learning Module #1 - Characteristics of Communication

Artifact Speech —This is a short, informal speech that is meant to familiarize you with speaking in front of an audience. Your speech should be about an object (a picture, souvenir, childhood toy, something you collect, etc . . .) that means something to you or says something about you or your personality. This speech should be one to two minutes in length.

Mental Contrasting Implementation Intentions Goal Setting Exercise—Based on self-reflection and analysis, students will identify outcomes and anticipated obstacles associated with their personal long-term goal of college graduation. Students will identify their personal benefits of earning a college degree and apply problem-solving to anticipated obstacles by creating if/then statements.

Learning Module #2 - Creating Compelling Content & Speech Delivery

Informative Speech—Your informative speech will educate and inform the audience about a topic from one of four topic categories related to student success (e.g. time management, relationships, grit, emotional intelligence, growth mindset, study habits, focus). Two sources are required; one will be the article you receive in class; the other should be a scholarly source from an academic journal. Your presentation should be 5 - 7 minutes in length. Visual aids (Powerpoint, Prezi, Google slides) are required.

Learning Module #3 - Communication and Interpersonal Relationship Applications from *The King's Speech*

Team Presentations—Students will work in their class teams to create a presentation over one of the chapters in the course text. Each team will give an overview of the chapter's key concepts and apply at least one concept/key term to a scene in *The King's Speech*. Each student will contribute to the group presentation by speaking two-three minutes.

Media Analysis Paper—Students will practice written communication through writing a two-three page analysis (APA Style, double-spaced) of one interpersonal relationship from *The King's Speech* (Bertie/Lionel or Bertie/Elizabeth). Support your analysis with evidence from at least two separate scenes. Incorporate at least five communication concepts from our class text. Include a title page, Running head, page numbers, and a reference list where you cite our class textbook and the movie. Boldface your thesis statement and the five communication terms.

Learning Module #4 - Organizational Communication & Job Interviewing

LinkedIn Profile Creation—Students will create a profile at www.linkedin.com to build upon throughout their college career. [Go to "Settings" and then "Privacy" to make your profile private (so it is not public) until it is strong, completed, and until you have at least 50 connections.] This assignment will require profile creation, a professional profile picture and background, creation of a custom URL, 7 skills chosen, and connections with at least 10 classmates.

College Knowledge Job Interview Preparation Assignment—In preparation for verbalizing responses in a job interview, students will brainstorm answers and examples of how they have personally mastered (or their plan for mastering throughout college) the following competencies: 1) The ability to learn cognitively; 2) Your non cognitive abilities and *showing up*, and 3) Perseverance

30-Second Elevator Pitch—Students will prepare a 30-second "commercial" highlighting their strengths and skills and orally deliver it to the class. (This pitch should share who you are, what sets you apart, the position you hope to have one day, and why you are a great fit for this type of work.)

Learning Module #5 - Persuasive Speech Job Interview Presentations

Persuasive Speech—Students will present a 6-8 minute persuasive job interview presentation. Students will research a potential future career at a company or in an industry where they would like to work upon college graduation. [This speech should attempt to persuade the audience (a hiring team from the company) as to why you are a great fit for the position.] Part One will exhibit your knowledge of job responsibilities of the position, the typical salary range, and your research about the company and its current activity in the marketplace. Part Two will explain why you are interested in the position and why you are a good fit. Part Three will explain your examples from the College Knowledge Job Interview Preparation Assignment. Presentation slides are required.

APPENDIX G. INTERVENTION EFFECTIVENESS SURVEY

Research Note: Your participation in this study is voluntary. All identifiers will be removed once the data has been matched (i.e. your name will not be linked to your responses).

Name_____ Date_____ Age_____

Please rate your agreement with each of the following statements about the effects of class activities.

Effectiveness rating scale:

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

Mental Contrasting with Implementation Intentions Homework Assignment (MCII)

The MCII self-reflection homework exercise was effective in helping me learn.	1	2	3	4	5
The MCII helped me think about college graduation as my long-term goal.	1	2	3	4	5
The MCII helped me to *persevere* to the end of the semester	1	2	3	4	5
The MCII helped me learn how to articulate/communicate about my future.	1	2	3	4	5

_____

_____

_____

Team Based Learning (TBL)

TBL helped me feel a sense of belonging as a new freshman.	1	2	3	4	5
TBL was effective in helping me grow in character as a person.	1	2	3	4	5
TBL helped my class attendance.	1	2	3	4	5
TBL helped me learn how to communicate better in a team.	1	2	3	4	5

_____

_____

_____

LinkedIn Profile Creation

Creating a LinkedIn profile was a beneficial learning activity	1	2	3	4	5
Creating a LinkedIn profile helped me think about college graduation as my long-term goal.	1	2	3	4	5
Creating a LinkedIn profile helped see the value of going to college.	1	2	3	4	5
Creating a LInkedIn profile helped me think about my future professional self.	1	2	3	4	5

_____

_____

_____

Effectiveness rating scale:

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

College Knowledge/Degree Job Interview Prep Assignment

This activity was effective in helping me learn about the effort college requires.	1	2	3	4	5
This activity helped me think about college graduation as my long-term goal.	1	2	3	4	5
This activity helped me see the value of going to college.	1	2	3	4	5
This activity helped me articulate/communicate what my degree will represent in the future.	1	2	3	4	5

_____

_____

_____

Persuasive Speech Job Interview Presentation

Doing the research for this assignment got me excited about my chosen career path.	1	2	3	4	5
This activity helped me see the value of going to college.	1	2	3	4	5
This activity helped me learn persuasive public speaking.	1	2	3	4	5
Based on this activity, I can see myself as a successful professional person.	1	2	3	4	5

_____

_____

_____

Job-as-Student Classroom Simulation

My attendance was better because I knew it was a course requirement.	1	2	3	4	5
I learned the importance of showing up (physically) to college success.	1	2	3	4	5
I see being successful in college as requiring the same amount of work as a full-time job.	1	2	3	4	5

_____

_____

_____

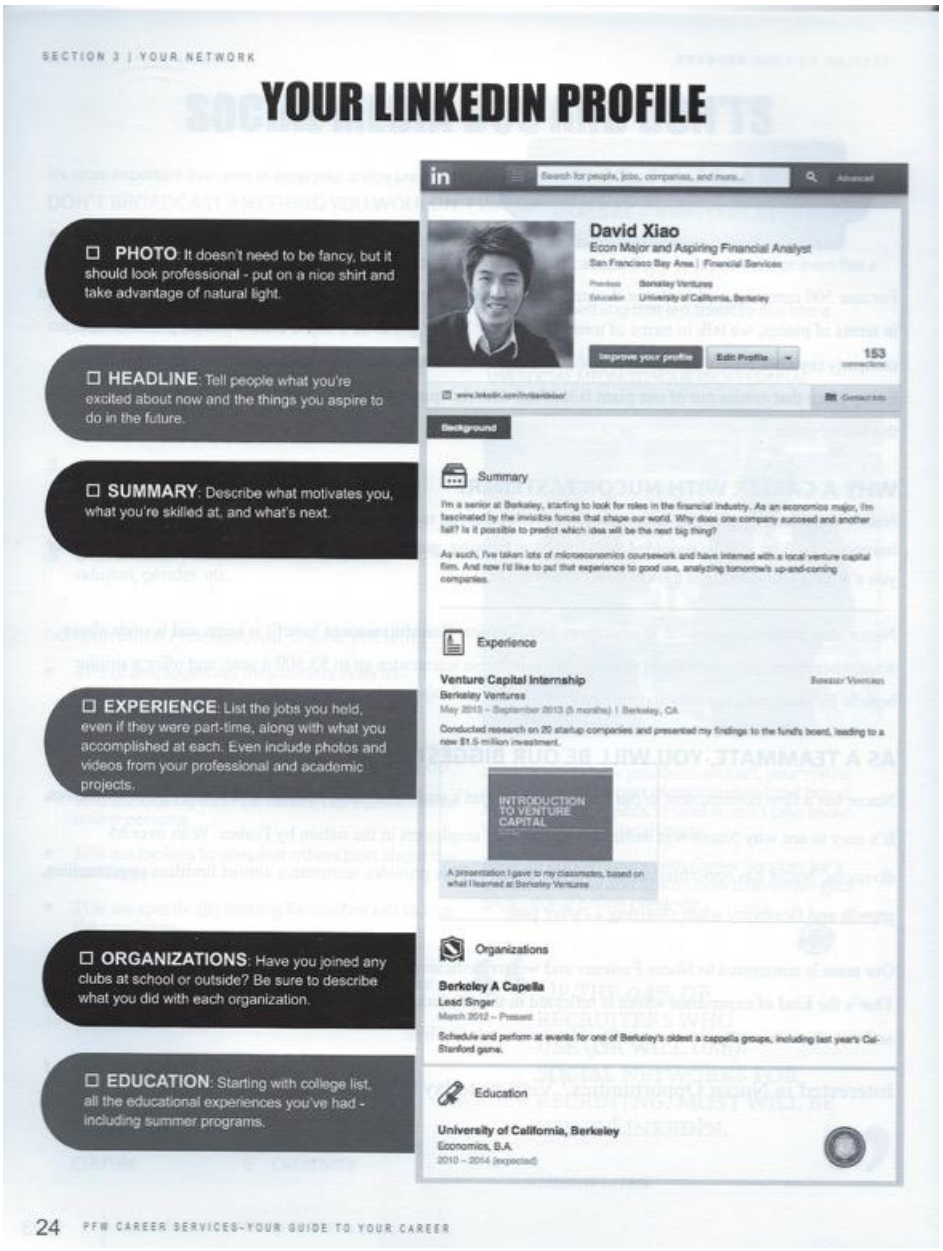
IF APPLICABLE: If you completed the essay project to earn back attendance points, please describe what effect the project had on your attendance for the remainder of the semester.

_____

_____

_____

APPENDIX H. CAREER GUIDE LINKEDIN EXAMPLE



☐ **VOLUNTEER EXPERIENCES & CAUSES:** Even if you weren't paid for a job, be sure to list it. Admissions officers and employers see volunteer experience as highly valuable.

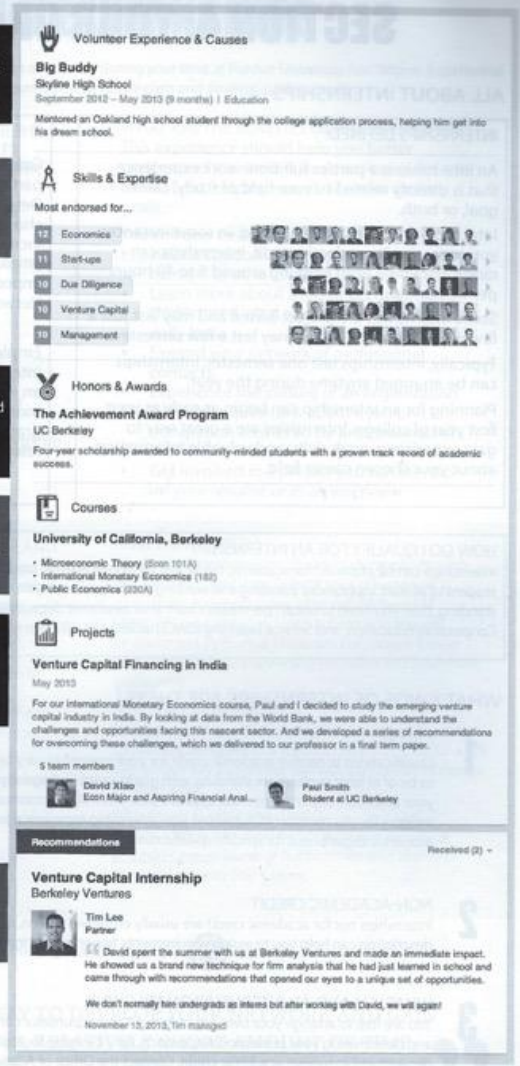
☐ **SKILLS & EXPERTISE:** Add at least five key skills - and then your connections can endorse you for the things you're best at.

☐ **HONORS AND AWARDS:** If you earned a prize in or out of school, don't be shy. Let the world know!

☐ **COURSES:** List the classes that show off the skills and interests you're most excited about.

☐ **PROJECTS:** Whether you led a team assignment in a school or built an app on your own, talk about what you did and and how you did it.

☐ **RECOMMENDATIONS:** Ask managers or professors to write a recommendation. This gives extra credibility to your strengths and skills.



TAP INTO LINKEDIN

Complete a LinkedIn profile and apply it in the Self-Marketing section for Endorsed.
Want more LinkedIn tips for students? Visit students.linkedin.com. You can also come to Career Services and have a career counselor review your profile and give you tips on how to strengthen it.

APPENDIX I. QUALITATIVE COMMENTS FROM INTERVENTIONS

Themes from Team Based Learning Qualitative Comments:

Fostered relationships

Enjoyed method/made class fun

Improved communication and public speaking

Facilitated teamwork

Qualitative Comments from Team Based Learning:

"I was able to understand how to work better in a team."

"TBL helped me connect with classmates and learn in an extremely beneficial way."

"It helped me get to know more people."

"Absolutely loved TBL! It helped me gain new friends and made it easier to give speeches."

"Helped with interacting."

"This helped me meet new people that are just like me."

"I really enjoyed team based learning, probably my favorite part of this class."

"TBL was overall helpful because I am very shy and do not speak to hardly anyone in my other classes."

"Loved TBL. It really helped me make good friends."

"Team based learning created a fun and unique environment."

"Team based learning helped me to become more comfortable with my class, resulting in less anxiety when giving speeches."

"Helped as you can compare how you're doing with others and if you need help it's right there for you."

"TBL made me feel more comfortable when speaking and allowed me to form relationships within the class."

“Helped me become more of a team player than I was in the past.”

“Good communication skills needed in TBL.”

“This really helped me be more comfortable presenting. Thank you!”

“TBL is great. I made new friends that helped and encouraged me throughout the year.”

“TBL helped me make new friends in people I thought I would be uncomfortable around.”

“TBL I felt was very beneficial to me.”

“This was an enjoyable experience to have in the classroom.”

“Loved team learning, really helped becoming comfortable in this class and make friends.”

“I felt more involved.”

“It helped me break my shyness a little bit. Plus I love working as a team.”

“TBL is a wonderful way to acquire (and prepare for) team and communication skills. It is a good reminder that in the real world (specifically workplace) you have to work and get along with a variety of people.”

“I really liked TBL. It gave me an even bigger push on how to do well communicating in a public forum.”

“TBL helped me make new friends and learn how to work together.”

“I loved team based learning. It made me feel like it was easier to do.”

“I loved it, good fun good learning.”

“I enjoyed team based learning because it helped me make a lot of friends.”

“Helped me meet new people that have a common goal.”

“I like TBL because it helped me meet new people and practice in front of a smaller group.”

“I enjoyed team based learning most in the class.”

“Loved team based learning; it was a lot more fun.”

"Team based learning helped me talk to people and helped me learn more."

"TBL was my favorite part of the semester. It really helped me feel welcome."

"I liked this a lot! It helped me learn by talking things out and made it not so nerve racking by talking to our groups before speaking in front of whole class."

"I enjoyed TBL because it introduced me to new faces within the classroom as a freshman and I loved the teamwork and communication involved."

"Team based learning was fun and it was good to make friends so easily."

"I liked this a lot. It helped me learn better."

Themes from Job-as-Student Simulation Qualitative Comments:

Affected attendance positively

Enjoyed simulation

Qualitative Comments about Job-as-Student Classroom Simulation:

"This also helped me figure out my job future."

"I showed up a lot more."

"Enjoyed this simulation."

"Loved getting points for showing up to class." (Note: Students did not earn points for attendance.)

"I loved this class as a job."

"Attendance being mandatory helped me be here more and helped me with the class."

"Attendance didn't make a difference for me since I would have come every day regardless."

"I definitely showed up more because it was required."

"Yes, taught me how an actual job would want me."

"Made me go to class."

"I didn't have perfect attendance."

“Good to practice such a thing.”

“I know that I need to come to class now.”

“Let’s see if I do better next time.”

“Basically really gets me to do my best.”

“Yeah, I liked the simulation.”

“I think more classes should be this way. Being a college student is like a job, and showing up to class taught me more.”

“I personally loved this class, so that helped with me wanting to come.”

“Helped motivate showing up to class.”

“My attendance was not the best. I learned you do not need to show up in order to really get all of the information.”

“Honestly, one of my favorite classes to attend.”

“Drove me to show up and communicate.”

“My attendance was not as good as I hoped, but the requirement made me persevere.”

“I like how important it is to show up to class.”

“Enjoy this class so showing up has been easy.”

“Attendance was important for this classroom.”

“It was great. I did not feel threatened and also knew I could come talk to you at any time.”

“Unlike my other classes where attendance wasn’t required, I did a lot better in this class because of it.”

“This helped me be prepared for job settings in the future.”

“In order to be successful in anything you must show up.”

“Loved it. And when things came up, the professor was understanding.”

“I would have shown up anyway, but can see that this helps people.”

"This helped me get the importance of always showing up in class."

Themes from MCII Homework Assignment Qualitative Comments:

Did not remember the assignment

Helped me think about goals and the future

Qualitative Comments from MCII Homework Intervention:

"It helped me to better understand my future goals in a more clear manner."

"MCII helped me understand what I need to do to become successful in college."

"I agree."

"This mostly taught me more about time management."

"In all honesty I don't remember this assignment but I'm sure it helped in some way."

"MCII helped me reflect and think about why I am in college."

"The MCII assignment was not very helpful to me because I already know I am graduating no matter what. It may have been helpful to less motivated students."

"Enjoyed homework, quizzes, and other assignments."

"Homework assignments are very practical to me."

"Helped me set goals and figure out what I need to do to achieve them."

"This helped me understand my goals and overcome hardships."

"Gave me some perspective on long and short-term goals."

"No opinion."

"No opinion."

"MCII was beneficial to me."

"Helped me really become proactive with thinking about my future."

"I don't think the homework was effective in certain ways, but it did help me see my future."

"Having the opportunity to simply write things down was, in a way, setting my goals in stone. It's a great way hold yourself accountable."

"This taught me what I was getting myself into at the beginning of this class."

"I did poorly."

"It really helped me realize what I wanted."

"Don't remember."

"Don't remember this assignment."

"Really helped think about long term goals and success."

"Forget what this is?"

"It was helpful for thinking about the exams."

"Setting goals helped me see where I am in the next few years."

"It helped me keep my head right and focus on my goals."

"The MCII helped me prepare for college and think about my future."

"This helped me think of my future and how I need to work hard for it."

"Don't remember this."

"I learned how college can impact my life and that I need to work hard."

"This helped a little kind of forgot what this was."

Themes from LinkedIn Profile Creation Qualitative Comments:

LinkedIn will positively affect my future.

LinkedIn will help me start my career.

LinkedIn will help me network and get connections.

Qualitative Comments from LinkedIn Profile Creation:

"I plan on working on it more throughout the years. It helped me start my career path."

"Creating a LinkedIn profile helped me know how to appeal to certain employers and what I need to do to get hired."

"Would not have done it if it weren't for this class."

"Still new to LinkedIn, but eventually I'll get the hang of it."

“It will be something I will use for years to come.”

“This helped me prepare for my future.”

“Was very easy and also have connected with many people.”

“LinkedIn is definitely important for my future and my career path.”

“Creating and learning about LinkedIn helped me because I will use LinkedIn more often, especially in the future when I need to have connections.”

“It is a useful website and we already had to make one for HPER."

“This helped me prepare and connect for the future.”

“Showed me the benefit of finishing out college and gave me a view of my future.”

“Value in long term goals.”

“Really helps networking. I’m happy we did it.”

“Creating a LinkedIn really allowed me to make new connections.”

“LinkedIn profile didn’t have much effect on me.”

“I haven’t heard much about LinkedIn, but the stuff I did hear wasn’t good about it.”

“LinkedIn helped me tremendously in composing my persuasive speech as well.”

“I really don’t get LinkedIn and how to use it.”

“I didn’t do it.”

“I’m glad this was done. I wouldn’t have made one if it wasn’t for this class.”

“Helped me realize that my future starts now.”

“Good idea getting ready for the job.”

“I enjoy LinkedIn because I get emails of job offers around me.”

“It got me thinking about the future.”

“This is a good thing to use for the future for connections for jobs.”

“I’m not too sure of the importance of LinkedIn.”

"LinkedIn profiles are step one to getting into the business world."

"It helped me see to build this profile college can add lots to it."

"LinkedIn helped me think about a career but not college as of now."

"This wasn't beneficial because I already had one made."

"This activity was beneficial and got me more involved in advertising employers from the workforce and connecting similar daily endurances."

"The LinkedIn activity was effective because I understand it better and it will help me get a job."

"This helped because it will help me in the job future."

Themes from College Knowledge Job Interview Prep Assignment Qualitative Comments:

Helped me think about my future and goals

Prepared me for job interviewing

Was thought provoking

Qualitative Comments from College Knowledge Job Interview Prep Assignment:

"The job interview prep assignment I liked because it better prepares me."

"Helped me know what to say in an interview."

"It got me familiar to the real world revolving college desires and/or knowledge."

"Very effective. Made me think outside the box."

"This assignment helped me think of goals."

"Job interview helped me realize that college helps me communicate better and show me that my degree will be good for my future."

"Made me think about why I am really in college."

"It was nice to see me set goals."

"This helped me figure out what I should say in an interview."

"Helped me think about getting interviewed."

"I liked this assignment because it will benefit me in the future."

"Awesome stuff. Good fun. Good idea."

"These helped me become better at thinking critically."

"Too bad it's mostly too late."

"It got me prepared."

"I thought this was good to have."

"Helped with knowing what to do in an interview and really prepare yourself."

"College knowledge helped me think about the future."

"No opinion."

"Really good life lesson."

"Helped me get an idea of what I wanna do in life."

"Helped me recognize my skills and showed me what college required."

"This helped me prepare for what it will be like."

"Help you understand why a degree is important and how it helps you."

"Very helpful and helped me determine what degree I want to achieve."

"This helped me better my resumé and prepare for any future interviews I may have."

"There's always ways you can improve something, we did not cover this part extensively."

"This motivated me more to finish what I've started."

"I always knew about this, but I liked the assignment."

"Helped me learn about college and what I have to do to become successful."

Themes from Persuasive Speech Job Interview Presentation Qualitative Comments:

Liked the assignment/favorite project

Helped me learn about my chosen career or potential careers

Helped me get excited about my future and/or future career

Qualitative Comments about Persuasive Speech Job Interview Presentation:

"This helped me learn better with what jobs are looking for."

"This got me excited about the career I chose."

"I loved this; I don't enjoy public speaking but this assignment pushed me away from my comfort zone."

"Made me think about my good qualities and made me excited for the future."

"This helped me realize what I will have to do to be an actuary and got me excited about it."

"I was able to learn key things about job interviews."

"This seemed helpful for a real interview."

"Got me more worried if this is the right path for me."

"Learned a lot about my job."

"This helped me research my career more."

"Little tricky, but good fun."

"Made me get excited for my future."

"This was the best project all year."

"I have no dreams."

"I really liked doing this assignment."

"This project was really fun to put together and got me really excited for my future."

"I loved the speeches because it brought me out of my comfort zone."

"This was my favorite assignment, it really opened my eyes to what I need to do to reach my goals and dream job."

"Loved this project, made me think about my future and how to sell myself."

"This activity really helped me see what jobs were available with my degree."

“I was nervous doing the persuasive speech and it caused me to fluster a lot. If I was better at public speaking, I would have loved this assignment.”

“I really enjoyed this project the most because I got to talk about my future company.”

“This was really fun, to take everything we’ve learned professionally and ‘apply’ for our dream job.”

“Really enjoyed this. Fun to do ‘professional’ assignment.”

“Showed me how to pursue people in public speaking and I got to learn more about my dream job.”

“I enjoyed presenting my dream job.”

“Was an interesting topic to do, so that made it easy.”

“The persuasive speech helped me realize how passionate I was about my dream job.”

“This was useful to me as it gave me an insight into a job that I’m interested in.”

“This helped me figure out what I need in order to obtain my dream job.”

“I did not like having to pretend I was qualified for a job I was not at all qualified for. I think a better assignment would be talking about a plan to become qualified for your dream job.”

“This project helped me think about what I want to do because I’m undecided.”

“This made me sit down and think of what I want to do in the future.”

“Pushed us to get out of our comfort zone each time we presented. Feel like more presentations should be incorporated.”

“Without this, I would still be a little clueless on what I wanted to do after college.”
“I think it was fun looking in to possible jobs.”

“Allowed me to research and understand my future career.”

APPENDIX J. FRESHMAN SCENARIOS TEAM ACTIVITY

Freshmen Scenarios

(Brainstorm IF/THEN problem-solving statements)

At mid-term of the semester, these students have a 2.0 estimated GPA

1) Joe is loving the college life. He and his roommate have a common interest in video games and are spending about 4 hours a day playing FortNite.

2) Sandy was recruited by a sports coach her junior year in high school. She received a great scholarship and was so excited to play for her college. Unfortunately the month before school began, the old coach left and a new coach was hired. This coach doesn't seem to like Sandy and hasn't played her at all during the first five matches. Sandy is wondering if she chose the right college.

3) Tom studied for ten hours for an exam that he failed. Given there are only three exams this semester, he is worried about his grade. If he drops the class, he will lose his financial aid.

4) Susan is so homesick that she can't concentrate on any of her college stuff. She is depressed and tired, so she has been skipping class often.

5) Stan is a party animal. He has a 9:00 a.m. class on Friday but he has missed every session because of Thirsty Thursday.

6) In order to afford to go to college, Pete is working 35 hours/week and having a difficult time making it to class and keeping up.

7) Kayla is incredibly shy. After the first four weeks of class, she does not know a single soul. She feels like quitting.

8) Something really bad happened to Joellyn. She does not want to tell her family because it will just worry them all the more about her. But this was something traumatizing and she can't stop thinking about it. It is causing her to lose focus on doing her college stuff.

9) Josh fell in love the second week of school. This girl is his dream girl. But she calls him several times a day and texts him almost every hour. He's trying to study so he can keep up in his classes, but he never gets to the point where he can focus.

10) Emily was the valedictorian of her small high school where everyone told her she was a great writer and how smart she was. For her first academic paper, she did her best but got an F! She's thinking it must be her English professor's fault. Does this guy not know good writing when he sees it?

11) Sam has to take calculus for his major. He has not missed any classes but due to the professor's accent, he cannot understand the material. He kept thinking it would just work itself out, but now he is getting worried.

12) Kurt tries to listen in class but he keeps falling asleep. His roommate comes in late every night and sometimes snores. He's making it to class but then goes back to the dorm and takes a nap in between classes.

13) Samantha used to be a cross country runner in high school. She is so stressed out about college, but she doesn't have any time to run.

14) Alice needs advice about a big decision coming up. Her new friend claims to have a foolproof way of making great choices: she drinks 6 beers, twirls in 3 circles, and clicks her heels. Alice's new friend is so kind and always there for her.

15) Carston's dream employer is coming to a career fair on campus. He has messaged them on LinkedIn, and they are excited to interview him. He knows he needs to wear a suit, but he doesn't have one and he can't afford to buy one right now.

APPENDIX K. ATTENDANCE MAKEUP POINTS OPPORTUNITY

Attendance Makeup Points Opportunity

Student Name_____ Section _____

Completion of this assignment will earn back this # of attendance points_____

Due Date _____ (Late submissions will not earn any points)

Student Signature_____ Date of Commitment_____

Instructor Signature_____

Assignment

Read the book *The Butterfly Effect: How Your Life Matters*, by Andy Andrews. Write a personal essay about the book and its application to you, your attendance in COM 114, and your college goal of earning a degree.

Your first paragraph should be the book synopsis. The second paragraph should be your application paragraph. Think about ten consequences (ripple effects) that would result if you fail COM 114 for attendance. Format your essay in APA and include a title page and References page with the book's citation (So, three pages total, with your essay double-spaced.)

Email your submission to Instructor Bleed at bleelj01@pfw.edu within one week of your sixth absence.