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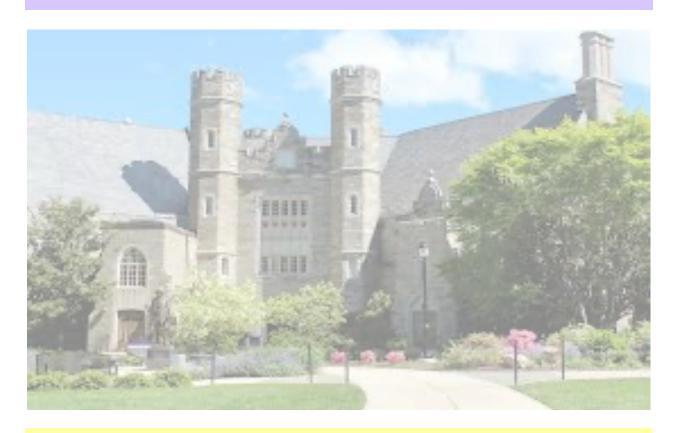
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West Chester University

Higher Education Policy and Student Affairs

THESIS



Growth Mindset Scholars: A Growth Mindset Community Intervention for a First-Year Experience

Robert Anderson

May 2021

Growth Mindset Scholars:

A Growth Mindset Community Intervention for a First Year Experience Course

A Thesis

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In Partial Fulfilment of the Requirements for

the Degree of

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Student Affairs

By

Robert L. Anderson

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Dedication

to the memory of Richard J. Miller

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Abstract

This thesis is concerned with how higher education has contributed to a rigid, inequitable view of intelligence that stifles education experiences for the sake of quick return on investment. Historically, this view of intelligence was used to justify slavery and other means of integrating people as human capital in society. I propose a one semester workshop intervention, based on Carol Dweck's research into mindsets, for first-year students to increase the salience of growth mindsets in new students. Research suggests that growth mindsets will increase students' resilience and adaptability when faced with adversity (Yeager & Dweck, 2012). Increasing growth mindsets may also mitigate multicultural student stressors, increase their connections with the university community, and help them persist until graduation (Kovach, 2018) (Broda et.al., 2018). This thesis outlines the learning goals and student first design for a successful growth mindset workshop including the incorporation of peer mentors and experiential learning to connect growth mindset broadly to first-year student life. Future application can focus on increasing the community engagement of the Growth Scholars Leaning Community in order to continue the work of changing higher education's mindset on intelligence.

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Chapter One: Introduction

My core belief of education comes from my understanding of the social psychology and motivations that drive students to push themselves towards higher learning. I feel that higher education should garner intrinsic value from students and make them actively seek out more pathways for deeper learning. In undergraduate psychology courses, I was first instructed on the studies of Carol Dweck, social psychologist at Stanford University. Dweck believed that student perceptions of knowledge could be broken down into two main categories of thought which she called mindsets. She wanted to see a developmental mindset in students that viewed intellectual ability as flexible and able to develop through effort. In some of her earliest work she called this mindset incremental theory. Dweck called the second set of assumptions entity theory which got its name from how it viewed abilities as nonmalleable trait-like entities (Dweck et. al, 1995, 267). Over the years, the language of these mindsets has changed to focus on how the student views their intellectual ability. I think the researchers likely chose the names based on whether students held the assumption that intelligence was fixed or could be grown. Dweck names these two opposite mindsets growth and fixed mindsets in her book, Mindsets: The New Psychology of Success (2006).

Dweck's definitions relied heavily on how each mindset functioned within the student's development. The fixed mindset students judge themselves heavily on their graded performance and strictly define their skills by the classes and coursework they excelled in. A student with a growth mindset believes that intelligence is among the many characteristics a person has that can be cultivated through effort (Dweck, 2006). Take for example the ability to juggle. A fixed mindset person may attempt to juggle several times but after failing would ultimately think they simply lack the coordination needed to juggle blaming their failure on their limited ability. A

novice juggler equipped with a growth mindset would be less halted by dropping the objects or failure, and this person would see their failures as effort towards mastering a new ability with undiscovered limits. This talent for understanding and moving past hardships with positivity is called *resilience*. In her more recent research, Dweck and her protégé in mindsets, David Yeager, reinforced that it was harder for students with fixed mindsets to develop their resilience to academic failures since their indicators for success so heavily favored feedback in the form of grades (Yeager & Dweck, 2012). Replace coordination with intellectual ability and dropping what is being juggled with academic rigor in colleges and then you can see the potential that fixed mindset has for stifling student development. Resilience and *adaptability*, being able to change when faced with hardship (Dweck, 2006), have been linked to higher growth mindset beliefs in students which show its potential to arm students against the current ever changing world of higher education.

Psychology Learning Community

When I think about the experiences in my undergraduate career that impacted my success and growth the most, I am drawn back to my psychology learning community (PLC) and the overabundance of educative experiences I gained through it. The PLC was an elective learning community where first year psychology students took hybrid-format intro psychology courses and also lived together on the same floor is the residence hall. The most important lesson I learned in that class was that intelligence and knowledge are not predefined in a person, and this changed the way I looked at myself and others who struggled or had failed. My community's advisor, a social psychologist and professor, taught my cohort Carol Dweck's concepts of growth mindset in order to challenge the beliefs of intelligence he believed standardized tests and comparative grading created in students from elementary through undergraduate education (K.

Barron, personal communication, September 5, 2019). We were encouraged to not compare our grades with one another, to study with and help our classmates, and to engage in a sort of learning that was intrinsic and reflective. In the absence of competition over grades, I witnessed time and resources from classmates and our professor being distributed equitably among my cohort. Students with greater base knowledge in one subject worked to catch other group members up to their understanding in organic peer-to-peer learning both in the classroom and back in the residence halls. There was almost no hesitation to ask a question about learning community topics in class and in passing while relaxing in our dorm rooms or working in study halls. This feeling continued in later years when cohort members were mixed in with other students within the same academic major courses and in general education courses. I can remember seeing a PLC peer in class and immediately knowing I had a study partner in that subject. Regardless of the subject, seeing a connection to growth mindset in the form of a colleague made it easier for me to challenge myself and advocate on my own behalf.

The learning community extended the social support from our shared psychology courses into our residence halls, which fueled extracurricular learning experiences. Connection between my academics and the community I was forming with peers also made the transition to college life easier for me than other students I observed. Where some halls and floors took months to get acquainted to each other, my floor by mixing psychology learning community students with many random roommate pairings - became a community very quickly. I can remember one creative project that generated many hours of work in our residence hall to research, prepare, and create. My group had decided to film a parody on a situation cop drama that also had a focus on the different fields and areas of study in psychology research. We used social, abnormal, personality, and forensic psychology in the scenes of us solving a crime, and we even managed

to sprinkle in commercials for clinical, counseling, and school psychology. Hallmates outside of the program volunteered and gained understanding of the fields in psychology research (such as social, cognitive, animal behavior) through extracurricular "play" to put it in our instructor's words. The ability to reach my team members when it was convenient to the rest of our social and academic lives benefited the project by keeping us engaged and utilizing time constructively. The final products from all groups were far from perfect but the hours of thought and learning that went into them was evident in our ability to critique more than the creative elements. Indepth conversations grew from watching the unique presentations about the fields of psychology, and learning between the classroom and residence halls felt seamless.

The Learning Community's Impact

The lasting impact of this community gave me a perspective on effort, intelligence, and spirit that helped me weather through academic challenges. The community also supported me emotionally through homesickness, stressful relationships, and moments of self-doubt. Through class discussion and in hall study groups, I was able to quickly build relationships that connected me to my academic work and the larger college community. The pressure to choose a career path early on incoming students was particularly high at my undergraduate university. The advising for first year students even encouraged setting high expectation goals before students really understood how challenging college level work could be. This was evident, for example, in the overwhelming number of nursing program candidates for a program with a 40 student acceptance limit. Failure was expected from too many students. Before I ever stepped foot on campus, I chose the pre-medicine general education track without really understanding the effort required to succeed. This created a major roadblock to my success within the psychology major where my passion and effort were focused. The first failure of my academic career since

elementary school was Organic Chemistry. During that entire semester I spent hours in advising meetings reassessing my career path and plans for graduate school. The learning community friends and academic partners I made were still there almost 2 years after the program to help study in classes we shared and talk through all the challenging decisions about my academic career I had to made. I failed one class that semester though it could have been worse without the learning community. They kept me working and motivated, so I was able to work through the hardship and still succeed moving myself forward. Through conversations with colleagues and advisors I was eventually able to see my failure become a piece of my academic puzzle, and I was able to realign my work with my passion for both student development and psychology. Having a growth mindset in my toolbox of learning strategies allowed me to bend and not break when I realized just how indirect a path through higher education could be.

The term college pipeline is used more frequently now to describe the slow transformation of college as place for higher learning to a place where students come to in order to be pushed through with a degree in 4 years. This pipeline effect is particularly harmful to reinforcing higher education as a place for robust learning because it creates the false narrative that colleges are only there to fill students with general work experience and a certificate. The college pipeline can also refer to how little flexibility the requirements for degrees have for non-traditional students or students with disabilities. This inflexibility spreads to both academics and social development, and the college pipeline is often referred to negatively for how it makes higher educational less accessible to everyone. I believe that it is vitally important to cultivate growth mindsets in undergraduate students in order to reverse the structure of the college pipeline that allows students to blame their intellect for shortcomings and ultimately fails to support those who don't conform to the dominant college experience.

Another trend in recent years has been to observe higher education as a return on investment. This is particularly destructive to the higher education environment when it is related to students' ability to perform in classes. Getting a lot for a little sounds great in economics theory but when applied to student effort in their coursework it can have terrible consequences. The structure of grading in higher education based on the ability to produce a finished product or recite what was lectured verbatim on standardized tests compiled with the notion of return on investment creates the environment where students who succeed with the littlest effort feel the most accomplished. On the other side of the same coin, students who put continued high effort forward but see little in regards to graded feedback may feel that their effort was wasted and therefore might be discouraged from putting that effort into future work. This non-educative experience so many students have reinforces fixed mindset beliefs that intelligence is rigid and avoiding challenges leads to the greatest success. Higher education is more than a machine to turn out degrees, and seeing academics as return on investment leads to students trying to take shortcuts that avoid opportunities for higher learning. I believe that a growth mindset is the key to providing students with the ability to push back against using return on investment as a standard in higher education.

Incremental Theory & Student Development

Two professors taught the same upper level psychology course on Abnormal Psychology at my undergraduate university. Due to their extremely different teaching approaches, one professor was always thought to be "easier" than the other. I heard so many conversations about this course among peers in the department. Also, while working as a peer advisor, I confronted students who were disappointed for having to take the more challenging professor's section, highlighting the fixed mindset belief that success with the least effort is best. Approaching the

selection with a growth mindset, I jumped at the opportunity to be challenged and while the difficult grading did reflect in less than perfect marks I was far more confident in the subject than those in the other section. I valued the effort I put into mastering one of the most faceted subjects in psychology despite the seemingly impossible expectations. Setting high expectations is a crucial part of a growth mindset that reverses this challenge avoidance in academics.

Knowledge is not something people are born with nor is it static unchanging words in a collection of books gathering dust in a university library. For information to become knowledge, it must be shared between people, questioned, and used to create the opportunity for more questions and answers to be explored. Yet, there is a mindset that continues to spread in students which does not connect this continuous growth of knowledge to the student's own intellectual potential. If we continue to teach that knowledge is always growing then why are we seeing more students who believe their intelligence is fixed to a certain level? A key factor that overlaps both growth mindset and learning community research is the ability to cultivate resilience in multicultural students (Broda et. al., 2018) (Stassen, 2013). This is a trait that is in high demand as higher education continues to struggle to create an environment of equity for historically marginalized groups. Resilience is reinforced through growth mindset from teaching students to tailor their specifically internal assumptions to focus on how the effort put in was reflected (Yeager & Dweck, 2012). This fights back against the destructive comparative nature of standardized testing which disproportionally tampers multicultural student success. Competition and the model to produce the greatest return on investment even when it comes at a cost to academic effort feed into the system that is reinforcing fixed mindsets. Mastery in juggling takes practice with both hand and eye coordination much like how educative experiences should focus on more than one way of producing knowledge to portray intelligence.

Peer networks like the one created in my psychology learning community have been shown to serve as excellent bridges for connecting incoming students to the college community as a whole. In my own experience, I saw how the peer relationships that had the learning community as foundation were able to permeate into the clubs and organizations members extended into. Half the founding members of my university's first racquetball club were Psychology Learning Community members who got into the sport in order to get out of their comfort zone and try a new sport together. Effort and persistence that came from a growth mindset in the classroom showed up in the way members of my cohort were driven to try and make the university community connected and more socially just. Resilience and persistence in the struggle against systematic injustices on college campuses can come from focusing students mindsets towards effort and continuous growth. The work of student affairs educators should be focused on integrating growth mindset into programming that helps the development of student identities and assumption about college life.

Students in college are in a constant state of development, and according to most developmental theories this period in most of their lives is when students will pin down their sense of self. For even the most fixed mindset student, undergraduate college careers are still a place where mindsets can be strengthened or changed. First-year students identities are the most in flux since they have the least experience to rely on, which makes them the best candidates for a mindset intervention. Educating students on both mindsets and how they affect academics also allows the students to determine for themselves which mindset they want to have more of to help them be successful.

This thesis will outline a growth mindset intervention that will center transitional advising for first-year students on growth mindset to encourage students to identify and use this

mindset as they work towards mastery and understanding of their majors. Utilizing the framework of critical action research, the design and implementation of this intervention will have a strong focus on social justice. Within the next two chapters, the purpose and history of higher education will be explored. I will discuss how neoliberal thinking is the latest in a long lineage of fixed mindset reinforcing ideology that shaped higher education into the degree factories they are seen as today, and why this push towards return on investment stifles the educational process. Relying on the philosophies of John Dewey, Paulo Freire, and bell hooks, I will make the case that higher education should be a place where mindsets match the creation of new socially critical knowledge. The identity model of Arthur Chickering serves a guide to approaching student developmental needs with the same kind of continuous philosophy of education as John Dewey. The history of higher education will be told through the a model that highlights how the university has increasingly become more of a business and how it always reinforced more rigid views on intellectual ability. Student protests in the 1960-70s serve as a view of what unrestricted student identity development can create for social justice. I will also discuss the history and modern application of mindset research starting with Carol Dweck in the 1970s and leading to how modern research is showing that a growth mindset can be an important factor in mitigating multicultural student stressors.

The implementation of my concern comes in the form of a critical action research designed pilot program. The goals of the program and how it will help create social change in students is outlined in chapter 4. This chapter also connects the design of both the growth mindset workshop and the peer mentoring opportunities with growth mindset program goals and mitigating multicultural student stressors. It is important that critical action research aligns with

social justice reform and this connection is highlighted in the intention of equitable developmental design for the Growth Scholars Learning Community program.

The final chapter is an outline of how one semester of a pilot program in growth mindset could run. The timeline for the parallel growth mindset workshop spaces out when topics and assignments could best be used to develop deeper understanding of mindsets and their application to college development and work. I discuss how utilizing an academic major partner will make funding and student buy-in for the intervention easier. Through a university partners eyes, I expand on how the continuous reflective process of critical action research will make the program stronger. I also discuss evaluation methods that align with growth mindset to keep congruency throughout the experience. Finally, I will discuss the limitations of the program in this form and where I would like to further explore the application of growth mindset to new students' academic careers.

Chapter Two: The Purpose of Higher Education and Student Affairs

I mentioned in the first chapter that I believe knowledge is only created if information is shared, critiqued, and cultivates new ideas. In my philosophical view of education, people are always developing from new experiences and their development can be supported from within institutions of learning. Colleges and universities create the space for humanity to collectively share and spread new ideas about nature, science, art, service, and justice. Higher education should always be focused on being the environment that continues to create opportunity for new exploration. I also believe that higher education has the means elevate humanity much like how bell hooks, author and social activist, believed that education was vital to creating social justice and freedom. Also powerful vocalist for reparations, hooks believed that modern colleges and universities needed to keep the slave-blood soaked foundations of higher education in mind when planning for its future (hooks, 1994). In recent years, the increasing diversity of thought in higher education has created more conversation about basic human needs and social justice. I believe that education should be available to anyone and create new possibilities for each person to expand their understanding and abilities that shape innovation and knowledge. When bell hooks critiqued the modern university, she highlighted that U.S. universities fail to include social justice in their old colonial ideal of the pursuit of noble truths (hooks, 1994). In order to be available to more people, education needs to have foundations that recognize the uniqueness of each student's development, strengths, and motivations.

A growth mindset is a powerful tool for students to wield against intolerance, prejudice, and systemic racism. It allows the student to accept upsetting information or perceive injustices without the student attributing the negative experience to their innate characteristics. This resilience comes from the growth mindset student's willingness to work and be challenged, and

can also create mindsets talented in working for social justice goals where the work will never be finished. In this chapter I will discuss the how the concepts of growth, development, and liberation relate to growth mindset and the philosophical framework for higher education.

Student Affairs and Arthur Chickering's College Student Identity Development

Up to this point I have been discussing growth only in the context of growth mindset. This growth comes from the mindset which views intelligence as a flexible ability people can change through the right effort. Even effort can be viewed through growth mindset as an ability that everyone has the power to shape and refocus. The concepts of growth I draw from growth mindset I learned about in my social psychology coursework which focused on a more psychological definition that concern wellness and motivation. Events that created psychological growth in a person lead to the development of personality traits, coping mechanisms, and the changing viewpoints held by that individual alone. Arthur Chickering, like Dweck, was another psychologist who's theories of development shaped my philosophy and practice of student affairs in higher education. His theory centered on how college students grew, intellectually and socially, along what he called the 7 Vectors of Development. Chickering believed that the core function of education was to build intellectual competency, but he also knew development encompasses so much more for the college student. At a university, students are also given more opportunities to develop emotionally and be more aware of themselves than other experiences for the same age demographic. The vectors that focus on an internal locus of control, managing emotions and developing autonomy, are Chickering's best example for the different speeds through development that different students may have. His research would strongly suggest that college aged women develop emotional regulation first while their male counterparts are developing faster in autonomous goal setting and thinking (Patton et. al., 2016). Higher

education should be a place where different developmental needs of every student are met equitably. Some of the vectors differ in observable behavioral ways over time, but cognitive vectors, like locus of control, are harder to assess since they are often less observable and more internalized assumptions. The vectors that focused on developing identity, purpose, and integrity overlap with the goals of many student affairs offices on campuses already.

The developing competency vector includes growth that takes the form of intellectual, physical, and interpersonal competencies. Ability is developed through experiences and colleges should provide the space for an open exchange of ideas that fuel educative experiences (Chickering, 1969). Much like Dweck's view on ability, speed of developmental growth along 7 Vectors is determined by the students time and effort on academic and social priorities. Chickering wasn't the only psychologist focused on college students during the 1960s. While his theories focused on the development of identity, other cognitive theorists at the time were considering how students' personal assumptions of intelligence effect their processing of academic feedback. In this attribution theory, the assumptions people make about their experiences that shape their responses can be described as either the person's identity or their mindset (Dweck & Yeager, 2012). I see growth mindset leading to the change in students' personalities that gains the most out of a college education by developing the intrinsic value for the work and learning. The assumptions these students make about their ability are focused on what skills they can grow and what development they have made so far. Growth mindset students willingly push themselves into experience that will challenge their skills. These students are less interested in what they have to prove and more interested in the experiences that will help them improve their knowledge and understanding. Growth mindset students put their development and understanding before the need for feedback or grades.

Chickering believed students have to learn to recognize and manage their emotions through experiences that happen throughout adolescence (Patton et. al., 2016). The vectors of adolescent development he proposed divided milestones along different tracks that a college aged student may move either forward or backward on depending on the experiences they face. Higher education should be focus on understanding development as non-linear like Chickering believed in order to equitably meet students at different developmental levels both socially and academically.

The Philosophy of an Educational Experience

My philosophy of education is heavily influenced by another form of growth that has a deeper focus on the type education and the experiences that lead to continual development. John Dewey's philosophy of educational growth is based in the idea that not all growth is weighed the same and experiences creating growth that leads to stagnation is the opposition of what education should strive for. In an ideal educational setting the value of growth would be determined by "whether growth in [a] direction promotes or retards growth in general (Dewey, pg. 66, 1984)." Dewian philosophy instructs educators to be focused on creating educational experiences which are categorized by creating growth that has the ability to create further knowledge and even more experiences for learning.

Dewey also believed that growth was only possible if the educator understood the interaction of education and the student. Interactionism is the philosophy that forces withing the mind and in the environment shape behavior by overlapping or acting on one another, and in the 1960s cognitive psychologists would call the interactionism in education as attribution theory. In education, the student represents the internal forces out of the educator's control. Motivations, past experiences, stereotypes, and understanding are forces that students bring into the

educational environment that will affect their educational outcomes. It is up to the educator to construct the environment to be approachable and adaptable for the audience they are focused on. Understand of the student and their environmental factors also creates the opportunity for equitable distribution of resources based on the amount of need each learner would have.

The modern classroom that fuels fixed mindset is a bad model to base the teaching style of the faculty in a growth mindset intervention. A banking model classroom is structured so that the educator holds all the power over knowledge creation. This model, first used to describe education by Paulo Freire, takes the creation out of learning and requires students to produce replications of what the educator teaches to get a passing grade. Freire asserts that this model also pushes against social justice by silencing dissenting voices, reinforcing dominant ideology, and narrowing the education field to what the powerful and elite believe in (Freire, 2000). Education today has too many classrooms and teachers that follow a banking model. These classrooms reinforce years of neoliberal ideology that over value choosing the best return on investment over the best education experiences. This banking classroom reinforces fixed mindsets by modeling that there is only one way to be successful. Students in a banking classroom have to follow the teacher's archetype of a good student and correct answers, and this could lead to students feeling that their effort is wasted if it's not rewarded.

A better growth mindset classroom starts with the students' development first and rewards all the effort students take towards understanding and mastery of a subject. Freire's antithesis of the banking model was another teaching style he named a problem-posing classroom. This classroom start as an environment where students feel valued and builds the course outward from what students already understand. In these classrooms, open dialogue between student and professor is used to constantly be reevaluating the course. Instead of a head

of the room, professors are brought to the level of their students in order to understand their motivations and needs in the classroom better. Student are given the power to challenge coursework, question validity of texts, and freely ask questions that are necessary to facilitating the shift away from performance-based learning and into learning for deeper understanding and growth. This model would reinforce that growth is nonlinear and would add to the greater self-advocacy of a growth mindset student by giving them the ability to question their environment. Freire asserts that a problem-posing model would require a "profound trust in [students]and their creative power (2000, pg. 75)," and I believe that this trust can be placed in the intrinsic value for continuous education that comes from a growth mindset.

The vectors of student identity development Chickering describes offers a framework for explaining growth that is more nonlinear which fits with the developmental path I took in college clearer than other developmental theories. Considering nonlinear development is important to educators ability to create educative classrooms and equitable learning environments. These classrooms would meet students at their developmental level and move at the student's pace as they deepen understanding or mastery of a skill. While the vectors of student identity development are generally non-linear, there are some which generally follow later in a student's timeline. The "final" two of Chickering's vectors, developing purpose and integrity, are considered final because they develop only after students have achieved many other identity milestones (Patton et. al., 2016). He believed they both require both skills and time to acknowledge what a person truly believes and stands for. This overlaps with Dewian educational philosophy called the continuity of experiences which postulates that every experience is a moment of learning which can lead to greater learning in the future depending on how the experience is perceived.

I feel that higher education should garner intrinsic value from students and make them actively seek out more pathways for deeper learning whether its academic learning or personal discovery. Chickering's assertion that students grow vectors at speeds based on effort combined with Dewian philosophy of educational experience can show how a fixed mindset can stifle any kind of academic development by narrowing the opportunities students expose themselves to.

Students more motivated to prove their worth by seeking classes they know they'll succeed in aren't seeking the kind of experiences Dewey would trust lead to greater learning in the future.

Catching first-year students and increasing their growth mindsets creates opportunity for more educative experiences by widening the abilities to process experiences, too. My intervention builds growth mindsets that would create a space where educative experiences are more possible through students critiquing themselves on their effort and growth in a subject not their performance on testing. Their assumptions based on development and growth will create personal understanding and allow students to choose the most productive paths through college.

Critical Action Research

In my Master's studies, the scientific method we used utilized continual reflection within community based research. Additionally, the program focused on social justice and transforming higher education into an equitable place for every potential student. Student affairs and educational researchers often place themselves within the communities they are studying to best understand the social struggles of the groups. Critical Action Research (CAR) is used most often when researchers are committed to bettering the social structure of communities they become a part of during their studies. A higher focus on utilizing critical race theory in CAR planning and reflection is another the reason my program choses to focus on CAR over other action research methods. Action research in general always has a high focus on participant agency – the ability

for participants to provide feedback that effects them and the study. CAR practitioners have a better opportunity to address the most important needs of each community since they listen to feedback through a critical lens of a member.

One of the most important distinctions in action research is that the planning method used follows a cyclical process of planning and assessment. Researchers in CAR assess and analyze the community in order to transform it, but they wouldn't stop after just one research cycle. The PLC that I was in my first year at college followed a similar structure that reassessed program goals every semester in order to best cater to students' needs. The faculty used the simple heuristic Plan-Do-Study-Act to summarize how their action research followed a repeating process of self-reflection and adjustment. From within a learning community, I saw when adjustments needed to be made to avoid competition, social drama, and accommodate students at different developmental levels mid-way through our first year on campus. I hope that I can similarly build assessments for gauging student learning milestones in growth mindset by structuring my intervention on CAR. The self-advocacy students will learn from growth mindset will also be reinforced when faculty asks for their opinions and actively listens to feedback by making adjustments. As students change from year to year, the individual developmental needs of each class will affect the amount and type of experiences offered, specifically those related to growth mindset. Like with Dweck's work, a diverse group of students with greatly differ on the amount of a growth mindset they possess and even where they focus their fixed versus growth assumptions. CAR is a great starting point to use to ensure that the intervention's classroom that is supposed to promote social justice is being equitable to the needs of the student participants.

From the top down, the intervention leadership will model growth mindsets that will help them push through adversity and equitably meet the needs of every student. A growth mindset

creates leaders focused on social justice work and resilient to the constant struggles that work entails. These CAR investigators will need to seek out the challenging work of critically examining how these first-year experience effect long term success of the students. Growth mindset will also help the investigators hold different roles being researcher, teacher, and advisor. While a fixed mindset leader may avoid difficulty or situations they aren't comfortable leading in, a growth mindset leader seeks out conversations and experiences that will grow their skills and help make even better connections to growth mindset for the first-year students. Just as CAR continuously looks at how interventions meet program goals, the faculty in this intervention will continuously assess how their advising and programming is reinforcing growth mindsets in their students.

Related Professional Experience

In my own undergraduate career I was faced with numerous setbacks and failures. I attribute my adaptability to these problems with the first-year experience that introduced me to social psychology and Dweck's mindset theories. I joined a learning community my first year focused on the major of psychology and preparing students for our academic careers. The instructor based his classroom structure around the concepts of growth mindset as well. Work became "play" and competition was stifled for the sake of better cooperation and team building. As evidence that the community building worked, I still have deep personal connections with these peers and will probably keep them for life. Reflecting on this classroom environment today, I see how the learning and activities equate to Dewian concepts of educational experience. Teaching first year students growth mindsets changed our perception of failure or stagnant classrooms into the morsels of learning that would still propel us forward in our studies. When I

personally failed out of the pre-medicine track, it was this same advisor I turned to in order to make sense of the experience and figure out how it changed my path in college.

All of these examples are to highlight why I believe the best time to introduce college students to growth mindset is as early as educators possibly can. Including this intervention as an addition to first year experiences will ensure that students as early as their first semester are exposed to growth mindset and can add it their mental tool boxes for their entire college careers. These first-year experiences are focused on preparing students for success in higher education, but they also teach new students what higher education is for. These experiences should not prepare students for the version of higher education that is trending at any given time because right now it would be a money making degree farm. Instead, higher education should reinforce to incoming students that it is a place for exploration, knowledge creation, social justice reform, and collaboration.

Chapter Three: History of Higher Education

The higher education system in the United States of America has a deep history of serving the elite and powerful. From their onset, colleges in the U. S. have fed into systems that perpetuated colonial ideas carried with white settlers from England. Early college presidents, like University of Princeton's Rev. John Witherspoon modeled their university system after English colleges. Witherspoon also "forged intimate ties to human slavery (Wilder, p. 105. 2013)" to accumulate the wealth needed for his schools to grow. U. S. universities which profited off the oppression, enslavement, and displacement of black and indigenous people became the system that was used to rationalize the very same atrocities. In the early days both the enlightened colleges and colonial churches, like Witherspoon's Presbyterians, justified slavery by teaching that it was historical means of cheap labor and the oppressed peoples somehow deserved their shackles. The idea that certain people have a fixed intelligence has been ingrained in higher education since the Ivy's were first formed. In the end, these white male colonialists succeeded in creating an environment that reinforced the importance of accruing capital wealth over academic freedom and education for all people. Echoes of these colonialists can be seen throughout the history of US higher education. The Abolitionist University is a non-profit dedicated to shedding light on these colonial ideals that permeate higher education by teaching counter histories which focus on the disenfranchised voices of the past. Their model for the history of the American higher education system is tied to each era's attempt to use education for profit while keeping it out of the reach of certain types of people.

A Colonial University for Profit

The Accumulation Model of Higher Education History is also great at highlighting how fixed mindset ideals crop up from neoliberal thinking that focuses on individual time and profit.

Higher education becomes more focused on hard skills and application to the job market post-graduation as it is pulled in the direction of a money making industry. The shift to paid higher education is not just an inequitable roadblock first meant to keep people of color out in the civil rights era. This slow but steady history shifting towards the accumulation driven higher education of today also reinforced the earliest fixed mindset ideas like certain people were inherently inferior, deserved separate spaces, or would damage the culture by introducing something new to it.

The model also highlights how the people fought back against the accumulation of people into the market system. These acts were as small as theft and petty acts of rebellion against slave owners in the 1600s, and they could be as big as entire student walkouts and radicalized teachers unions against segregation in the 1960s (Abolition Journal, 2019). These acts of rebellion often signal growth mindset assumptions about students and the purpose of higher education. Students pushing back against the accumulation model as far back as the 1700s were challenging the idea that some students were inherently disqualified from certain fields. Woman in the 1800s taking advantage of the land grant acts were able to teach the first views on intelligence that included more than white colonial men. Native American rebellion against colonial education as far back as the 1600s taught view about intelligence that can be viewed as more growth mindset than how universities would have viewed it at the same time. A fixed mindset is the dominating view on intelligence in the accumulation model's view of higher education, and a growth mindset today can help push back against the over commodification of a college degree.

An Accumulation Model for Higher Ed History

The first era in the Abolitionist University's model looks at the early days of colonial America. This era focused on the first major colleges' foundations in slavery and displacement

Of native Americans. Many of these first colleges would go on to be todays Ivy League Universities, their extensive history with slavery is discussed in Craig Steven Wilder's book *Ebony and Ivy* (2013). The names of the eras in the Abolitionist University's model are a counter interpretation of political and economic era names. For instance, the era that U.S. historians commonly call the U.S. Reconstruction Era is referred to as the first Land Grant Era after the means in which states accumulated land for new colleges during the 1800s (Abolition Journal, 2019).

Planter Era. Labeled the Planter Era after the plantation heavy economy in early colonial United States, this first era in development formed the unshakeable ties with accumulation within the higher education system. The economy from the 1600s to the 1800s was built on a trade system that trafficked both goods and people away from their home countries. Universities in this era were only for the most elite of white business men and were founded on their estates built with slave trade money. The Accumulation Model emphasizes that some schools owned slaves, like Georgetown, while most others used their coursework to train plantation owners and future traders on the processes of slavery and human profiteering. Some institutions used their influence to push back against abolitionists at the time by changing their narratives from true freedom to the removal of people with African decent (Abolition Journal, 2019). There was little that could be done to reverse these modes of accumulation at the time, but still student riots and small collectives pushing back against enslavement existed. The ideas made mainstream by universities at this time reinforced the racist colonial policies and taught that intelligence was reserved for certain types of peoples. The assumptions of a fixed mindset were implanted in the very first universities with the idea that intelligence wasn't something that could be grown through effort.

Land Grant 1 Era. Following the civil war, a dramatic shift in US economics drove colleges and universities during the US Reconstruction Era to scoop up western land in order to create funding for an expanding higher education market. In the first Land Grant Era, 1862-1890, congress passed the Morrill Act as a way to establish state colleges (Abolition Journal, 2019). The act made it possible for states to speculate on land out west and send settlers to secure it from indigenous populations to serve as collateral for establishing their colleges. This displacement was followed by religious and state own institutions targeting indigenous and black populations with colonial educations meant to destroy their original culture in favor of the white dominant culture of wealth. Bell hooks highlights that this pacification of culture played a huge part in justifying and covering over the atrocities early colonials committed in pursuit of accumulation (hooks, 1994). The university system was responsible for funding massive anthropological surveys that robbed the land and graves of indigenous people. This annexation was justified, just as slavery, from within the university halls that called these populations less developed.

Land Grant 2 Era. Following the reconstruction era, the second Land Grant Era marked by the Morrill II Act focuses on how segregation began to be used as a tool for accumulation. The turn of the 19th century saw massive philanthropies start to pour capital into colleges which temporarily eased the burden of accumulation on faculty and educational production. Professors and faculty started to unionize in small ways which allowed them the agency to demand better treatment and autonomy from state governance. The Abolitionist University sees this as a false autonomy though since unions largely worked to reinforce institutional control over what was being taught and not genuine educational freedoms (2019). The prevailing beliefs about intelligence at this time were heavily favoring fixed mindset concepts of inherent intelligence.

Colleges and universities remained almost entirely for white men if they weren't being used to indoctrinate indigenous populations with believed inferiority. One successful resistance to accumulation practices at this time was the initial push back on taxing university buildings like residence halls, dining facilities, and gymnasiums which would have started the shift towards for-profit colleges decades before it became the norm.

Military Keynesian Era. The turn of the 19th century also marked the first major era in college disciplinary organization. Colleges began separating majors by their dominant philosophies such as humanities, economics, and social and natural sciences. Almost as soon as they establish their place in the university, the humanities start to fall out of favor with the university and its practice of accumulation. Starting during the Military Keynesian Era and continuing through the Cold War Era, 1928-1960s, the university system began its dramatic turn away from freedom of education and scholarship ideals. This time was marked also by an increase in the relationship between the military and universities in both student life and research focus. In the early years of this era, military research funding fueled the push towards scientific fields. Defense contracts and the inherent arms race brought on by World War II created the space for science programs to accumulate incredible capital from state and federal governments. In their counter history of this progress, the Abolitionist University view the university at this time as offering a geopolitical fix to communist arguments at the time. The university created the space to remove populations from the workforce for several years before reinserting them back into the workforce with the right experiences to work in a capitalist nation. Neoliberal ideology would probably view a fixed mindset as beneficial to the capitalist market too. Universities reinforcing that students could not change their intelligence much could reinforce that some people belong in difference classes because of their inherent ability. Similar views of intelligence have been used to justify slavery in the past, so it stands to reason that these views could justify the borderline servitude in cheap labor necessary for a modern capitalist society. Universities turned themselves into a commodities more and more by providing huge groups of cheap labor and research capabilities in the form of unpaid college students (Abolition Journal, 2019).

The same university system that defended slavery because of profit was being used again as a means to accumulate the disenfranchised into the market economy post WWII. Bell hooks remarks that the university that once sustained colonialism in its infancy was at this time reinforcing "white supremacy and racial apartheid even in the face of desegregation (hooks, p. 24, 1994)." Philanthropies tipped the scales away from public funding for segregated schools which created the most unjust education system the US ever had. While black schools provided the same means of displacing laborers, segregated colleges provided an education that did little to help minority students general personal capital post-graduation. Instead, these degrees served only as a way for black citizens to be better capital for industry and corporations (Abolition Journal, 2019).

Neoliberalism Eras. The most drastic shift in the marketability of university research came in 1980 with the Bayh-Dole Act that allowed universities to patent research. This became a huge avenue for research funding that would work to balance the scaling back of public funding for state public colleges and universities. The university became an hotbed for technology and economic startups that made it seem like a fast education was all that a person needed to start generating capital for themselves (Abolition Journal, 2019). The first neoliberal thinking to make its way into mainstream views of higher education, and this also echoes the same fixed mindset thinking that has always been present in the university. The university begins to build itself around the growing neoliberal market economy and also used the business model to replace non-

instructional service with the lowest paid labor. This drives colleges functions like food services, clerical, and custodial jobs to move into the private sector.

The shift towards a business focus also meant the beginning of a hard shift away from the humanities. "Soft degrees" were had decreasing value as the measure of a degree became solely economical in focus. Colleges worked hard at this time to reinforce the idea that a student's time was directly judged by what they got in return, and this return on investment thinking reinforced fixed mindset assumptions. The same assumptions were also teaching students at the time that classes they might not succeed in aren't worth their time, or that any skill they might not instantly be a master at will be wasted effort (Abolition Journal, 2019). Return on investment that stemmed from neoliberal ideology created the ideology within U.S. universities of choosing a path of least resistance. As the price of colleges continues to rise, students increasingly have to ask which degrees will also allow them the time to work one or more jobs. Advising that reinforces choosing the path of least resistance is fortifying fixed mindset views towards academic planning.

Just as the culture of the time impacted higher education, the effort to push back against the neoliberal phase of the accumulation model would impact far more than itself. The push for more diversity in education was a driving force for the Civil Rights Era, and with this push for more open education came the welcoming of new schools of thought. Carol Dweck began her research into the incremental theory of intelligence in the 1970s that would be the foundation for her mindset theories. It was the mindsets of students coming together in a brand new way that created the space in education for so much growth. Community was a huge part of how the students during this time were able to create positive social change.

Residence Life & Social Justice

On-campus residential living has been a corner stone of student life throughout the history of higher education in the United States. The first colleges were simply small groups of buildings where students and faculty worked, learned, slept, ate, and formed connections with colleagues. The changes to the residence life architecture over time through the influence of societal and political views of higher education creates an environment that no longer encourages students to take control of their education. Now these places for out-of-the-classroom learning support the inequitable static mindset that I've shown arises from the accumulation model of higher education. Importance seems to have shifted from scholarship to the need for receiving the grades in the classes necessary to get a return on the investment of debt and time. The influence of student movements on societal views provides a counter history of why the structure of residence life and campus community has been made to reinforce fixed mindset learning. Looking through the history of the most disenfranchised groups, specifically of the social change movements that came from college students, provides examples of how important a community focused on growth and development can impact colleges campuses.

The first dormitories in the U. S., as far back as the 1600s, were all male buildings designed to promote the connectedness of the undergraduates and create environments for intellectual conversation. The student, at this time, was under the complete control of the faculty that lived and worked with them. The concept of *in loco parentis* arouse from this idea that while the student is attending university they are solely under the supervision of the college and the college acts as their pseudo parents during their stay (Lee, 2011). This concept contributes to the fixed mindset by removing the students ability to create their own space. Student's either thrived in this period of university control or they would get left behind or fail out. In the 1800s as

women more frequently pursued higher education degrees, the concept of In Loco Parentis is seen again creating intentional design of segregated women's and men's dorms that enforced the periods societal roles of gender on students. Constructed to enforce the societal norms of the female homemaker, social areas had much larger emphasis in women's dorms than libraries or study halls. The rigid stereotyping placed on female students resembles a fixed mindset. Male peers held fixed mindset beliefs that they were superior in certain subjects just based on believed natural ability. Sadly this mindset still persist today as fixed mindset students often echo the incorrect college stereotype that women are innately worse in STEM (Science, Technology, Engineering, and Math) degree fields.

As their numbers grew, women would form the first student movements that changed the structure of residence living towards a more open community. At Howard University in the 1910s female students formed committees and worked with their university in response to the unsafe living condition of black women who wanted to attend college. These new dorms had long hallways which gave resident advisors better view of the shared community space, and fewer entrances and exits for increased safety. Howard University also excelled in communicating their vision for a residential community to the students using their history of struggle to reinforce the ideals of contributing to a better community. The Harriet Tubman Quadrangle would become a model for how to optimize residential living space while increasing the security of students dramatically, but there consequences to the dependence on this model (Bauer-Wolf, 2019). This militaristic design to increase control over movement has added to the control of *in loco parentis* on many campuses by increasing the monitoring of all aspects of a student's life. In these dorms, the rigid structure of a fixed mindset was also supported by the control that the college had over students' movements, visitation, and social activities.

As Baby Boomers started to pour into colleges in the 1960s, universities used Howard's model for a secure and simply structured dormitory to build the new residence buildings needed to house the increasing student population. This style of dormitory became the new normal and is now almost synonymous with the first year college experience (Bauer-Wolf, 2019). During the same period, the Civil Rights movement also shook the foundation of higher education by challenging so many of the ideals that shaped college campuses. A change in the social mindset among students that began to stray away from fixed ideas like innate levels of knowledge and listening blindly to administrative offices could be what motivated students to come together like never before and protest for their rights. In 1964, students at the University of California, Berkley ignited the first of many free speech protests of the Civil Rights Era, seemingly starting the Free Speech Movement of the same time (Landau, 2014). These students were standing up for their classmates rights that were previously thought to be governed by the university In Loco Parentis. This was a huge driving force that lead more student to create changes in the 60s in the direction of student self-governance. No doubt that those first progressive minds had to develop a mindset outside of the fixed rules the colleges enforced on them. Their disregard for grades, penalties, or failure from protesting are indicators that these student held growth mindsets that helped them be more resilient to the pressures that were trying to keep them down. These students creating their own courses, systems, and educations are signs of the belief in a living, changing wealth of knowledge that is governed more by experience than grades.

In response to the Civil Rights movements, many colleges tried to redesign programs and their residence halls to create less volatile and more achievement focused environment again.

This is where the direct and intentional shift to a fixed mindset happened in earnest. With a heavy reliance on standardized education, there has been a shift in recent years away from these

growth mindset ideals again. Residence halls never reached the levels of student autonomy that protesters in the 1960s dreamed of. Instead, the same system that defined academic success as a grade not learning defined experiences in residence halls to be community building not educative.

The residence halls of today seem to be steering away from places to study and from community into creating lavish living spaces with student autonomy in mind. The effects of some student movements such as those at the University of California at Berkeley in the late 1960s contributed to the first changes towards the ideal of student autonomy (Landau, 2014). With the wave of students demanding to be in control of their dorms, courses, and programs, the long held belief of the University acting In Loco Parentis gave way for the first time to students being seen as adults with their full constitutional rights. One lingering trait of in loco parentis that was left behind was the undisputable leadership of professors in their classroom. A trait shared with Paulo Freire's concept of a banking classroom which is a model of how classrooms can be set up to reinforce power and ideology. This classroom also reinforces fixed mindset ideas like static knowledge and the dependence on graded feedback. Current students are as politically knowledgeable as those students in the 1960s but there are far less student protesting, less advocacy for students, and less student control over their residence and courses overall. Freire also believed that oppressive power molds the way knowledge is valued and learned in order to create a cycle of citizens learning to follow the oppressive structure of their society (Freire, 2000). Through this lens, the shift towards standardization and fixed mindset classrooms takes a sinister shape of the processes that are meant to keep college students quiet until they become useful to the economic society.

The free speech debate is still a hot topic on college campuses, but college students' ability to create societal change hasn't been as clearly seen since the 1960-70s. It is the mindset of the current university model that keeps students from challenging their learning and creating a growing shared knowledge. Selling points of today's dorms are things like cool game rooms, private space, and personal appliances. Better selling points for the continued purpose of residence halls should be coming from how they benefit student development and transition into college. The most bragged about statistic all the residence life training I have known has centered around the grades of the students in residence halls verses those off campus. The fixed mindset importance of grades and finite knowledge has polluted residence life into another cookie cutter system that just wants to push students through college as capital. It is up to student affairs professionals to create the opportunities for new mindsets to develop in residence halls in order for higher education to regain its ability to think outside the box, question the structure of the world around it, and create a university that is driven by the growth of knowledge and understanding.

The Impact of a Growth Mindset

The positive impact a growth mindset has on student learning and development has been studied since it was first called incremental theory by Carol Dweck in the 1970s. Before that, developmental theorist studied student motivation in a number of different ways that lead to the right environment in psychology theory for Dweck's mindsets. In her own reflections on her foundational incremental theory, Dweck highlight's growth mindset's "... interesting lineage" that centered on cognitive learning theories like attribution theory and learned helplessness (Dweck & Yeager, 2019). The theories she first proposed combined how cognitively animals may choose to give up when they face failure repeatedly with humans finding explanations for

students up with an environment that viewed academic failures as huge negative setbacks and catastrophes. The path of least resistance thinking that made its way into college ideology could explain why students seem to reach so negatively to setbacks. In 1975, Dweck proposed that changing students' perception of failure could help them build a habit of persisting past repeated setbacks. She found that students that only received feedback based on whether they succeeded had even less learning after a failure, but the students who were advised on effort came back from failures ready to continue their academic journeys (Dweck, 1975).

Growth mindset articles are mostly published in research and review journals in higher education or K-12. The articles often discuss development and growth mindset in the classroom setting or how they relate to overall student achievement (i.e. retention, graduation, grade point average). Some growth mindset theories focused on motivation have more of a focus on reflective assessments like growth and development than performance based assessments like GPA and academic proficiency (Mandeville, et. al., 2018). There is more of a focus on pedagogical approach and long-term academic success markers like retention and GPA in the articles which focused on learning communities and peer mentoring. Learning communities and first year experiences have been around far longer than Carol Dweck's mindset theories (Stassen, 2003), and the shift in researchers' focus from broad developmental goals to specific institutional goals was not surprising. The concepts in high impact practices directly relate to increasing connectiveness, engagement, and academic performance which is why the current research is aimed towards proving its effectiveness.

Carol Dweck's Growth Mindset

There are growth mindset articles, like both from Forsythe and colleagues, that utilized mindset as their basis for higher education interventions that mostly stem from Dweck growth concepts. Particularly, one concept that came up without the need to be related directly to growth mindset was theory surrounding feedback and student perception. Feedback has been found to be important to the development of growth mindset and useful in reinforcing of growth concepts with students (Barnes & Fives, 2016). In the research, feedback and growth mindset are so interwoven that it is hard to tell in these observational studies whether it is the mindset which makes receiving the feedback more salient (Forsythe & Johnson, 2017) or if feedback can encourage more growth mindset attitudes in students (Forsythe & Jellicoe, 2018). Forsythe, Jellicoe, and Johnson drew the connection between growth and feedback to growth mindset's core concepts of self-regulating and intrinsically motivated learning. Other studies focused on the extracurricular student experiences which lead to increased growth mindset values. Researchers found that parental involvement and recognizing growth values in a student's environment both allowed the concepts to be more salient (Waithaka, Furniss, & Gitimu, 2017). Students' who saw the growth mindset modeled in teaching internalized and portrayed growth mindset even more after peer feedback, interactions focused on growth mindset, and simply by being exposed to peers developing the same concepts (Kovach, 2018).

Growth Mindset in the Classroom

Feedback is not the only growth mindset concept that can be directly applied to the classroom setting in my intervention. Barnes and Fives outlined more ways growth mindset can be integrated into assessment to encourage more development in undergraduates. They found that students performed better with increased feedback, personal progress tracking, and

developing personal high expectations, and that the students which performed the best in these situation had more growth mindset values than their peers (Barnes & Fives, 2016). Tucker and colleagues even noticed these positive effect of growth mindset peer mentoring in their study of different types of peer advisors. In their study, peer advisors where given self-efficacy and growth mindset training before assigned to classrooms which researchers believed would encourage students to seek the advisors out more. Tucker's researchers were more focused on the effect this training and work had on the peer advisors themselves, and they found that these students developed higher growth mindset values and leadership skills after working as a mentor (Tucker et. al., 2020). Integrating growth mindset concepts into the college classroom would most likely start with how students receive feedback, but as seen in these articles it could even come from the students themselves utilizing growth values giving peer feedback or training peer mentoring. The classroom environment is not the only place these concepts and values could be integrated. With such a strong correlation to peer learning, the concepts of growth mindset connect well to the high impact practice of living-learning communities and extracurricular learning which takes place in residence halls.

Learning Communities

There were no shortages of studies and articles related to one of the most enticing high impact practices for undergraduate students. Learning communities have been around since the 60s in college residence halls. The research into their efficacy really started after George Kuh brought the experience to the front of academic and student affairs minds when he released his book on High Impact Practices and how to integrate more students into them. High impact practices are still researched and implemented across the U.S. today in efforts to increase educative experiences for undergraduates. Researchers, Wolaver and Finley, found that

participation in first-year living learning communities lead to more participation in high impact practices throughout their undergraduate career, higher student engagement overall, and even an increase in the diversity of students' social groups (2020). Studies looking at types of learning communities and their impacts have found that category, such as Honors, Arts, or Residential Academic, have little difference in the positive effects related to participation (Stassen, 2003). Other similar studies have found that the size and effort by faculty had a bookending effect where the largest learning communities performed as well as smaller more student affairs guided communities, but both outperformed the middle mixed-department communities. This study also separated the largest and middle-sized communities from the smallest by categorizing the smallest as a mostly student affairs or residence life driven program while the others had to include faculty advisors and connection to a course of study (Inkelas, et. al., 2008). This particularly interesting data lends itself to the argument that the smaller programs would more likely be sustainable and still impactful to student development. Self-segregation from within a learning community is a potential risk especially for a program with growth mindset goals in mind.

There is evidence to support either side of the argument that learning communities create this competitive trend. The first researchers surveyed students and found that while they were all in the same living learning community there were separate social groups that formed based on the perceived intelligence of classmates, a very fixed mindset concept (Brouwer et. al., 2018). On the other side of the fence, Smith supported his theory that first year learning communities actually mitigate the academic segregation and narrowing of social circles that Brouwer and colleagues identified in their study (Smith, 2018). Both of these articles point out the importance of monitoring academic circles forming in learning communities and creating interventions to

stop this fixed-mindset trend. Competition is not helpful in creating environments where students feel comfortable trying new things, especially if those students already a lot of fixed mindset ideals.

Mitigating Marginalized Student Stressors

Serving underrepresented, marginalized, and minority students is one of the main focuses of student affairs professionals in recent years. There are a plethora of articles with the community building aspects of learning communities being used to mitigate the effect of oppression, privilege, and belonging have on minority students. In their discussion of the increased diverse engagement they found from learning community students, Wolaver and Finley assert that motivated participation in learning communities would open more paths for future growth of diverse peer groups and seeking out more diverse experiences (2020). Learning communities could also serve marginalized students through peer development of persistence, or the ability to work through difficulty. Studies of different types of learning communities have shown that no matter the type of program students have an increase in mindsets related to persistence (Stassen, 2003). Persistence is a concept that Broda and colleagues also linked to the development of growth mindset, and they went a step further to say the minority students in particular expressed this value had significantly higher academic performance than their regular course counterparts. Their growth mindset article also overlapped with the learning community by showing that participants and students with growth mindset values have an increased sense of belonging making them more likely to persist through their degrees (Broda et. al., 2018).

A Growth Mindset Learning Community for Social Justice

It is evident, from the literature, that the concepts of growth mindset would be beneficial to creating a learning community for social justice. For example, Kovach (2018) found support

for their theory that there was an important social component related to mirroring behaviors and peer pressure making it either easier or harder to develop growth mindset values in college students. The connection that learning communities have can be used as a means of flooding students' environment with growth mindset concepts to increase saliency. Though in order for that to work, there would have to be high student buy-in or students already comfortable with the concepts of growth mindset that would model its values from day one. Circling back to social justice, studies show that its students with diverse multicultural experiences that exhibit the most growth mindset values before coming to undergraduate and many even before they knew what growth mindset was. These values like intrinsic motivation and need for directed feedback mean they would support and model growth concepts theoretically more easily than students with little or no multicultural experience (Narvaez & Hill, 2010). There was no shortage of discussions which theorized the benefits of increased belonging and persistence, the ability to receive and decode feedback into learning, and minimizing of intelligence stereotypes would have on minority students. These articles only scratch the surface of the similarities in developmental goals of these two concepts. Both are concepts that can be used to handle the social inequality problem on campuses alone, but the possible application of both together could be the adrenaline shot to jumpstart new student success at PWIs and other schools where minority students struggle disproportionately in academics.

Chapter Four: Program Design and Implementation

The function of my intervention is to incorporate the concepts of growth mindset and community building into the first year college student's experience. Specifically, my intervention is a workshop to run parallel with a first-year experience that centers advising and goal setting on growth mindset concepts. The workshop will also bring students together as an academic learning community to reinforce social justice assumptions and focus on cooperation over competition. Reaching students as early as their first year could increase the saliency of growth mindset concepts throughout their college careers. Growth mindset could provide these new college students with increased resilience and adaptability that would be a foundation for academic success. There is also the potential for increasing student agency through growth mindset that goes hand-in-hand with academic and career planning coursework in first-year experiences.

Creating a community outside of the first-year experience classroom will be important for connecting the concepts of growth mindset to students' social development. Studies like the ones lead by Broda that have shown that there is overlap between growth mindset concepts and the developmental growth that has taken place within learning communities (Broda et. al., 2018). These overlapping concepts like resilience, persistence, and positive social coping skills are particularly useful to the incoming college student. As these students plan for their future success they will be reinforcing the concepts of growth mindset with their peer mentors and advisors. Physically housing the students in the same residence halls also aids in mitigating many multicultural stressors that arise from first-year programming. However, if housing students together is impossible the concepts of the learning community are still vital to creating the environment for growth mindset to flourish. The same feelings of connections that mitigate

onliness or imposter syndrome in multicultural students can be created when growth mindset is used to bring together students who share a common major or interest. Prominent motivational and mindset theorist have even shown that establishing learning communities at predominately white institutions increased multicultural students' sense of belonging (Broda et. al., 2018).

Selecting students for the growth mindset learning community could start with the academic majors who would benefit most from a perspective that deeply values effort, learning, and continual educative experiences. The first majors that come to mind are education majors and the social science focused major like Psychology. Education majors would benefit from a perspective on learning that shifts away from the common approaches that center on performance goals and rigid assessment. Science majors like psychology could focus the growth mindset concepts as they could be applied to the continual nature of scientific research or the direction of new research into mindset and wellbeing. All students will benefit from program tailored to academic planning, goal setting, and growth mindset coping strategies. Matriculated students who have chosen the growth mindset community's major partner can be offered the choice of the community as a supplemental part of their first year experience.

In the best case scenario, the students who apply for the program will also be offered housing in the same residence hall. Some workshops could even take place within the residence hall to reinforce the connection with the larger residential community and the growth mindset student cohort. The cohort of students will be called a major's Growth Scholars in order to draw some added interest in joining. Notoriety from the name will hopefully also generate interest as perspective students are looking at the college as a whole or the specifically the department that houses the intervention. When a cohort of the Growth Scholars Learning Community is finished

with their semester together, it is hoped that they continue to think of themselves as growth mindset students and peer-educators for the remainder of their time in undergraduate.

Intervention Program Goals

Foundational programming goals for my intervention will help make sure that each piece of the growth mindset community and class work together to provide the best experience for first-year students. These goals will also serve as comparison for the end of the year to see where the program might need to be adjusted in order to best relate the concepts of a growth mindset to the student experience. While these goals are a great start for planning and programming, it is important that this program follows the cyclical assessment process of critical action research (CAR). These program goals are subject to change if the program as a whole either fails to meet them or the goals become separate from the academic needs of students. It is possible that some cohorts will need or want a higher focus on the community building while other would be looking for the academic support of advisors and peer mentors with a growth mindset. As I've mentioned in previous chapters, the student first approach to planning and content creation makes sure that individuals will be taught growth mindset from the level they will gain the most from. The difference in student understanding of mindsets will certainly be the biggest hurdle for instructors. Having solid programming goals to rely on will make sure a problem-posing classroom is always going to be working towards the goal of increasing growth mindsets. Students will be asked to evaluate learning goals with their instructor and advisors at the beginning of the program in order to match their expectations of a first-year program to the coursework and topics.

The program goal for my intervention focuses on the purpose of the 8 week growth mindset workshop that is supplemental to students first year experience. The goal of the

experience programming for incoming students. Building out from this first program goal, the learning objectives for the bi-weekly meetings will focus where the content in the first year experience will generate growth mindset discussions and learning. Following the one semester supplemental workshop, Growth Scholars will be able to;

- 1. Describe growth mindset as it relates to academic planning, grading, and advising.
- 2. Describe how a growth mindset can influence their social development and interpersonal relationships, specifically in the college setting.
- 3. Use the growth mindset concepts they learn when planning academic careers and career development throughout college.
- 4. Evaluate feedback and academic advice through the perspective of growth mindset scholars.

Faculty and peer mentors will work with each cohort to create and evaluate the best programming outcomes that will help each group meet these learning objectives. This is where individual developmental difference can greatly influence the kind of outcomes that faculty might think are necessary. For instance, if students all agree that scheduling classes is low on their list of priorities than program outcomes might not need to include scheduling when talking about academic planning and growth mindset. Program outcomes can be helpful to peer mentors and graduate advisors trying to build programming for the Growth Scholars. Each time a new project, activity, or field trip is presented the mentors can use their program outcomes to evaluate whether the learning that will take place is beneficial to the overall goal of teaching a growth mindset. I will model how these programming outcomes help keep the program on track when I discuss the 8 week intervention's assignments later in this chapter.

Implementation – Growth Scholars Learning Community

The Growth Scholars Learning Community will serve as a supplemental program to a university's required first year introduction course. Universities offer these first year courses to introduce students to college life, provide necessary trainings, and give students the chance to see all the university has to offer. These first-year classes are mostly one semester long, but some colleges do have similar first-year programming that is more spread out over a year. The Growth Scholars programming is designed to fit into a one semester course as workshops and outside the classroom learning experiences. Including the growth scholars program These first year courses are intended to prime students for liberal educations by encouraging them to explore during their undergraduate careers. The courses also typically have first year students visit different university buildings and classrooms to prepare students for the variety of experience they might have completing their general education requirements. The concepts of growth mindset from the Growth Scholars Learning Community encourage students to be active explorers and primes them with more frameworks to draw meaningful experiences on.

The faculty instructor will be vital to integrate growth mindset concepts seamlessly with the out of the classroom workshop. The best instructor for the Growth Scholars Learning Community would recognizably be the same instructor that teaches the students' first-year experience course. This faculty is already going to be trained in first-year advising strategies, many with overlaps into growth and motivational theory. The one semester workshop for students will be presented to faculty as a pilot group intervention that introduces the topics of growth mindset through activities and community building.

While the name "Growth Scholars" is meant to elevate the students taking the additional first-year workshop, there could be an inherent elitist formed within the first-year experience

sections that have a section of the Growth Scholars Learning Community. Competition is one of the most toxic things to a growth mindset in how it creates an environment that breeds on quickly labeling and judging other students based on perceived intelligence. The research on learning communities suggests that any size community has the potential for self-segregation (Brouwer et. al., 2018). Faculty need to be clear to the cohort that the community is more than an academic success tool in order to avoid these fixed mindset behaviors and encourage the better outcomes of mitigating multicultural self-segregation seen in Smith's research (2018). The faculty instructor will have the important job of moderating conversation within both classroom and community workshops, and their obligation in these conversations is to reinforce growth mindset instead of competitive fixed mindsets. Additionally, some of the coursework is aimed directly at encouraging community building outside of the GSLC cohort. Growth Scholars are encouraged to share the growth mindset concepts or learning strategies that impacted them with other first-year students. Students will have the opportunities to be a peer-teacher for another first year student, and reinforce their learning by teaching the concepts of growth mindset to each other.

The faculty instructor's job of mitigating self-segregation will also be important from within the Growth Scholars community as well. Competition can be stifled by encouraging students to not compare grades and work productively together on many projects throughout the semester. Faculty and peer advisors will have time to brainstorm team building experiences during their training day that will encourage a bigger sense of community too. These programs can be as simple as team relay tasks or as big as an experiential learning field trip to a ropes course or team workshop center.

Faculty and Peer Advisor Training Day

Faculty advisors for first year orientation courses most likely already experience an extensive training dedicated to teaching the advising and academic planning strategies that will work best for new incoming students. The growth mindset intervention's training will be consolidated into a one day experience that will get advisors and the student peer mentors excited about using the concepts of growth mindset with first year students. During the training day, concepts of growth mindset will be reviewed in the morning through activities and short lectures that let the participants grow their understanding from what they already understand.

The big ticket event for the training will be a keynote speaker that joins the participants the second half of the day. This speaker will give a presentation on their growth mindset work as well as the current state of growth mindset research across the country. Speakers can be psychology researchers with a heavy focus in mindset and motivation, like Carol Dweck and David Yeager, or other practitioners that have integrated growth mindset into the way they study or teach. These speakers will be asked to stay for the last training sessions and provide feedback as faculty advisors and peer mentors brainstorm activities and community building events.

Growth Mindset Bi-Weekly Workshop to FYE

As I mentioned before, the extracurricular learning focused solely on growth mindset is taught by the faculty instructor of the first year experience course. The training will be in the form of bi-weekly workshops that will often connect with the first-year experience coursework, but the focus of the workshop's discussion will be solely around identifying and using fixed and growth mindsets appropriately. The community as a whole will benefit from the Growth Scholars' commitment to creating inclusive learning environments and mitigating competition. The Growth Scholars will be encouraged to share what they're taking away from the meetings

with other community members as they form academic and social connects outside of the program.

One opportunity for peer leadership experience will come from other undergraduate students also wishing to learn about growth mindset. This student would be a second year, or above, student that may have missed the opportunity to be a part of the Growth Scholars program as an incoming first-year or may have transferred without needing to take the first year experience at all. Research discussed in chapter 3 highlighted how well students, particularly multicultural students, respond to peer mentors they see as equals. The intervention would select one 2nd year and above student to actively take the growth mindset workshop with the cohort and serve as an embedded peer mentor for the class. I think embedded peer mentors lends themselves particularly well to the Growth Scholars program since they frame peer mentors as fellow learners and growth mindset teaches that learning always taking place. The peer mentors will intentionally not be portrayed as experts but rather fellow growth mindset explorers with more community and career development experience to share. Embedded peer mentors have also been shown to increase the learning outcomes of multicultural students and nontraditional learners including Pell grant recipients (Tucker et al., 2020). As mentioned in chapter 3, these embedded peer mentors would benefit from having relevant experience such as going through another learning community program or even having been a part of a previous year's Growth Scholars cohort. Most undergraduate students would have also experienced the first year programming that this community would be supplemental to, so they will be able to directly relate to the experiences of their advisees. Transfer students that didn't have their first-year experience at the institution could also fit the role of these embedded mentors, but they may additionally wish to observe one or more of the first year courses a week to be better connected to the students. No

matter what the student's background, the embedded peer mentors should work with the community's instructor to be visible when both trainings and activities are presented in order establish themselves as peer and mentor for the students.

Another peer advisor will be a graduate student in order to scaffold students learning with multiple levels of growth mindset focused support. The graduate assistant will have a higher focus on creating programming that helps develop the community aspect of the intervention. The best choices for program areas to get graduate assistants will be from the same university partners our students come from. If the intervention ends up housed in the psychology department for instance, graduates focused on social, developmental, and school psychology would be among the easiest to train in growth mindset since their foundational knowledge already consists of motivational psychology theory and practices. This kind of centralized advisor for more general student needs has also been shown to model the continual learning aspect of growth mindset (Tucker, et al, 2020) which will be a better fit for the community projects this graduate advisor will develop and present.

These graduate students will be advised to act like CAR practitioners when developing one or two programs a semester focused on a growth mindset in social development. Just because a program worked for the previous year doesn't mean it will work for a new set of students. The graduate assistant will assess whether previous programs aided the overall program goals and whether the current cohort will be able to do the same activities. These changes to programs might be based on ability, which could change year to year, or on the how developed the students' growth mindset are at the onset of the program. The graduate student will gain the experience of not only serving as a would-be teacher's assistant but also though development of some out of the classroom experiences for the first-years. Programming could take students into

the greater community for service learning experiences, or focus on entertaining applications of growth mindset like field trips to try a new skill. The scaffolding of having a peer, a graduate, and a faculty advisor will create a network of growth mindset mentoring support that meets students' varying levels of self-advocacy.

Workshop Overview

The workshop that will actively engage students in growth mindset topics will run on an every other week schedule over same semester as the first year experience. The off weeks are intended to give students ample time outside of class to reflect in journals and work on assignments without them conflicting with other academic work. The bi-weekly schedule will also allow peer mentors and graduate advisors to plan experiential learning without getting in the way of other coursework. There are nine weeks of programming for the Growth Scholars workshop that will get students to use growth mindset in creative ways and focused towards academic goals. The workshop topics for each week and a timeline for assignments are included in Appendix C. Topics and assignments can be shifted around the semester to better align with the conversations in the first-year experience course if the faculty chooses to do so. There is also the opportunity for students to voice which specific aspects of student and academic life are particularly concerning to them. This would allow some topics to shrink and others to have a larger focus depending on the needs of each student population.

Workshop topics start out foundational and work their way towards applying a growth mindset in cooperative learning experiences. The first weeks discuss a fixed versus a growth mindset in academics and the research behind attribution theory and mindset. These foundational weeks should focus on activity-based learning to begin to equate the concepts of mindsets in students own terms and grow off their initial understanding. Assignments for the first half the

semester focus on reflection and explaining a growth mindset from the perspective of each student. The second half of the semester will apply the topics of growth mindset to peer learning activities and focus on how mindsets an affect feedback. The big assignment for the last portion of the workshop will be to design a creative way of discussing growth mindset with peers outside of the Growth Scholars community. This project will conclude with students actively seeking out peers to educate and using their feedback productively to assess learning and goal completion.

Workshop Assignments

The workshop's assignments have been designed in a way that will make sure the Growth Scholars learn the concepts of growth mindset in practice. These activities are meant to be a more experiential, hands-on learning style than forcing students to sit in another lecture and turn in endless reflection papers. All assignments are open to changes that will make them more accessible or impactful to each cohort of Growth Scholars, like changing a high ropes course to a motivational speaker day to accommodate a differently abled student some semester. The graduate student mentor will have the additional job of creating one or two programs that are aimed solely at community bonding. These programs will be heavily influenced by the interests of each cohort, so graduate mentors may want to incorporate brainstorming time into some of the first community meetings.

First year students are likely taking general education English composition classes and will have writing and planning assignments for their first-year experience classes during this first semester too. To avoid overwhelming the students with too many written assignments, peer mentors and faculty will try to encourage creative assignments over essays and journals to connect growth mindset ideas in fun and interesting ways. I have outlined several of these kind of assignments in the sample syllabus in Appendix A. One assignment I want to highlight is the

Growth Mindset Narrative Challenge. In this creative project, students would work independently or in pairs to identify a story, movie, or motif that they feel represents the concepts of growth and/or fixed mindset. An example of one such story is the Tortoise and the Hare, where one competitor believes their skills will lead them an easy victory but is thwarted by the determination of their opponent. The students may create their own movie that exaggerates the characters' mindsets or they may do a character analysis in the form of a collage. Their final product will be mindsets in the students own words and make differences between fixed and growth mindsets salient in much more than academic life.

The Growth Scholars will also be assigned journal entries throughout their first semester to reflect on the coursework in their first-year experience course using what they have learned about mindsets. These reflections are great for making the student think about mindsets in academic context while also letting faculty keep up with how salient mindsets are becoming. Faculty can use the journals to spark conversations about academics in one-on-one feedback sessions. This personalized feedback is like the feedback from Forsythe's research that reinforces growth mindsets in students (Forsythe & Jellicoe, 2018) and can inspire Growth Scholars to have greater self-advocacy in all their meetings with advisors.

Chapter Five: Implementation

The Growth Scholars Learning Community is designed to run parallel to a one semester first-year experience program. Academic departments or student affairs offices have the opportunity to connect programming in the first-year experience more directly to their departmental goals by sponsoring and volunteering advisors to the Growth Scholars. The program can either be an addition to a major specific first-year experience or an entirely separate component focused on a growth mindset in scholarship. Ideally, major department sponsors would run the growth mindset workshop component using the faculty advisor from their students' first-year course. These advisors already have training on first year experiences, so they would only require focused growth mindset training to be able to run a successful workshop. The following chapter outlines how the Growth Scholars Learning Community could be best implemented into an academic major department. Assessment of the Growth Scholars' learning and development of a growth mindset will be critical to following the application of critical action research when piloting this intervention. Placing the advisors and peer mentors in the position of pseudo-researcher and community member will heighten their ability to mitigate competition and other fixed mindset ideology. This chapter also discusses how future applications of a first-year mindset intervention can growth towards greater community goals.

Training

The training will take place in the summer before the fall semester starts. The training is designed to be open to several first-year experience faculty and peer mentors. While the budget (Appendix B) is constructed for only one section of the Growth Mindset Scholars, the training is something that any faculty can gain professional experience from. Even the first-year course sections that do not have the growth scholars workshop attached to them will benefit from a

faculty who understands growth mindset. Apart from the training activities for the Growth Scholars' assignments, the training day will include discussion time where advisors can reflect on their styles with the concepts of growth mindset in mind.

The beginning of the growth mindset advisor training will teach the core concepts of growth mindset through engaging activities. This is to mimic the less lecturing style that the Growth Scholars community will also seek to follow when the faculty are teaching first-year students about growth mindset. The activities and discussion focused training sessions also model important concepts of growth mindset that will help faculty internalize the mindset and apply it in their advising. This will hopefully create more congruency in between what faculty and mentors are teaching and how they are advising the first-year Growth Scholars.

Mentors will also be treated to a presentation and discussion with a prominent motivational or cognitive psychology expert active in the field of student learning. This presentation will highlight the incredible work being done with mindsets, grit, and resilience on perpetuating undergraduate student success. With the increased online work during 2020, many of the most prominent growth mindset names, including Carol Dweck, have evens started offering video appearances without the added cost of transportation and accommodations. More information on obtaining a speaker is below in the section on budgets. The speaker will lecture on the current research and direction of mindset research highlighting their own work most predominantly. Speakers like Carol Dweck or David Yaeger would be the first and best choices for speakers being that they are foundational to growth mindset as it is their work. Any professional with a background in cognitive motivational theory will cover the most important job of the guest speaker which will be to address misinformation and confusion from the faculty and mentors. This question-and-answer type portion with the guest speaker will make sure that

the concepts of growth mindset that faculty direct towards their students are exactly in line with the academic research. This will also be a great time for faculty to discuss expectations, goal setting, and advising in context with a growth mindset researcher.

Budget

The budget for the intervention includes consideration for staffing, the cost of the training day, and additional funding for experiential learning opportunities (Appendix B). Some budget items are subject to change depending on the support from academic sponsors or donors. Faculty salary will largely be dictated by the university's standard which could include a bonus for teaching the growth mindset workshop additionally to a major specific first-year experience. Peer mentors would be paid at the rate their university sets for them as student workers. The undergraduate mentor is not budgeted for more than 10 hours a week for the intervention now. This was not a cost saving choice but rather a decision to limit the hours of the undergraduate student so they will have ample time for other academic courses and extracurriculars. The graduate student mentor's budget item cost covers the average cost of a stipend and credit waiver for a full-time graduate student at a middle-sized state accredited university in the U.S. northeast. The budget currently only has positions for one of each level of mentor, but if notoriety for the program grew it is possible that more funding would allow for additional peer mentor spots.

In addition to the staff, the budget outlines the cost of the a growth mindset training day that includes a speaker presentation. Because this training would be an all-day event, food and drinks will need to be provided. At some universities that have campus catering or a food service contract with the school, these lunches and snacks will be charged based on the number of participants in attendance. The pricing listing in the budget reflects what a food service may charge per person. This training day is open to more faculty than just the one section of the

Growth Scholars Community, so the budget reflects what a training for 20 first-year advisors could cost. As I mentioned before, the speakers for the workshop are a big price point in the budget. Booking speakers will likely come from online talent booking agency, like AllAmericanSpeakers.com, which have set the price for speakers like Carol Dweck at \$10,000-\$20,000 for virtual presentations (2021). These are explained as ranges depending on the length of time of the presentation, travel distance, and market value of the speakers.

Student costs in the budget include items that will serve as a connection to the community and useful tools to aid their learning. Purchasing a copy of Carol Dweck's *Mindsets* for every student and a logo journal for their reflections could help increase student's buy-in on their assignments. Dweck's book has sold over 2 million copies and is available in paperback for only \$13. Considering the cost of many textbooks, the cost of these readings is a considerably low and having these books to keep would be invaluable to encouraging students to continue thinking about mindsets after the intervention is over. The journals' cost is budgeted based on the cost of having an independent online supplier put a Growth Scholar's specific logo on to the journals. This cost is easily subject to change if departments wish to simply use journals from their school stores with the university logo on them. The personalized journals could make the assignment more meaningful and provide a reminder of the program that students can take with them and reflect in throughout their undergraduate careers.

The budget includes an \$8,000 operating budget for the experiential learning trips that graduate peer mentors will be co-leading with faculty. This budget would be open for paying the per person cost of a ropes course experience that would likely be over \$3,000 plus the cost of transporting the students there (Lippe, 2018). Other more accessible experiences could be a motivational or team building speaker, a visit from a career service office, or outside faculty

coming in to discuss their academic careers and experience. Graduate assistants will need to think critically about the accessibility of these experiences in order to avoid leaving students out or making them feel segregated in anyway. Experiential learning trips might need to submit approval to academic sponsors if the department has guidelines on field trips, this approval and thinking critically about trips will take place during the week between faculty training and the beginning of the workshop.

Obtaining Funding

The Growth Mindset Learning Community adds a level of scholarly appeal to first-year programming. These programs are often underused opportunities to assist the development of first-year students. First-year experiences that do not connect with majors may also be missing the opportunity to focus goal setting and planning towards degree completion. University departments and majors can partner with first year programming by clustering students of the same major together, but then they run the risk of creating self-segregating environments where fixed mindsets prevail (Brouwer et. al., 2018). The Growth Scholars could be a developmental framework used by university partners to mitigate competition and focus learning goals on mastery and educative experiences. The intervention would likely find funding with an academic partner as a pilot program. The academic sponsor would gain the opportunity to train several advising faculty on growth mindset topics and create a community of first year students that will continue to spread growth mindset topics as they continue their careers. An academic department could be a co-sponsor with a first-year programming student affairs office if there needs to be more funding brought in. The student affairs office can provide the support to the training program so that growth mindset tools are best suited for the style and length of the first year experience.

Academic sponsors gain the added bonus of calling some of their faculty and peer mentors Growth Scholars as well. The scholarly name reflects the notoriety that departments will get from growth mindset advisors that encourage new experiences and assess student development on continually effort. The departments also add peer mentor experience that help mitigate multicultural student stressors and create a more equitable environment (Tucker et al., 2020). The proposed budget included in Appendix B includes funding for both a graduate and undergraduate peer mentor. These positions create appealing leadership opportunities for higher year students that the department can also market as additional credit.

Obtaining Student Buy-In

Getting attention for the program will have to happen quickly since the target is new first semester students. During the summer leading up to their first years, students often attend a welcome day or summer orientation session. The university sponsors of the Growth Scholars can promote the learning community during sessions to get students and their family/guardians interested in the additional first year experience component. The major will benefit from having a program that focuses the first-year experience into career, academic, and personal development topics specific to the majors. Universities often have welcome days or accepted student days that these departments can showcase their Growth Scholars workshop. Like with most high impact practices, being a part of an academic learning community like this one has been shown to increase student's likelihood of doing more high impact learning activities in the future (Stassen, 2003). Departments can also use a growth mindset's high expectation, challenge seeking, and resilience to failure as selling points that perspective students might develop if they joined the major and workshop.

Leading a Growth Mindset Intervention

As I mentioned before, this intervention would best be suited to act as a bridge between student affairs and an academic department. Application of this intervention was be largely influenced by the size and type of institution that is trying to adopt it. Leadership in student affairs that wish to create this growth mindset intervention would have to be opportunistic with their searching for a university partner. Following the Social Change Model of leadership in higher education, student affairs professionals introducing the intervention to academic partners would need to relate the goal of increasing growth mindset as something that an academic department would need to get done. Using the some of the 7 C's in their approach style, these initiators could highlight the goals of the institution or department are incongruent with the first-year experiences and how a growth mindset could align them better (pg.70). Academic departments that do not have major specific first-year experiences could be easily convinced.

Collaboration, another Social Change Model "Cs", is a huge influence on the leadership style that will sustain the intervention multiple years. At smaller and private universities, the collaboration between student and academic affairs is already high enough where support can flow back and forth from faculty advisors to first-year programming offices the most easily. Navigating the academic politics within academic majors may still be a challenge for student affairs educators. Some institutions have particularly divided student and academic affairs departments where passing the program off to a major partner to continue it yearly may be next to impossible. The ability to collaborate will need to be more than finding sponsors but also finding faculty willing to put the work on them to help the program come back every year.

Servant Leadership

While training does not touch on the subject of leadership directly, faculty and peer mentors will need to address their leadership style in the Growth Scholars program in order to be consistent with the growth mindset constructs they are expected to teach. For a growth mindset workshop that has a goal of increasing student advocacy, the leadership style for mentors will need to be one that is approachable and student needs focused. The best example of this kind of leadership I know is called servant leadership. Servant leadership and growth mindset are connected and strengthened by one another (Chan, 2016). Servant leadership focuses on the leader's ability to understand the needs of their followers and meet those needs with support aimed at making the follower autonomous. Growth Scholars advisors will want to approach every student developmentally and address individual needs to get every student willing to play with a diverse group of mindsets. The servant leadership approach looks at students' approach and effort over any kind of perceived talent. Kong Chan even goes as far as to say that servant leaders embody a student of growth mindset in their conscious choice to use empathy, listening, and healing as they lead (Chan, 2016). These are not easy skills to employ when someone is trying to get others to follow their lead, but leaders with growth mindsets are resilient to the difficulties and push for mastery in collaboration.

Assessment

Assessment plays a significant role in the implementation of a successful growth mindset experience like this intervention. The faculty advisors need to measure if students have developed more salient growth mindsets from the reflections, feedback, creative assignments, and experiential learning trips that comprise a semesters worth of the Growth Scholars' work. Following the principals of critical action research, faculty advisors will observe and evaluate

mindset workshop programs continually through the perspective of both a community member and investigator. Advisors will make sure to highlight program goals when discussing assignments and later in mindset surveys and one on one evaluation discussions.

Faculty have several opportunities to plan additional assessment for their students to observe whether they are developing more salient growth mindsets as a result of the Growth Scholars Learning Community. The students' creative assignments are an excellent indicator of whether the students learned the concepts of growth mindset. Their journals will be artifacts that show how students reflected on assignments and feedback. Faculty can use observational scales to judge journal comments about effort, ability, and learning strategies on whether they align with a more growth or fixed mindset (see Appendix F for an example of a rubric to use). It will be up to the faculty to act as the principal investigator and assess how the two types of assignments are getting students to think critically about their mindsets. Conversations with students about the mindset review of their journals closes the loop.

As investigator and advisor, the faculty will use the one-on-one evaluations at midterm and end of the program as the opportune time to compile some observational assessment. The faculty should use this time to discuss grades in an equitable way that resembles a problem-posing classroom assessment style. The student should have the agency that comes from Freire's problem-posing model to be able to debate that their effort was not clearly displayed by their graded feedback (Freire, 2000). Debating effort and grades will hopefully focus conversation so they reflect students' mindsets about their work and effort. If students are willing to be recorded than meetings can be transcribed to allow faculty to easily highlight quotes that encapsulate growth or fixed mindset assumptions. A similar observational scale to the one used for assessing journals could be used during these meetings (see Appendix F). The observational scale can even

be used to provide students with feedback about which mindsets they are signaling more like in reflections and provide an outside look at their mindsets.

Advisors could begin evaluation meetings by reviewing graded feedback based on simple mindset priming questions. As students reflect on their grades for assignments faculty may wish to prompt them with interview questions focusing on where the student's effort was to prompt a growth mindset question or what the student felt successful in to prompt a fixed mindset question. This motivational interviewing technique will help get students talking how they are processing their successes and utilizing mindsets. Samples questions could be similar to evaluation question in Appendix E that have been adapted from Carol Dweck's *Mindsets* (2006).

Faculty may even turn to Dweck's book for dilemma prompts that may get students to reflect on mindsets in an academic context. This could be helpful if the advisor is seeing a lot of non-mindset reflections coming from the students while discussing their grades. This again implies that the advisors are thinking like critical action research investigators and looking to engage in conversations that relate to learning outcomes while doing their jobs as instructors. Dilemmas can be workshopped with faculty and peer mentors during training days to relate closely to experiences first-year students will go through at their particular university. The students' responses, either recorded or noted, would be assessed based on an observational scale. Investigators will use these scales to note or score the student responses in order to get a clearer picture of how the students are applying mindsets to their experiences. An example of a dilemma and an observational scale for growth mindset can be seen in Appendix F. The faculty advisor may wish to provide a type of graded feedback like a growth mindset salience grade based on this observational work. These evaluations would provide students milestones and feedback twice a semester focused on how they are developing and applying growth mindsets. If faculty

does choose to use grades, they should be based on expectations discussed with the students at the beginning of the semester to follow the growth mindset equitability that these models the assessments have been based on.

Evaluation

In order to evaluate the most important goal of the intervention, increasing the salience of growth mindset, students will take a growth mindset self-assessment at the beginning and end of their time as Growth Scholars. The first assessment will help faculty and peer advisors understand where students' development in a growth mindset is starting from. In their mid-term evaluations, students will have a change to reflect on this starting point and talk about the course so far had changed their thinking. The last self-assessment the student takes at the end of the semester before their final evaluation will serve as a post-test. Faculty can compare students mindset scores and discuss with the student what experience helped change it and why. A selfassessment is another way for students, faculty, and departments to see if the program is successful in creating mindsets focused on continuous learning and seeking challenges. An increase of growth mindset scores at the end of the seminar would begin to show that students are internalizing the content. Academic partners will likely want to include GPA compared to nonmembers as an evaluation marker of strictly academic performance. Departments may also want to have a debrief with faculty and even peer mentors to get their idea of what could be improved to help first-year students in the future.

Limitations & Looking Ahead

Self-segregation and competition may present the clearest danger to the program goals related to growth mindset, but there are several other possible issues that shaped the design of this intervention too. One of the hardest parts in turning this intervention into a long term

program will be sustainability. Running the intervention as a pilot will be an easier "foot in the door" to academic departments, but pilot studies have no guarantee of being brought back in subsequent years. I would rely on the observational feedback and pre-post assessments to provide departments with one reason to keep the program for subsequent years. Short term support will be gained most easily by showing that program outcomes are being reached and students are deepening their growth mindset. Long term support would need to be based on opening up evaluations to include markers of long-term academic performance that administrations would be more influenced. I would hope that showing GPA compared to non-Growth Scholars within the major or persistence showing Growth Scholars remaining in their programs at higher rates would be the kind of proof needed to make the intervention a permanent piece of the first-year experience.

This program's use of the continual reflection element of critical action research will keep the program focused on having the best goals for student learning. Critical action research's influence will also be helpful in keeping the program adaptable if departments want to make changes to the first-year experience or the related content in the growth mindset workshop.

Departments may even reject the Growth Scholar program because it does not specifically link to a major or field of study. Conversely, departments may choose to adjust the growth mindset program so that it does connect directly to major specific topics and use it to replace an existing major specific first-year experience.

Colleges often put a lot of experiences in front of first-year students to give them resources to be successful in their careers. It is possible that adding the Growth Scholars program on top of a first-year experience will oversaturate these new students with too many resources to be helpful. Topics in both sections will touch on goal setting, academic planning, and getting

support from professors. Students may feel that the Growth Scholars program is just repeating the topics from the other course. Each week of topics in the workshops should be focused on the growth mindset topic first and relate to first-year course work during discussions and activities.

A considerable limitation for the program will be faculty and mentor burnout if steps are not taken to avoid it as early as possible. Whether it is the faculty stretching themselves too thin between their different sections or it is the peer mentors struggling to have the time to do the workshops and their own work, burnout will likely happen at some time.

Servant leaders are also prone to pushing so hard for their followers that they slow down and become less successful at leading as a result. Looking ahead, the best solution to avoid faculty burnout would be to hire a person to work as only the growth mindset workshop instructor. Student burnout is much harder to mitigate since it has so many personal factors. The focus on critical action research again perpetuates an environment where faculty will be engaging in review often enough to notice if student mentors are beginning to show signs of burning out. Incorporating an aspect of the critical action research focus of this intervention on peer mentors' emotional wellbeing could be beneficial to catching burnout before it disrupts student learning. The faculty will hopefully be acutely aware of the community's feelings as they are in the role of both advisor and researcher.

One of the Growth Scholars program's selling points for incoming students could be the experience of sharing coursework and a residence hall. The program will offer interested first year students the chance to live in the same residential building together, preferably on the same floor. The residential floors would not need to be entirely Growth Scholars and would be able to accommodate students who choose roommates outside of their majors. Students with commitments to live elsewhere on campus, such as Honor's College housing, will still be able to

join the additional first-year programming and would still benefit from the extracurricular community building events. Setting up a residential community will mean extending university partners to include residence life. This would form a substantial planning hurdle that I felt took away from the faculty's ability to plan and serve the needs of their students both in the Growth Scholars and first year experience. Faculty burnout would be far more likely if they were asked to run three separate communities.

Conclusion

A growth mindset has driven me to seek challenges and given me resilience to work towards what I am passionate about. In undergraduate studies, my adaptability and willingness to learn from failure helped me find my path, set meaningful goals, and have the determination to finish them all came from being introduced to mindsets my first year. As colleges become more accessible and more students enroll every year, it is time to address the racist and restrictive view of intelligence that has been incorporated in higher education for centuries. Growth mindset thinking creates more empathetic instructors, a more resilient student, and more equitable classrooms. All these things are important to overriding an ideology that has been taught to new students for 12 years before they get to college, and an ideology that has dominated U.S. higher education for the last 200 hundred years. The work of social justice is never finished and it is rarely easy, so higher education should be preparing growth minded students who will always be willing to get their hands dirty and continue the fight for equality.

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Appendices

Appendix A: Intervention Syllabus

CLASS#: Growth Scholars

Instructor: TBD

Room: TBD

Discussion & Workshop: Th 4:30-6:30pm Every Other Week (EOW)

Community Building: Th 4:30-6:30pm EOW

Experiential Learning Opportunities:

1- Career Field Experience

2- Team Building Field Trip

3- Be A Peer Mentor Day - a day where students expand the community by being a GM

peer mentor for a student outside the program

Workshop Purpose:

Neoliberal culture is creating increased competition and production goals within higher

education. To create a counter-culture within higher education, this workshop will focus first

year students' motivation towards growth mindset learning goals. The purpose of the workshop

is to explore the concepts of growth mindset as they relate to motivational theories, student

development, and college social life. This course will spark conversations about how a growth

mindset can impact students' approaches to academic planning, course selection, goal setting,

group projects, navigating social situations, and many other facets of college student life.

Class Expectations:

Following the core concepts of a growth mindset and incremental theory, students will be

asked to set high expectations for themselves in order to get the most impactful experience from

the learning community. Since effort and showing up are fundamental to a growth mindset, participation in outside of the classroom learning experiences is a substantial part of each student's grade. Students working on projects together will develop group contracts that will also assist faculty in evaluating whether students applied themselves with as much effort as they excepted themselves to put into the work.

Student Learning Objectives:

- Engage in respectful dialog about growth mindset topics
- Develop growth mindset goal setting and self-evaluation skills
- Apply growth mindset to student academic planning, both career and coursework
- Apply the theories of modern motivational and mindset research to discussions about student social development and interpersonal relationships
- Evaluate the effectiveness of both growth and fixed mindsets various academic and social scenarios
- Incorporate more cooperative academic behaviors like team exercises, study groups, and peer review into students' work strategies

Feedback and Grading

• Individual Midterm Progress Meeting

o Instead of a midterm evaluation, Growth Scholars students will meet one-on-one with the faculty instructor to assess how their effort has worked towards developing a growth mindset. Faculty and students will review the reflections students have finished up to this point and any grades they may have in their first-year programming to make sure students are holding themselves to the high expectations they set at the beginning of the semester.

• Group grades

In group projects, grades will be determined by both instructor feedback and the feedback from other group members focused on each individual effort towards the completed projects. Group contracts, agreements on individual effort towards a final project, will be the basis for peer and instructor evaluation. Group grades and individual grades will be decided in one-on-one evaluations with faculty instructors.

• Final Grade

Keeping with the concepts of self-evaluation within growth mindset, final grades will also be decided after another one-on-one evaluation meeting with the faculty instructor. The student's final grade will be dependent on their graded performance throughout the semester, but can also be debated with the faculty if students feel their learning wasn't completely encapsulated by the graded projects. Students may even be given the chance to review and resubmit individual assignments in order to prove their understanding of growth mindset was not clearly shown. Students will also be given the chance to defend their proposed final grades in an organic conversation about growth and fixed mindset topics with their faculty.

Assignments:

1. Participation –

a. Keeping with the high expectations of a growth mindset, students will be required to participate actively in the activities and discussions during bi-weekly workshops. Participation will be graded on contributions to class discussion each week. Faculty can use this grade as something to reflect on during student one-onones. Student attendance on team building field trips, community building fun
days, or extracurricular involvement should not impact their participation grade,
but students should be encouraged to attend whatever they are capable of to gain
the most out of their experience in the workshop.

2. Journal Reflections -

a. Students will be asked to write short (one page maximum) reflections on the concepts covered in each week's growth mindset workshops. These reflections should focus on how the concepts discussed relate to their own work during the semester or to their planning for future academic ventures. These reflections will also be used to track students' development in their midterm and final meetings with the instructor.

3. Growth Mindset Self-Assessment

a. Students will complete two growth mindset self-assessments at the beginning and end of their semester in the program. These are ungraded assignments but will serve as excellent data during their final meetings with faculty.

4. Expectations and Goals Paper

a. Growth Scholars first assignment will be to review the syllabus for their workshop in pairs and create a list of a least 3 learning goals for themselves over the course of the semester. Individually, each student will write a reflection on their goals focused on how they might work continuously during the semester to meet them. In addition to the goals, students will reflect on what expectations they

are setting for themselves in the workshop and their first-year experience. These papers will be reviewed in class as an exercise in evaluating mindsets.

5. Be A Peer Mentor

a. Goal Setting Project

i. Growth Scholars will each design a short creative presentation on growth mindset and goal setting to present to a student outside of the program.
The presentation doesn't need to be any longer than 15 minutes but should cover the core concepts of both fixed and growth mindset as well as provide advice to other first-year students about how growth mindset could help them. Students may also choose to create a creative assignment that teaches goal setting and growth mindset in a fun or unique way.

b. Mentee Feedback Paper

i. The Growth Scholars will be asked to have an opportunity to present their growth mindset projects to other first-year students, preferably outside of their residential communities. The participants will then be asked to provide written feedback on what they enjoyed, disliked, valued, and learned from the presentation either via surveys or reflective essays.
Finally, Growth Scholars will present an overview of their presentation and the feedback they find helpful with the rest of the learning community.

6. Aesop's Fables – Growth Mindset Narrative Challenge

- a. Can students identify stories or motifs that connect with growth mindset? Aesop's
 Fables are a great place to start with stories like The Tortoise and the Hare the
 story of how effort and determination wins against perceived superiority.
 - i. Students will write a reflection, make a video, or create a artistic project based on a story or motif that evaluates how the characters may portray the traits of growth and fixed mindsets. Creative reflections should include their opinions on how these mindsets may have impacted the characters' choices and how the stories' themes relate to the student's experiences in education.

Appendix B: Budget

Item	Description	Cost
First Year	Annual salary + bonus for additional workshop	\$55,000
Experience		
Faculty Advisor		
Graduate Advisor	Tuition waiver for a part-time or full-time hourly	\$20,000
	commitment.	
	A cost-of-living stipend.	
Peer Mentor	A small stipend for the part-time peer advising this	\$2,250
	student provides to first-year students. (\$15/hr x 10 hrs/wk	
	x 15 wk)	
Growth Mindset	A keepsake and reflection journal for 30 Growth Scholars.	\$650
Journals	Custom logo and program name embossed on front. (order	
	online \$21/journal + shipping)	
Growth Mindset	30 copies in paperback of Carol Dweck's Mindset: the	\$400
reading	New Psychology of Success (2006) (\$13/book + shipping)	
Growth Scholars	Printed logo t-shirts for advisors and students.	\$450
T-Shirt	(online order \$15/T-shirt + shipping) x 30	
Faculty Training	Fruit Veggie Tray, Cookie tray, Tea, Coffee, Water	\$200
Day - Snacks	(Catered by university at \$10/person) 20 people	
Faculty Training	Catered lunch (e.g., Airmark)	\$400
Day Lunch	(Catered by university at \$20/person) 20 people	

Faculty Training –	A foremost name on mindset or motivational theory who	\$15,000 -
Keynote Speaker	will lead a presentation on how growth mindset effects	\$25,000
	students in higher education, and Q&A about	
	programming	
	-Speaking Fee	
	-Travel & Accommodations	
Experiential	Experiential learning opportunity off campus fees (ropes	\$8,000
Learning Fund	course, career coach, team building experiences),	
	Transportation fees,	
	Craft supplies	
	Total	\$101,900 -
		\$111,900
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Appendix C: Intervention Timeline

1 week Faculty and Peer Mentor	
	Fraining Day Peer Mentors – Program Goals
before Guest Growth Mindset Sp	eaker: TDB for Experiential Learning
semester	
1 – What is Growth Mindset?	- History and -Self-Assessment 1 Assigned
Workshop foundations of mindset re-	searchJournal 1 Assigned
Readings: Dweck (2006).	Mindsets: The
new psychology of success	3
2 Team Building Field Trip	/ Fun-day -Self-Assessment 1 Due
	-Journal 1 Due
3 – Growth Mindset Goal Set	ting – -Expectations & Goals Paper
Workshop Connecting growth minds	et to academic Assigned
planning and setting learn	ing goals.
4 Pacing Week – Students r	nay choose to
have individual meetings	with any
mentors. Peer mentors sho	ould also lead at
least one group study sess	ion over pacing
weeks.	
5 – Cultivating more Growth	Mindset – -Expectations & Goals Paper
Workshop Addressing misinformatic	n and forming Due
better narratives for defini	ng intelligence -Aesop's Fables - Narrative
and mindset.	Challenge Assigned
	-Journal 2 Assigned
6 Career Field Experiential	Trip -Journal 2 Due
7 – Individual Midterm Meeti	ngs -Aesop's Fables – Narrative
Midterm	Challenge Due

8	Pacing Week	
9 –	Topic: Being Better Growth Mindset	-Be a Peer Mentor Project
Workshop	Peers – Connecting growth mindset topics	Assigned
	to cooperative learning.	-Journal 3 Assigned
	- Sharing Aesop's Fables projects	
10	Pacing Week – Extra time to complete Be	-Journal 3 Due
	a Peer Mentor Project	
11 –	Topic: Feedback – Revisit attribution	-Be a Peer Mentor Project Due
Workshop	theory and how mindsets can affect how	-Mentee Feedback Paper
	students' receive feedback. Modelling	Assigned
	how feedback could help create growth	
	mindset assumptions and increase	
	learning outcomes.	
12	Pacing Week	
13 –	Topic: Continuity of Learning -	-Mentee Feedback Paper Due
Workshop	Group Growth Mindset Project Proposal	-Journal 4 Assigned
14 & 15 -	Individual Final Meetings and Project	-Self-Assessment 2 Due before
Final	Check-Ins	Final Meeting
15	Closing workshop – Final send off for	
	Growth Scholars that should also serve as	
	reflection time for the key take away each	
	student will have.	

Appendix D: First-Year Experience Growth Mindset Training For Faculty and Peer

Mentors

Time	Session	Description		
8:00 –	Meet & Mingle	A chance to meet the other faculty and peer mentors, share		
8:30 am		experiences, and prepare for the days training.		
8:30 –	Introductions and	Introduce the facilitators, speakers, and participants to one		
9:00 am	Ice Breaker	another. One or two ice breakers that are for introductions or		
		energizers, like Train Wreck.		
9:00 –	First-Year	Review of the program goals and schedule of the Growth		
10:00 am	Experience:	Mindset Scholars Workshop, an 8 week supplemental option		
	Growth Mindset	that focuses on useful application of growth mindset ideals in		
	Workshop	college.		
	Overview			
10:00 -	Fixed vs Effort	Participants will be read several scenarios (See Appendix		
10:30 am	Activity	TDB) that either reflect fixed or growth mindset responses to		
		common first year struggles. Participants will then walk to		
		either side of the room to signify if they think the student was		
		showing more of a fixed or growth mindset.		
		After the activity, participants will have time to discuss		
		questions they might have had.		
10:30 -	Growth Mindset	Short presentation on Growth Mindset that looks at how the		
11:30 am	Introduction &	concepts grew from incremental theory to mindsets, and the		
	Think-Pair-Share	current research into student motivational theory.		
		Then in small groups, participants will discuss their		
		assumptions and questions about growth mindset. These		
		conversations will prime conversations for after the keynote		
		speaker and assignment review sessions.		
11:30 –	Avoiding	Before lunch, a brief presentation on healthy competition and		
12:00 pm	Competition	growth mindset. Examples of how to avoid competition, self-		
	Workshop			

	1	
		segregation, and in fighting by rewarding growth mindset
		effort and strategies.
12:00 –	Lunch	
1:00 pm		
1:00 -	Growth Mindset	A formative voice in mindset or motivational psychology
3:00 pm	Keynote Speaker	(such as David Yeager or Carol Dweck) presents on Growth
		Mindset and the direction of motivational psychology today.
		Question and Answer following presentation for faculty to
		gain insight for their Growth Scholars sections.
3:00 -	Experiential	A change for peer mentors to brainstorm, discuss, and begin
4:00 pm	Learning	planning for one or two outside the classroom learning
	Brainstorm	experiences (i.e. High Ropes Course, Service Learning Trip,
		Growth Mindset Team-building Retreat)
4:00 -	Assignments	Faculty and peer mentors will have time to work with
5:00 pm	Workshop	facilitators on reviewing assignments for their Growth
		Mindset Scholars Sections

Appendix E: A Mindset Dilemma and Observational Scale.

Dilemma: You have applied to graduate school after making it all the way through your undergraduate. You are confident in your resume and have your heart set on a particular field of study. You only applied to one program thinking you were sure to get in. But you are rejected.

Levels	Description	Examples
Strong growth mindset	The student's response was focused on the effectiveness of effort and approaches to tasks or goals. Student also reflected on how their mindset influenced their approach to situations and reasoning.	"Student is optimistic that other opportunities will present themselves. They recognized that only applying to one school didn't create a lot of opportunity for them. They said they have learned from this experience."
Some growth mindset	The student responded a little about the effectiveness of effort and approaches to tasks or goals. Student may not have mentioned their mindset playing a role in their decision making.	"The student is planning to apply again, this time applying to more programs and having colleagues read their applications before submitting. They feel they can still get into a program somewhere else."
Non-mindset self-disclosure	The student did not mention their effort when considering what went wrong. There is little to no mention of their processing of the situation.	"The student thinks they may have applied to the wrong program. They are considering applying elsewhere"
Some fixed mindset	The student responded based on their achievements and abilities. Student may have signaled fixed mindset a little in their assumptions about how they were judged.	"Student suggests that they may not have been as good of a candidate as other students. They assert that their work must have been viewed as mediocre by admissions. They might apply again."
Strong fixed mindset	The student strongly responds based on their perceived lack of ability. Student make significant connections to fixed mindset and their effort not mattering.	"Student said they now see their choice was foolish because they don't believe they have the skills for a graduate program. They said they will not try to apply again."

Adapted from Dweck, C. S. (2006). Mindsets: A new psychology of success. Random House

Appendix F: Growth Mindset Interview Starter Questions Student's Name (Week 7) (Week 14) or What experiences did you value in college so far? What are you planning on focusing on next semester? How did you put effort forward towards the assignments you valued this semester? How are you using a growth mindset? How are you using a fixed mindset? How are either mindset aiding your academic work at the moment? What did you think of assignment? How did you approach getting started? How did your mindset or the mindsets of your teammates effect this project? What else do you want me to know, too?

Adapted from Dweck, C. S. (2006). Mindsets: A new psychology of success. Random House

Appendix G: Growth Mindset Self-Assessment

Name:		ID:	Date	
For the		s, circle how wel	l you feel the statement reser	
1.	Your intelligence is	something very b	pasic about you that you can'	t change.
Stro	ngly Agree	Agree	Disagree	Strongly Disagree
2.	You can learn new t	hings, but you ca	n't really change how intelli	gent you are.
Stro	ngly Agree	Agree	Disagree	Strongly Disagree
3.	No matter how much	h intelligence you	u have, you can always chang	ge it quite a bit.
Stro	ngly Agree	Agree	Disagree	Strongly Disagree
4.	You can always sub	stantially change	how intelligent you are.	
Stro	ngly Agree	Agree	Disagree	Strongly Disagree
5.	When it comes to sp	orts, you are eith	er a gifted athlete or you are	not.
Stro	ngly Agree	Agree	Disagree	Strongly Disagree
6.	If you know that you	u will likely fail a	nt something, you would rath	er avoid taking the risk.
Stro	ngly Agree	Agree	Disagree	Strongly Disagree
7.		y new things eve	en if there's a change you wo	n't be good at them
	right away.			
	ngly Agree	C	Disagree	
8.	I don't need to work	to improve a ski	Ill anymore if I know I am go	ood at it.
Stro	ngly Agree	Agree	Disagree	Strongly Disagree
9.	Even when I am alre	eady good at som	ething, I think there is alway	s room for
	improvement.			
Stro	ngly Agree	Agree	Disagree	Strongly Disagree
10.	. I enjoy school becau	ise I enjoy learnii	ng about new things and deve	eloping new skills.
Stro	ngly Agree	Agree	Disagree	Strongly Disagree

Scoring Chart

	Scoring			
Question #	Strongly Agree	Agree	Disagree	Strongly Disagree
1	0	1	2	3
2	0	1	2	3
3	3	2	1	0
4	3	2	1	0
5	0	1	2	3
6	0	1	2	3
7	3	2	1	0
8	0	1	2	3
9	3	2	1	0
10	3	2	1	0

Score Total _____

30-22 High Growth Mindset

21-17 Mostly Growth with some Fixed Mindset

16-10 Mostly Fixed with some Growth Mindset

10-0 High Fixed Mindset

Adapted from: Dweck, C. S. (2006). *Mindsets: The new psychology of success* New York: Random House Inc.