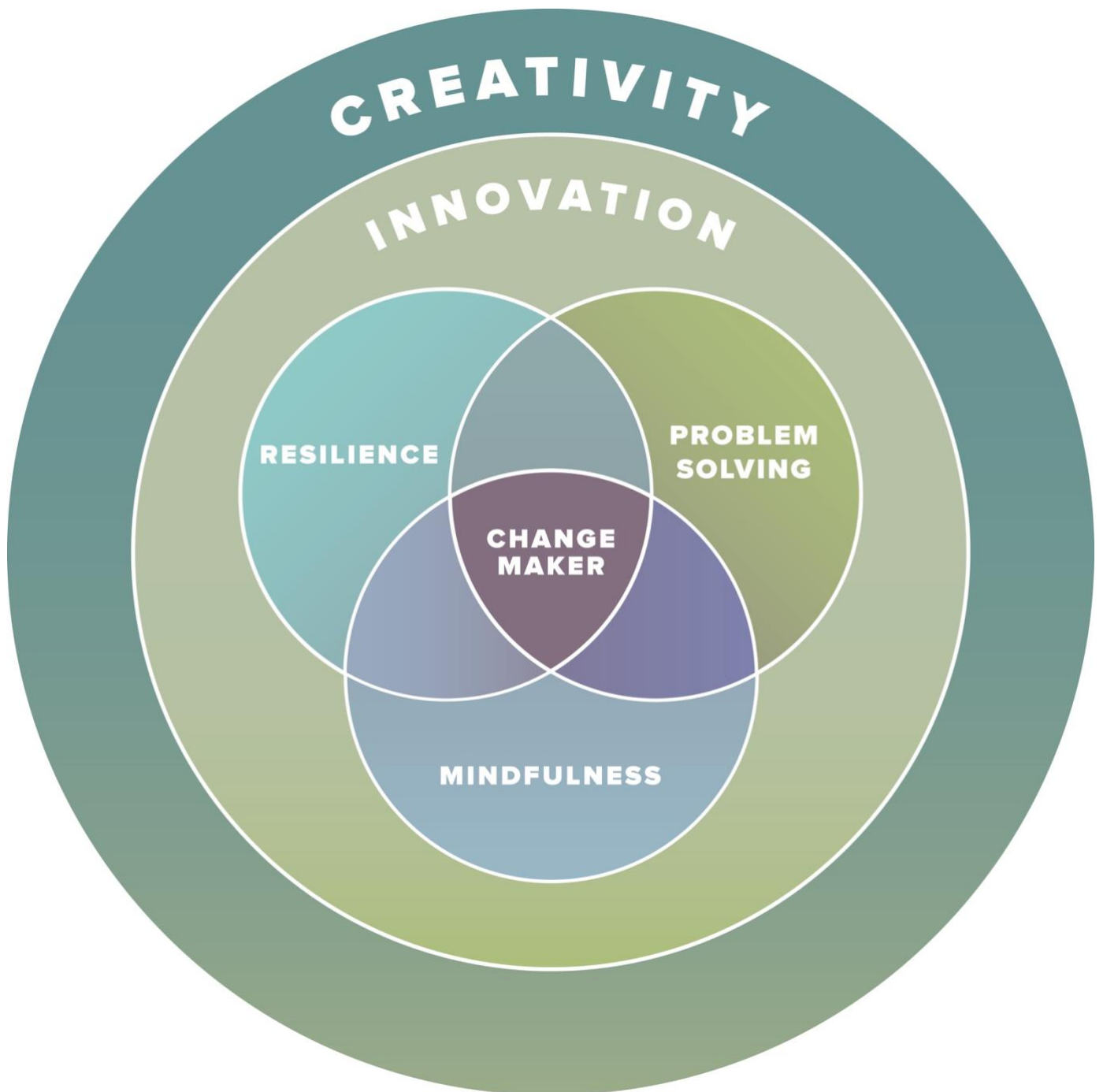


INNOVATION

at **COLORADO COLLEGE**



INNOVATION AT CC STRATEGIC PHILOSOPHY/PLAN (DRAFT June 2017)

TABLE OF CONTENTS

INTRODUCTION	3
DEFINING PROGRAMATIC ELEMENTS AND LEARNING OUTCOMES.....	6
Problem Solving	7
Risk/Failure/Resilience	8
Mindfulness	9
Changemakers	10

INNOVATION AT CC STRATEGIC PHILOSOPHY/PLAN (DRAFT June 2017)

CC Mission Statement: *At Colorado College our goal is to provide the finest liberal arts education in the country. Drawing upon the adventurous spirit of the Rocky Mountain West, we challenge students, one course at a time, to develop those habits of intellect and imagination that will prepare them for learning and leadership throughout their lives.*

INTRODUCTION

I came to the position of Director of Innovation at CC with a background as an entrepreneur and start-up consultant. Since my background is not in academia, I spent time this year coming to understand the landscape of innovation in higher education. I have observed that "innovation" is a buzzword in higher education, but that it means vastly different things to different institutions. There is not a single, cohesive definition of innovation in the academy. What is clear, though, is that there is no existing model of "innovation" out there that is a fit for CC. We now have the opportunity to create a model that doesn't yet exist that aligns with our unique identity.

Innovation in higher education is often conflated with entrepreneurship: it focuses on developing market-place solutions to problems that transform an industry and happen to be lucrative. Out of the sixteen colleges listed as CC's peer institutions on our website, eleven of them include entrepreneurship in their mission statements. Small private liberal arts schools want to encourage their students to be business savvy, while larger institutions such as Stanford, Harvard and MIT have their respective "Innovation" labs where a hot topic of debate is how much of a share the institution may have in the companies they help incubate. Gary Rhoades and Sheila Slaughter reflect on this trend in their article *Academic Capitalism in the New Economy*: "As colleges and universities become more entrepreneurial in a post-industrial economy, they focus on knowledge less as a public good than as a commodity to be capitalized on in profit-oriented activities." While CC supports entrepreneurial enterprises, an approach to innovation that focuses strictly on entrepreneurship and business does not fit Colorado College's mission statement to provide students with "habits of intellect and imagination that will prepare them for learning and leadership throughout their lives."

One of the major problems with conflating innovation with entrepreneurial enterprises, such as technology startups, is that it makes the space very exclusive and upholds systems of privilege that we have a responsibility to actively dismantle. Within the space of innovation nationally, because of the way the term has been appropriated to be synonymous with technology startups, there is a striking lack of diversity. Diversity and inclusion are core values of CC as an institution, and we are committed to reflecting that value in the space of Innovation at CC. The branding of "innovation" over the past ten years has made it a much narrower, more exclusive, and less vibrant enterprise than what innovation actually entails. This trend often excludes social and cultural innovators. Innovation should not be a way to create headlines on our webpage about business savvy students; the opportunity is much larger than that. We have a chance to build a culture of innovation at CC that reflects our unique strengths and diversity, that builds on our history of attracting students who are innovative risk-takers, and that addresses the needs of students, faculty and staff at this particular historical moment.

We know that when students graduate from CC, the majority of them will no longer be entering into well-defined, potentially long-standing jobs with companies or organizations. The landscape of employment is much more fluid than it has been in the past, and requires a new level of nimbleness and creativity. By 2020, more than 40% of the American workforce, or 60 million people, will be self-employed, shaping their own careers along with their personal lives. One of the most powerful things that CC can do to prepare students for this new reality is to equip them with creative confidence.

Creative confidence means knowing that even if you don't know how to do something, you have the confidence to step into the darkness and figure it out--or to build a team that can figure it out. It means knowing how to

ask the right questions, and who to ask them of. It embodies the willingness to try something that has never been done before. It means being able to generate endless possibilities, to imagine positive outcomes and have faith in one's ability to navigate through uncharted territory to achieve them. It means knowing that the most interesting opportunities often arise because you are present and open, rather than boxed into a plan. It means having the confidence to choose curiosity over fear.

We are at a cultural moment in which challenges abound, socially, politically, economically. There is no shortage of opportunity to create change for the better. Innovation at CC aspires to empower students with the creative confidence to address areas that call out for change--to become changemakers. We use the term "changemaker" instead of "entrepreneur" to emphasize the reality that innovation occurs culturally, socially, and personally, rather than exclusively in the business and tech worlds. The term changemaker includes the same skills denoted by the term entrepreneur, but by changing the language, we broaden the scope and invite more students into the space.

Innovation at CC also differentiates itself from the current approach to "innovation" by bringing a stronger focus to the dimension of creativity, the precursor to innovation. In general, creativity refers to the ability to generate ideas, while innovation refers to the execution of those novel ideas. Without creativity, there is no innovation, yet many institutions that promote innovation and entrepreneurship give little conscious attention to the conditions that cultivate creativity. All humans are endowed with creativity, and although many of us have experiences early in our lives that cut us off from our creative sources, they never disappear. With guidance, students can not only recover access to their creativity but learn how to sustain it over a lifetime. The essence of creativity is the ability to generate many possibilities, including novel ones. Creative thinkers have access to new solutions to existing problems. With exposure to research about how creativity works, practice in creative-problem solving methodologies, and self-knowledge about their own creative processes, students are well positioned to approach any challenge with flexibility, openness and confidence.

Innovation at CC looks to create changemakers by cultivating strengths in three main areas: design thinking, mindfulness, and risk taking/failure/resilience.

Experience in design thinking equips students with the skills needed to define and approach problems; it provides guidance in how to move through a creative process that results in innovation. While design thinking approaches vary, they generally involve a series of steps designed to identify the (real) problem, generate possible solutions, discern among possible options, iterate or prototype, and execute or implement the new solution or idea. Design thinking provides a kind of map--not of the territory itself, but of a process that can be used to approach novel problems. Integrating design thinking into the culture of CC brings new tools and skills to our institutional tradition of finding out-of-the-box solutions to new and existing problems.

To truly bring this current generation of students into a place of creative confidence, we also have to address the profound cultural realities that these students face. A near-perfect GPA is required to be accepted into Colorado College, along with an array of stellar extracurriculars. Our students arrive at CC with a long history of performing well to meet external expectations. But innovation, by definition, means doing something that has not been done before, perhaps something that has not even been previously imagined. It means moving against conventional wisdom, breaking expectations, straying into the territory beyond the cautionary "do not enter" sign. Cultivating failure would not be a wise move for a student aspiring to attend CC, but the willingness to fail is crucial to innovation. Innovation is an iterative process that proceeds through successive failures along the road to new solutions. If we are to instill creative confidence in our students, we need to issue them an invitation to take risks without preconceived outcomes and without measurement. As much as faculty may be committed to supporting exploration in CC classes, students are very aware that after CC they need to forge careers in a competitive market or secure coveted spots in graduate schools. They do, rightly, care about their grades. The extracurricular nature of many of Innovation at CC's programs and opportunities provides arenas in

which students can take risks playfully and step into the unknown without needing a “successful” outcome. We are also exploring ways to create safe spaces for risk-taking within the curriculum. While students might think it unwise to risk anything less than excellence, the quality of resilience that is crucial to any successful career and life requires reframing failure as a necessary and fruitful learning tool in an ongoing process of discovery.

Another cultural reality for this generation is the omnipresence of technology. Technology shapes young people's lives now to a degree that is unprecedented. What challenges do these students face that we who belong to earlier generations did not? And how do those changes affect students' ability to innovate? Technology is still in its relative infancy, and we don't yet know its full impact on human minds and psyches. As Jim Steyer of Common Sense Media observes, "We're conducting the biggest experiment on our kids--the digital transition--without research." It is estimated that students now spend nine hours a day accessing their phones. Furthermore, the separation between work and life--or study and life--has eroded: students are dinged by their phones or sending and receiving status updates at all hours of the day and night. In such circumstances, it is hard to cultivate the habits of attention and reflection that give rise to new ideas (or even coherent thoughts). Creative thinking requires some measure of uninterrupted, unstructured time, a measure of solitude and silence, in which unformed ideas can take shape and find their way to the surface of consciousness. Brandon Keim, citing an article on distraction by Maggie Jackson, notes that "It's not a pretty picture: a never-ending stream of phone calls, e-mails, instant messages, text messages and tweets is part of an institutionalized culture of interruption, and makes it hard to concentrate and think creatively." ("Digital overload is frying our brains," *Wired*, 6 February 2009). Under a barrage of information from the internet and social media, and lacking uninterrupted time and space, students may lose their internal connections to their own intuition and creativity.

How does one learn to stay in a place of fruitful uncertainty when information is abundant? What students may need help cultivating in the Google Age are tools for subtractive thinking: amid the excess of information, how does one identify and stay focused on the facts and knowledge that are strictly relevant to a given issue? And how does one recover the ability to be alone with one's thoughts? I believe that the practice of mindfulness, which involves bringing single-minded attention to the present moment, is a powerful tool to help students recover the ability to focus, as well as to restore their access to their own inner creative resources. From this perspective, students' creativity and personal well-being are inextricably related. The connection to creative sources within involves connection to the self, the crucial ground on which students create the capacity for learning and leadership throughout their lives.

The emphasis on innovation in higher education is not occurring in a vacuum; it is part of a broad rethinking of the purpose of education in the 21st century. Carol Geary Schneider, president of the Association of American Colleges and Universities, says the rise of entrepreneurship programs is part of a shift in higher education, in which skill building coexists with the liberal arts. "The idea is that students aren't in college just to take courses, they're in college to learn how to apply their education to real-world contexts," she says. "Entrepreneurship is simply a shorthand title for learning how to apply knowledge, skills, and judgment under conditions of uncertainty."

In *“Remaking, Renewing, Reimagining: The Liberal Arts College Takes Advantage of Change,”* Rebecca Chopp notes that the global access to knowledge afforded by technology is creating a trend toward "social learning," which could reshape the way we teach and the way college curricula are organized:

"Social learning does not rely on linear knowledge transfer. Rather, it is based on the premise that, as Brown and Adler put it, we 'understand content through conversation and grounded interaction around problems or actions.' . . . The current generation of students is ready for this form of engagement. They live in a world with few boundaries and compartments, where they multitask and tweet throughout the day and night. Partly because of this open access and wide range of interactions, they want more and better forms of problem-centered, real-world-based learning. Our faculty members want to work with students on projects and programs

that welcome new, often interdisciplinary ways to organize knowledge and develop deeper connections between theory and practice. It is exciting to watch the myriad ways that this transformation is taking place in and out of the classroom."

Chopp notes that students and faculty are driving this trend: " Our students and faculty are not waiting for institutions to act. They are already participating in *knowledge design*, a concept aimed at placing creativity and agility at the heart of learning and scholarship. . . ."

At CC, we are rethinking our general education requirements in response to such changes in the landscape of higher education. Although the work is still in preliminary phases, the ideas that the Curriculum Executive Committee has been exploring mirror the trends Professor Chopp describes, including project based, real-world learning and an emphasis on the active construction of knowledge. Innovation at CC is happy to champion, collaborate with, and support such curricular experiments.

It is an exciting time at Colorado College, in which conversations across multiple programs and departments are intersecting and collaborative efforts are generating new ideas about how to best prepare our students to be leaders and changemakers in our rapidly changing society. We have an exciting opportunity to model these principles institutionally by testing new pedagogical approaches and by taking risks ourselves.

Ultimately, Innovation at CC would love to promote a culture at CC that supports innovation by creating spaces in which work merges with play, spaces where students, faculty and staff have the chance to say "I don't know" and are resourced and encouraged to choose curiosity over fear. We might redefine success for our students to mean that they have tools to lead holistic, balanced lives driven by passion and creativity, lives that include work that has meaning.

Innovation in the liberal arts is necessary to stay leading edge and relevant in a time of rapid change. Investing in Innovation at CC capitalizes on our existing strengths and allows us to expand into uncharted territory. Because of the block plan and our existing focus on immersive, experiential learning, we have unique opportunities that other institutions do not. The word *innovation* was synonymous with revolution in the 17th century! I propose to use this as a guide post as we "draw upon the adventurous spirit of the Rocky Mountain West" and continue to revolutionize our approach to liberal arts education. The chance to "innovate" innovation in higher education and create a new model is an opportunity that CC is poised to realize. If we can empower students with the ability to trust and turn their curiosity into actionable, iterative steps, I believe this will empower them to accomplish anything.

We must remain self-reflective and conscious that it is critical for us to model the same principles that we are promoting for students as we build programs and create spaces (literal and metaphorical) for innovation on campus. As we iterate our way forward, we can embody the values and practices of a culture of innovation, including design thinking; risk, failure and resistance; and mindfulness. The strategic plan that follows constitutes a framework for implementing the mission of Innovation at CC, but none of it is static. As we are creating something unlike other institutions' innovation programs, inventing something entirely new, we need to remain nimble ourselves, responsive to as-yet-unimagined opportunities and sensitive to our community's ever-changing curiosities, needs and desires.

DEFINING PROGRAMATIC ELEMENTS AND LEARNING OUTCOMES

Proposed Innovation at CC Mission Statement: Innovation at CC empowers students with the creative confidence to be changemakers.

Creative confidence is Innovation at CC's main learning outcome. Since so much can be conflated as "innovative", it is crucial that we define our learning outcomes. Identified learning outcomes include:

- Creative confidence
- Resilience
- Mindfulness
- Reflective self-awareness
- Comfort with navigating ambiguity
- Comfort with iterative risk-taking
- Comfort with creative problem solving methodologies (design thinking)
- Courageous doing (ability to bias towards action)
- Understanding of place in global community

Further, innovation at CC wants to encourage and create opportunities for:

- Human centered/empathic problem solving
- Collaboration across diverse constituencies
- Self-directed learning
- Project based learning
- Defining of values and passions
- Community engagement and collaboration
- Experimentation without pre-defined goals or outcomes

Design Thinking

Question: How do we integrate innovative creative processes such as design thinking into campus culture to support the academic mission?

What is design thinking? It's an approach to problem solving based on a few easy-to-grasp principles that sound obvious: "Show Don't Tell," "Focus on Human Values," "Craft Clarity," "Embrace Experimentation," "Be mindful of Process," "Bias Toward Action," and "Engage in Radical Collaboration." These seven points reduce to five modes — empathize, define, ideate, prototype, test — and three headings: hear, create, deliver. Design Thinking is a method that draws upon logic, imagination, and intuition to explore possibilities of what could be.

When we think about design thinking, the first word that comes to mind is *human*. For example, what's the human need behind that business need? Design thinking encourages students to focus on the people they're creating for and leads to human-centered products, services, and processes. The core of design thinking is getting actionable and knowing your questions. It's about simple mindset shifts or ways of asking questions differently—a new way to look at problems.

Innovation at CC seeks to empower students with creative confidence to iterate any idea forward, and design thinking is one method that will help us achieve this goal. Design thinking has the potential to equip our students with a methodology for producing reliably innovative results in any field. We hope to empower students, as well as faculty and staff, with this cognitive framework to better understand and be able to practice creative problem solving and design.

Risk/Failure/Resilience

Questions: How do we empower students with the creative confidence to choose curiosity over fear? How do we create a container for students to take incremental risks? What is the relationship between research, creativity, play, repairing and risk taking? How do we teach students to embrace ambiguity and experiment iteratively with ideas with a focus on process over final outcomes?

The world is more interdependent than ever before and the challenges of the 21st Century demand multilateral solutions that presently don't exist. It is critical that the next generation is provided with the skills and attitudes they need to creatively access their genius in order to address these challenges. To realize their passions and their place in the world, students must be well versed in risk-taking, failure, and resilience.

The millennial generation is characterized as a generation that lacks resilience. One key difference between their predecessors, particularly Generation X, is that millennials are not big risk takers. Their relative risk-aversion may have something to do with the protective environment that parents and schools created for millennials.

NESTA, the National Endowment for Science, Technology and Art in the UK published a report titled “*Learning to Take Risks, Learning to Succeed.*” The following excerpt speaks to the importance of risk taking in relationship to innovation:

Innovation is urgently needed for economic growth and to find solutions to pressing national and global problems. Risk taking is essential to innovation: anyone developing a new product, service or idea risks the possibility that it will not work, that someone else will get there first or it will be met with disinterest. Young people entering work in the twenty-first century will need to take risks to find these solutions, and addressing everyday challenges also involves complex decision making and evaluation of risk.

Risk taking is becoming a core skill. Employers now need people who can communicate, work in teams, make decisions, be adaptable and take risks. Despite the demand for skills of innovation and enterprise, and despite recognition of the value of invention and original thinking, the role of risk taking in preparing young people for the future is often overlooked by educators and policy makers. In the context of young people's lives, risk is seen as largely negative, linked to danger and regarded as something to be avoided.

In addition to benefits for employers and the economy, learning about risk taking can help young people to make decisions about subject choices and routes through education and careers. It can help them to evaluate alternative courses of action and can build confidence. The experience of failure, as a result of risk taking in a safe environment, can help to build resilience to setbacks and help young people to manage risk better in the future. There is little evidence that entrepreneurs are born and cannot be made: through practice, young people can learn to recognize opportunities and possibilities rather than play safe and tread well-worn paths of inquiry.

Adults involved in innovation projects with young people should have a clear and distinct role, leaving key decisions to them. They should facilitate risk taking by asking open questions and not advocate solutions. Only in this way can young people make their own assessments and risks, and experience the rewards, or failure, for themselves. Time for reflection is also necessary to ensure that young people learn from their experiences of risk taking, including their mistakes. Reflection can also draw out any learnings for other areas of young people's studies and lives.

Risk-taking emboldens students, as it does entrepreneurs, to innovate and to achieve, to create opportunities and learn from failure. The ability to think broadly and critically, to communicate clearly, and to identify and solve problems thoughtfully, will empower students to tackle risk head-on. As Beth McMurtrie stated in her article *Now Everyone's an Entrepreneur*, "Risk taking, in a way, has become the new critical thinking. It's what colleges believe they need to teach for graduates to meet the needs of today's workforce."

Colorado College needs to respond to dramatic changes in culture by providing more space and opportunities for students to take risks, to stray from the inherited definitions of success, and to embrace unexpected opportunities and challenges.

Mindfulness

Questions: To what extent have we created a culture in which people are disconnected from each other, their communities, their own ways of knowing, their own creativity, and their own bodies? How do we address the cultural changes (involving technology) that negatively affect our ability to be present and do focused work?

What is mindfulness? Mindfulness is a mental state achieved by focusing one's awareness on the present moment.

Harvard Professor Ellen Langer, in *Mindfulness in the Age of Complexity*, defines it as "The process of actively noticing new things. When you do that, it puts you in the present. It makes you more sensitive to context and perspective. It's the essence of engagement."

An article titled, *Mindfulness and Innovation* published in *Now Unlimited* states, "It is impossible to innovate whilst in a mindless state of mind where one is firmly immersed in rigid and fixed views about objects, the world, and the self. For example, 'we do it this way because we always have'. In mindfulness, the habitual and conventional interpretations are identified, acknowledged and then choices made that allow us to pursue new and more adaptive ways of seeing the world. Mindfulness reduces reactivity and promotes a state of calm. In this state, people become more receptive to ideas and develop their ability to engage with their surroundings in a more focused and vibrant way."

Many higher education institutions are beginning to integrate mindfulness into their academics. At Vanderbilt, they strive for a contemplative pedagogy "designed to be quiet and shift the habitual chatter of the mind to cultivate a capacity for deepened awareness, concentration, and insight." Vanderbilt cites the article *Toward the Integration of Meditation into Higher Education: A Review of the Research* by Shapiro, Brown and Astin (2008) as integral to their mindfulness pedagogy. Their research finds that "meditation is noted as contributing to enhanced cognitive and academic performance (including attention and concentration), management of academic stress, and the development of the "whole person." Harvard i-Labs includes Mediation Mondays, a program that helps inform their entrepreneurship and innovation center. Their emerging emphasis on mindfulness is reflected in an article in the *Harvard Business Review*, *Mindfulness in the Age of Complexity*:

"No matter what you're doing—eating a sandwich, doing an interview, working on some gizmo, writing a report—you're doing it mindfully or mindlessly. When it's the former, it leaves an imprint on what you do. At the very highest levels of any field—Fortune 50 CEOs, the most impressive artists and musicians, the top athletes, the best teachers and mechanics—you'll find mindful people, because that's the only way to get there."

Mary Elizabeth Williams in *Why Every Mind Needs Mindfulness* says: "It's no coincidence as we find ourselves increasingly barraged with distractions—a 2013 University of Southern California study estimated that the

average American consumes an astonishing 13-plus hours of media a day—we simultaneously find ourselves in the midst of a mindfulness revolution.”

Forty years of research shows the positive effects of mindfulness, and more research is rapidly emerging around the connection between mindfulness and innovation as well as the dangers of constantly being plugged into technology. Having a cluttered brain gets in the way of deep and agile thinking. We live in a competitively frantic culture and people are feeling the impact of always being connected. It used to be you left work and went home. Now you’ve got a device on you at all times. The body is designed to be energetic and active and then recover. People no longer have recovery time, and there’s been a silent, invisible ratcheting up of invasion of our space.

We are already seeing the negative impacts of this cultural shift on the present generation of college students. In 2014, a Penn State study found that anxiety had surpassed depression as the leading mental health issue facing college students. Depression and anxiety are prevalent problems in colleges across the country. “There is no question that all of the national surveys we have at our fingertips show a distinct rise in the number of mental health problems,” said Jerald Kay, M.D., Professor and Chair of the Department of Psychiatry at the Wright State University School of Medicine. According to mental health research conducted by the National Alliance on Mental Illness (NAMI):

- One in four students have a diagnosable mental illness
- 40% do not seek help
- 80% feel overwhelmed by their responsibilities
- 50% have become so anxious that they struggle in school

Anxiety is not a state that allows for innovation to flourish. Further, social and emotional well-being play a fundamental role in the attainment of positive academic outcomes. Research shows that mindfulness increases focus, memory, cognitive flexibility, information processing speeds as well as decreasing task effort. In addition to cognitive benefits, mindfulness practice has also been proven to reduce anxiety and stress, regulate emotional reactivity, and increase empathy and compassion. Innovation at CC seeks to give students, faculty and staff access to mindfulness practices to clear out the endless distractions and onslaught of information so they can access their innate wisdom and creativity.

Changemakers

Question: How do we empower students to bias towards action and execute their ideas while being thoughtful about the impact of their actions?

As mentioned in the introduction, we use the term "changemaker" instead of "entrepreneur" to emphasize the reality that innovation occurs culturally, socially, and personally, rather than exclusively in the business and tech worlds. This phrase is borrowed from Tulane’s Taylor Center for Social Innovation and Design Thinking, which defines changemakers as those who “use their skills, humility, expertise, gifts, and power to affirm the humanity of all people in the pursuit of a more just, sustainable, and equitable society.” Design Thinking, Risk/Failure/Resilience and Mindfulness are all practices and tools that will lead students into the change making space where ideas become actionable. Changemakers are courageous doers who bias towards action.