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The Creativity and Humility Guidebook: Fostering a Community Filled with Creativity Through Humility

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The Creativity and Humility Guidebook: Fostering a Community Filled with Creativity Through Humility on the Roberts Wesleyan University Campus

by

Samantha Monaghan

An Abstract of a Project
in
Creativity and Change Leadership

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Master of Science

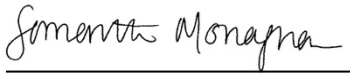
May 2023

Buffalo State University
State University of New York
Department of Creativity and Change Leadership

ABSTRACT OF PROJECT

The Creativity and Humility Guidebook:
Fostering a Community Filled with Creativity Through Humility on the
Roberts Wesleyan University Campus

Although an often-under-explored cognitive skill, humility has an important relationship with a person's creative capacity. Due to its inherent focus on honesty, flexibility, and openness, intellectual humility significantly increases an individual's problem-solving abilities. This paper will detail the development of *The Creativity and Humility Guidebook,* which will be used to provide a thorough overview of both creativity and humility to the Roberts Wesleyan University community in order to equip faculty and staff with a fuller understanding of the symbiotic relationship between the two. Due to the turbulent climate of higher education in today's world, coupled with the countless social, economic, and political issues that plague society, a guidebook that focuses on increasing a university's creativity through humility comes at a pivotal time in which the clear benefits of creativity training are crucial for success.



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April 29, 2023
Date

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Finally, thank you to my mother, Debbie, father, Brian, and sister, Morgan, for their love, patience, and encouragement. I sincerely hope they know how truly grateful I am for their support.

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SECTION ONE: BACKGROUND TO THE PROJECT

Purpose and Description of the Project

Novel problems require creative solutions (Puccio, 2015), and today's world is filled with novel problems. There is a constant demand for creative thinking, yet current educational systems often fall short of fostering skills related to creativity (Puccio & Lohiser, 2020). As a society, we need to utilize every tool at our disposal to facilitate problem-solving. I believe humility, an often misunderstood and under-explored skill, can be used to improve a person's creative capacity and bring individuals closer to finding creative solutions.

For my project, I am developing an initial draft of a guidebook that will eventually be used to introduce the Roberts Wesleyan University (RWU) faculty and staff to the creative power of intellectual humility. Intellectual humility can be defined as the ability of individuals "to recognize their own potential fallibility when forming and revising attitudes" (Zimigrod et al., 2019, p. 205). Put simply, intellectual humility is the ability to say, "I could be wrong" and learn from this voluntary openness (Resnick, 2019). RWU, where I serve as the Director of Academic Operations, is not immune to the issues that plague higher education today, such as under-enrolled programs, financial instability, and low employee morale. Based on these external and internal factors, I have observed that members of the RWU campus are currently asking themselves how they can be more creative. I would like to offer my response to this question through *The Creativity and Humility Guidebook,* which will suggest that we, as a community, embrace the cognitive skill of intellectual humility in order to foster a creative and thriving environment.

A research study conducted in 2019 found that those who most often demonstrate a high level of intellectual humility are more likely to express cognitive flexibility (Zimigrod et al.). Additionally, intellectual humility positively correlates with openness, epistemic curiosity, and existential quest and negatively correlates with intolerance of ambiguity (Leary et al., 2017). For

these reasons, I see humility as having an important relationship with a person's creative capacity and problem-solving abilities.

A number of concepts related to creativity will be highlighted in the guidebook as they connect to intellectual humility. For instance, a strong emphasis will be placed on one's ability to embrace uncertainty. Beghetto (2021) proposed that uncertainty is fundamental to creativity in that uncertainty and inconclusiveness are a part of all creative thinking and can even be re-introduced into seemingly resolved ideas. I see this having a significant impact both in and out of the classroom at RWU, as this way of thinking can be used to develop a tolerance for ambiguity, complexity, and risk. These skills are critical for an institution facing increasing change, as well as for students preparing to enter the workforce or advance their already successful careers.

Along with the encouragement to embrace uncertainty, readers will be introduced to the concept of pluri-perspectivism, which is a "commitment to acknowledging and engaging with a multitude of different perspectives" (Beghetto & Glăveanu, 2022, p. 31). Diversity of thought can be a stimulant of innovation and novelty. In fact, Beghetto and Glăveanu (2022) argued that the act itself of intentionally attempting to understand other perspectives can increase a person's creative ability. As a part of a thinking community, ideas are shared and evaluated, and this collaboration should be considered vital in higher education institutions where adults of all ages are seeking to further their learning. Engagement leads to sincere conversations, and when dialogue is respected and taken seriously, individuals are more likely to entertain other perspectives, thus strengthening their ability to avoid premature closure (Beghetto & Glăveanu, 2022).

An emphasis will also be placed on the importance of listening for understanding and how it influences creativity. Listening for understanding requires the listener to hear what has been said and to internalize the information, purposefully processing the meaning tied to the content. Listening finds its foundation in being "other-oriented," which is defined as having an

“awareness of the thoughts, needs, experiences, personality, emotions, motives, desires, culture, and goals of your communication partners while still maintaining your own integrity” (Beebe et al., p. 2). Due to its perceived passiveness, listening may seem to run counter to creativity, which relies on action and forward progress. However, according to former FBI hostage negotiator Chris Voss, listening is the “most active thing you can do” (Voss & Raz, 2016, p. 24), as negotiating is a process of “discovery” (p. 58). When relationships contain a solid foundation of mutual respect and understanding, creativity can be cultivated to help solve problems.

Listening for understanding contributes to one’s ability to clarify, which is crucial to creativity. Those who engage in creativity should want to see things as they are in order to see things as they could be. Possibility thinking, a key creativity skill, can be defined as “the means by which questions are posed or puzzles surfaced - through multiple ways of generating the question ‘what if?’” (Craft, n.d., p. 1). The question “what if” can only be effectively asked with an existing understanding of “what is.” For that reason, accurately identifying and defining a problem with honesty is the important first step in the problem-solving process (Puccio et al., 2011). The success of solutions is contingent on asking the right questions.

A third area of attention in the guidebook will include one’s ability to detach, which has roots in the polarity of immersed detachment that Glăveanu (2019) defines as simultaneous connectivity and disconnection. Detachment is the process of taking a step back, either physically, cognitively, or both, and the purpose of detaching is to allow space for new thoughts and perspectives, which, in turn, makes room for growth, change, and creativity. In fact, detachment is a key component of incubation. Incubation occurs when an individual takes a step away from a task to allow for the unconscious processing of thoughts and ideas, and a seminal study conducted in 1968 revealed that periods of incubation were shown to improve an individual’s performance in divergent thinking and problem-solving (Fulgosi & Guilford).

The link between detachment and intellectual humility can be found in the skill of rethinking. Rethinking supports cognitive flexibility, which is our ability to mentally adapt to change. A common barrier to creativity is the fear of being wrong because it often fosters avoidance and denial. When individuals bind their ideas to their identities, admitting errors or mistakes can feel as though they are admitting character flaws. However, being wrong is something creative individuals should embrace as it means that knowledge has been gained (Grant, 2021). Detachment supports the independence of intellect and ego, which is a key factor of intellectual humility (Krumrei-Mancus & Rouse, 2016).

The Creativity and Humility Guidebook will provide a thorough overview of both creativity and humility in order to equip readers with a fuller description of the symbiotic relationship between the two. The initial draft of the guidebook will contain three major sections. The first section will have a primary focus on defining creativity and humility. In my experience in the Creativity and Change Leadership Master of Science Degree Program and my career at RWU, I have found that, while individuals may have a strong understanding of the concepts related to creativity or a strong understanding of the concepts related to humility, it is rare that an individual has a strong understanding of both. Specifically at RWU, employees have already been introduced to the term intellectual humility in various settings related to strategic planning and academic presentations, yet many could still benefit from a general overview of the concept. The definition of creativity is likely less familiar to the faculty and staff, especially as we do not have any academic programs dedicated to creative studies. My goal will be to define the term in a way that is succinct yet has appropriate depth.

The second section of the guidebook will focus on the relationship between creativity and humility and how it can be embedded in the institution's operations. I will explore skills that all faculty and staff of the RWU community can use to reap the benefits of creative working environments and interpersonal cohesion. I believe it is important that the guidebook be relevant not just to instructors but also to the staff who support the operations. Those who have worked

in higher education know that educators don't just exist in the classroom. All employees of RWU have the opportunity to contribute to the learning of the students enrolled, and all employees can gain from the clear benefits of creativity training.

The third section of the guidebook will focus on the approaches to creativity in education that can be used to foster intellectual humility in RWU's students. Due to the strong connection between cognitive flexibility and intellectual humility, there are a number of models that can be utilized to increase a student's ability to embrace uncertainty, listen for understanding, and detach. The purpose of this section will be to expose faculty members to the theories that exist and encourage them to think about the ways in which they could incorporate them into their current courses.

Additionally, the guidebook will contain an introduction that provides an overview of the history and mission of Roberts Wesleyan University. Founded by B.T. Roberts in 1866, Roberts Wesleyan was originally developed as a school for underprivileged women and men to earn a faith-based education, and the roots of social justice still remain present in the university's mission today, which aims to provide education for character (Roberts Wesleyan University, n.d.a). This introduction will offer a context for the information presented in the guidebook, empowering all members of the RWU community to better understand their role in the future of the institution.

Through completing this guidebook, I have a number of personal goals I hope to achieve:

1. **I would like to create a starting point for testing my theory that humility can be taught and used to promote creativity.** The Creativity and Change Leadership Program teaches that not only is creativity an essential life skill, but it is a skill that can be taught (Puccio et al., 2017). In this same way, I believe that humility can be taught, and I hope to explore the most effective methods for delivering this instruction.

2. **I want to further hone my voice in the field of creativity by successfully articulating the principles of creativity and humility alongside my own thoughts and views on these concepts.** Throughout this program, I have learned valuable information, and I now have the opportunity to make it my own and determine what it means for me as an individual in a way that is authentic. I have reached the stage of my education in which I need to consider how I would like to contribute to the field. With this in mind, I know that ideas lose their potency if we are unable to communicate them effectively, so I will work to articulate myself in a way that is clear and fruitful.
3. **I would like to create a guidebook that is both accessible and sophisticated.** Mumford et al. (2000) wrote that "without appropriate developmental experience, even the most intelligent and motivated individual is unlikely to be an effective leader in an organizational setting" (p. 24). The reality is that some people have stronger access to educational opportunities than others. If the skills of creativity and humility help individuals benefit from and contribute to thriving communities, and these skills can be taught, all individuals should have access to this education. With this in mind, I plan to write the guidebook in a way that makes it accessible to all members of the RWU community. At the same time, accessibility does not prevent sophistication. My aim is for the guidebook to have a level of sophistication that is mature and professional.
4. **I want to explore and grow in my potential to be a creative leader at my institution.** According to Puccio et. al (2011), a creative leader guides a team through creative change while having a "profoundly positive influence on his or her context…, the individuals in the situation, and the environment in which they collaborate" (p. xviii). Leaning into a greater understanding of leadership that I

have developed through this program, I hope to help my institution face creative change by providing my colleagues with the necessary skills for solving problems and engaging in transformation. Creativity requires individuals to utilize a strong sense of self-awareness, and through understanding myself, I know I will never be the loudest voice in the room. Therefore, writing a guidebook that my colleagues can grow from is an approach to positive influence that best aligns with my gifts and personality type.

Rationale for Selection

I am grateful for this opportunity to further explore an area of research that is not only of personal interest to me in the midst of today's turbulent society but is also an interest of RWU. Intellectual and spiritual humility is a current research focus of my institution, and a number of my colleagues are working to publish papers and develop training sessions around this topic. I am eager to contribute to this effort with the lens of a graduate degree in the field of creativity.

The field of higher education is currently fighting against an abundance of novel problems. In a time when colleges and universities are plagued with enrollment and staffing crises (Camera, 2022), creativity is needed in higher education now more than ever. In order to succeed, RWU has to be innovative, adaptive, and creative. The skills required for success in today's world are much different than in the previous century (Puccio & Lohiser, 2020), and I believe a guidebook that focuses on increasing a university's creativity through humility could not come at a better time.

Clear benefits of creativity training include the ability of teams to solve complex problems, the promotion of effective leadership skills, and the development of individual potential (Puccio, 2015). Creativity makes use of engagement, understanding, and change in order to foster thriving communities. While I believe that educating others on the benefits and skills of creativity and humility can promote healthier environments and help individuals live up to their full potential, my vision is not entirely altruistic; it is also a form of enlightened self-

interest. When those around me are trained in creativity skills, I, too, have stronger paths for reaching goals and solving problems.

The interdisciplinary nature of creativity makes it relevant to all departments, disciplines, and individuals (Puccio, 2015) and will allow me to touch upon every aspect of the organization. By conceptualizing *The Creativity and Humility Guidebook*, I can offer my entire institution a holistic document that helps start the conversation about an important strategic planning initiative. The development and implementation of *Vision 2030* (https://www.roberts.edu/about/market-position/), the University's strategic plan for the next seven years, has an inherent emphasis on humility as a distinctive in order to provide character education for all students. The institution's market position includes a focus on being "committed to the flourishing of people and communities and graduating students who are ready to lead" (Roberts Wesleyan University, n.d.a.). These goals are supported by new strategic pillars that aim to provide students with the tools necessary to engage with the world in a meaningful way.

The *Vision 2030 Strategic Plan* is still young, only being announced publicly at the beginning of March 2023. Conversations as to how the pillars will be implemented on campus are starting to take place and will continue through the rest of the semester and into the summer months. For this reason, I see the first draft of the guidebook serving as a springboard that can be used to stimulate ideas and dialog. It is my goal to introduce what I've learned in this program to my colleagues so that they can then dig deeper into the concepts that resonate with them the most. Ideally, the guidebook will grow as the conversations progress, with the wisdom of the community contributing to its development.

The creation of the guidebook comes with the full support of the Chief Academic Officer (CAO), Dr. David Basinger, who has been charged by the President of the institution to determine the ways in which the University can integrate intellectual and spiritual humility into all areas of campus (see Appendix A). Dr. Basinger serves as my direct supervisor and will provide significant feedback to my writing, weighing in on both the outline and the individual sections.

With over forty years of experience at RWU, Dr. Basinger has a deep knowledge of the historical roots of the institution, as well as the current climate. Additionally, his academic background is in philosophy and ethics, and one of his current areas of research includes intellectual humility. Dr. Basinger's affirmation of the guidebook will carry significant weight with both the faculty and staff of RWU.

When considering my passions, interests, and strengths, it is helpful to lean into my cognitive and social preferences to determine what my vision does and does not include. With this in mind, my vision includes room for silence. Powers wrote in his Pulitzer Prize-winning novel *The Overstory,* "Trees fall with spectacular crashes. But planting is silent and growth is invisible" (p. 89). My best learning is accomplished when I have time to process information through introspection and incubation, and I believe the same is for many others. A guidebook serves this purpose well.

My vision does not include imposing skills and beliefs onto other people. One of the standard values of the profession of social work is that "the most effective changes cannot be imposed" (Reamer, 2018, p. 33). There is a great deal of respect placed on one's ability to determine her own destiny. I identify with this value not as a social worker but as a creative professional hoping to foster healthy environments. In this same way, creativity in education scholar Craft believed that the most effective way the help students engage in creative education is by enabling them to have ownership of their own learning, creating an inclusive learning environment (Jeffrey & Craft, 2004). I hope to create an educational opportunity that presents information effectively, empowering others to internalize it and make it their own, and I believe I can achieve this successfully through *The Creativity and Humility Guidebook*.

SECTION TWO: PERTINENT LITERATURE & RESOURCES

Much of the research I completed in *CRS 625: Current Issues in Creative Studies* has informed the development of my master's project. As a result, I have an inventory of useful resources to reference as I begin to write *The Creativity and Humility Guidebook*. These resources fall primarily into two categories: research related to creativity and research related to intellectual humility.

Annotated Bibliography: Creativity

The resources related to creativity have an emphasis on defining creativity, identifying the benefits of creativity, and exploring the practical ways creativity can be embedded into an organization and/or classroom.

Beghetto, R.A. (2021). There is no creativity without uncertainty: Dubito ergo creo. ***Journal of Creativity, 31,*** **1-5.** **https://doi.org/10.1016/j.yjoc.2021.100005**

In this article adapted from a keynote address at the 2021 Creativity Conference at Southern Oregon University, Beghetto proposes that uncertainty is fundamental to creativity. He argues that individuals can be surprised by uncertainty or they can use it intentionally. When used intentionally, uncertainty leads to genuine doubt, which leads to new possibilities. In this way, I see creativity promoting humility. In the pursuit of new possibilities for problem-solving, creative individuals are encouraged to embrace uncertainty, which serves as a foundation for a humble mindset. Additionally, Beghetto touches on education, encouraging teachers to include uncertainty in predetermined curricula in schools and classrooms in order to promote possibility thinking for learners.

Beghetto, R.A., & Glăveanu, V.P. (2022). The beautiful risk of moving toward pedagogies of the possible. In R. J. Sternberg, D. Ambrose, & S. Karami (Eds.), ***The Palgrave handbook of transformational giftedness for education*** **(pp. 23-42). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-91618-3_2**

Beghetto and Glăveanu highlight the importance of creativity in education in order to elevate time spent in the classroom from a transactional to a more transformational experience. “Pedagogies of the possible” (p. 23) offer an inclusive way for all students to learn how to contribute to making the world a better place. For my guidebook, I plan to reference Beghetto and Glăveanu’s definition of pluri-perspectivism, which is a “commitment to acknowledging and engaging with a multitude of different perspectives” (p. 31). Beghetto and Glăveanu argue that the act of intentionally attempting to understand other perspectives can increase a person’s creative ability. When individuals embrace the intricacy of opposing views, they strengthen their tolerance for complexity and avoid premature closure.

Puccio, G., Mance, M., & Murdock, M. (2011). ***Creative leadership: Skills that drive change (2nd ed.)*****. SAGE. https://doi.org/10.1111/j.1467-8691.2008.00468.x**

This book highlights the key benefits of creative leadership, making it accessible to most individuals and organizations. Puccio et al. provide a strong argument for embracing creativity in teams while walking readers through the creative problem-solving process. In providing an overview of the Thinking Skills Model, this piece of work provides me with key terms, tools, and skills to reference when attempting to define the concept of creativity for readers of the guidebook.

Rhodes, M. (1961). Analysis of creativity. *Phi Delta Kappa, 42*(7), 305-310.

A seminal article on defining creativity, Rhodes compares creativity to looking through a glass prism with four sides: person, process, press, and product. While each side is unique, they need to work together to form creativity. This example is helpful when defining creativity as metaphors help make abstract concepts more concrete.

Annotated Bibliography: Intellectual Humility

The resources related to intellectual humility will have an emphasis on defining humility, identifying the benefits of humility, and exploring the practical ways humility can be embedded into an organization and/or classroom.

Berry, E., & Carr, F.D. (2022). *Intellectual and spiritual humility* [Unpublished manuscript]. Institute of Intellectual and Spiritual Humility, Roberts Wesleyan University, Rochester, New York.

Written by two of my colleagues at RWU, this article serves as a launching point for the university's initiative to weave the principles of intellectual humility into all aspects of the campus. Commissioned by the President of RWU, the article tackles the hard task of explaining the nuances of humility in today's world. By using prominent historical figures such as Mother Teresa, Dietrich Bonhoeffer, and Howard Thurman as examples, readers gain an understanding of what humility is and what it is not.

Grant, A. (2021). *Think again: The power of knowing what you don't know.* Viking.

In this book, Grant, an organizational psychologist at The Wharton School of the University of Pennsylvania, presents the ability to rethink as an essential cognitive skill that is far too often overlooked. The ability to rethink boils down to the virtue of humility, which Grant defines as "being grounded - recognizing that we're flawed and fallible" (p. 46). Grant articulates two specific concepts that I plan to include in the guidebook: detachment and the fear of being wrong. He identifies two forms of detachment as being especially helpful to the ability to rethink: detaching one's

opinions from her/his identity and detaching the present from the past. He also explains that the fear of being wrong often fosters avoidance and denial.

Leary, M.R., Diebels, K.J., Davisson, E.K., Jongman-Sereno, K.P., Isherwood, J.C., Raimi, K.T., Deffler, S.A., & Hoyle, R.H. (2017). Cognitive and interpersonal features of intellectual humility. *Personality and Social Psychology Bulletin, 43*(6), 793-813. https://doi-org.proxy.buffalostate.edu/10.1177/0146167217697695

This article explores the characteristics of those who exhibit high levels of intellectual humility. Low levels of humility, often caused by belief superiority, come with a number of consequences, such as interpersonal conflict, incorrect information, and lack of compromise. Alternatively, those who hold beliefs tentatively acknowledge that beliefs may be limited due to a lack of information or expertise. The research studies conducted for this article conclude that intellectual humility positively correlates with openness, epistemic curiosity, and existential quest and negatively correlates with intolerance of ambiguity.

Zimigrod, L., Zimigrod, S., Rentfrow, P.J., & Robbins, T.W. (2019). The psychological roots of intellectual humility: The role of intelligence and cognitive flexibility. *Personality and Individual Differences, 141*, 200-208. https://doi.org/10.1016/j.paid.2019.01.016

The main hypothesis of this study is to examine the theory that “an intellectually humble mind is also a flexible mind.” Participants completed a number of assessments to determine their levels of intellectual humility, cognitive flexibility, and intelligence. The results confirm that intellectual humility is positively related to cognitive flexibility and intelligence. This article offers the definition of intellectual humility I plan to use most prominently, which is that intellectual humility is the ability “to recognize their own potential fallibility when forming and revising attitudes” (p. 205). Additionally, the discussion portion of the article concludes with how the results

of the study could be used for interventionist and educational approaches, particularly in the prevention of the spread of misinformation and polarization, a theory I plan to incorporate into the guidebook.

SECTION THREE: PROCESS PLAN

Plan to Achieve Goals and Outcomes

To summarize, the completed product for my master's project will be the first draft of a guidebook that my institution can use to help shape the conversation around the strategic initiative to embed intellectual humility into all operations of the university. My emphasis will be on intellectual humility's ability to foster creativity and problem-solving. Additionally, this guidebook could potentially assist other higher education institutions to face novel problems in a turbulent climate. For this reason, the full text of the guidebook will be shared within Section Four, with the acknowledgment that it will be a living document that will continue to evolve as I progress in my studies and as the institution begins to form a clear direction for this initiative. My plan is for the initial draft of the guidebook to be a thorough and articulate representation of my voice and a helpful contribution to the field of creativity.

To achieve my personal goals, I will collaborate with colleagues who are already developing articles, curricula, and non-degree-bearing courses around the concept of intellectual humility. As I continue the writing process, the sections related to classroom instruction will require a significant amount of my attention as this is the area in which I have the least amount of experience. I plan to utilize the expertise of the educators at RWU who have advanced degrees in curriculum development and extensive experience teaching in higher education. Additionally, I have identified members of my cohort as feedback partners who have been immersed in the field of creativity for a number of years. Diversity of thought provides the foundation for innovation and novelty (Beghetto & Glăveanu, 2022), and I will rely on the voices of many friends and colleagues to inform my writing.

A crucial component of creativity is the openness to receive feedback and the willingness to adjust/revise/edit based on the input received (Puccio et al., 2011). For this reason, I will use the feedback I receive from reviewers to continue to make the guidebook as effective as possible. In addition to the individuals mentioned above, my goal will be to also

share my work with those who do not have an existing understanding of the material in an effort to have external perspectives, as well. Intellectual humility promotes the ability to rethink, and I hope to internalize the message I am delivering by practicing intellectual humility during my writing process.

Project Timeline

The timeline depicted in Table 1 indicates my current schedule for completing the guidebook. In addition to the activities in the timeline, I am attending class sessions and meeting with my feedback partners.

Table 1

Project Timeline

Activity	**Deadline**	**Hours to Complete**	**Notes**
Complete concept paper proposal	January 30, 2023	20 hours	Official due date is February 13, 2023
Create working outline for guidebook	February 3, 2023	15 hours	
Share outline with colleagues and sounding board partners for feedback	February 10, 2023	10 hours	
Write the first section of the guidebook	February 24, 2023	20 hours	Writing process includes research.
Complete Sections 1-3 of masters paper	March 15, 2023	10-15 hours	Need to share in class on March 15; submission due date is March 21, 2023.
Write the second two sections of the guidebook	March 24, 2023	20 hours	Writing process includes conducting research and consulting with colleagues.
Share the guidebook with reviewers	March 26, 2023	5 hours	Reviewers include colleagues and classmates

Edit guidebook based on feedback.	April 12, 2023	20 hours	
Complete Sections 4-6 of the masters paper (Note: Section 4 will include the current full-text of the guidebook as of this date)	April 12, 2023 (Submit on April 23, 2023)	20 hours	Need to share in class on April 12; submission due date is April 23, 2023.
Edit guidebook and masters paper based on feedback.	April 31, 2023	20 hours	Feedback will be provided from Dr. Keller-Mathers.
Submit completed guidebook and completed masters paper	May 1, 2023	NA	

Evaluation Plan

Evaluation of my project will stem from the goals I have identified for myself as I complete the guidebook. Table 2 reports the actions I will use to determine the success of my goals, which relies heavily on feedback from colleagues, classmates, friends, etc., as well as my ability to model the skills and principles I present in the guidebook. Through the completion of my project, I plan for results to include the successful exploration of a topic in which I'm deeply interested, the presentation of unique and insightful connections, the utilization of critical feedback from others, and the ability to model the skills I present in the guidebook.

Table 2

Evaluation Plan

Goal	**Action**	**Result of Action**
Create a starting point for testing my theory that humility can be taught and used to promote creativity.	Write a guidebook that teaches the concepts of creativity and humility and offers practical ways to incorporate them into the organization	My progress in the writing process will test my current understanding and give me the opportunity to explore the ways in which I may need to adjust my thinking.

Further hone my voice in the field of creativity by successfully articulating the principles of humility and creativity alongside my own thoughts and views on these concepts	Present unique ideas and make insightful connections that demonstrate a high level of thinking and reflection	The desire to go beyond restating collected research will challenge me to make connections that have not yet been explored.
Create a guidebook that is both accessible and sophisticated	Gather feedback from reviewers with various educational backgrounds and levels of experience. This includes receiving formal feedback from the CAO.	Feedback will be used to strengthen the guidebook and will help me identify the areas that need editing.
Explore and grow in my potential to be a creative leader at my institution.	Promote creative thinking and problem-solving in my professional sphere of influence	By modeling the principles detailed in my guidebook, I will put my research into practice and engage in fruitful conversations with my colleagues about the concepts related to intellectual humility and creativity.

SECTION FOUR: OUTCOMES

The completed outcome of my project is the first draft of *The Creativity and Humility Guidebook.* I have decided to include the full text of the guidebook within Section Four of this paper with the goal of making the concepts and tools available to anyone who may find them helpful. While there are specific references to Roberts Wesleyan University in particular and higher education in general, the transdisciplinary nature of intellectual humility and creativity makes many of these principles applicable across various different professional fields, as well as in personal lives. If readers plan to use any portions of the guidebook for their own purposes, I am happy for them to do so but ask that they include a reference to this master's project.

While I consider the guidebook to be a first draft, there were many iterations of this draft, informed by feedback from classmates, colleagues, friends, and family members. After completing each section, I would email the portion to willing reviewers who provided valuable suggestions and edits, which I would consider and implement. I am extremely grateful to those who took the time to read the sections and share thoughtful feedback. I took a linear approach to writing and wrote each section in the order I intended them to be read in order to share the guidebook with a number of reviewers who did not have previous experience with creativity and humility. The sections of the guidebook are as follows:

- **Introduction**
- **What are creativity and intellectual humility?** This section includes the definitions of and myths related to creativity and humility, along with a preliminary overview of the relationship between the two.
- **How can intellectual humility be used to promote creativity at Roberts?** This section outlines the tools that RWU could use operationally to promote creativity through humility. The tools fall under three categories: embracing uncertainty, detaching, and listening for understanding.

- **How can intellectual humility and creativity reinforce each other in the classroom?** This section provides educators with creativity in education models and approaches that can be used to explore the ways in which intellectual humility can be embedded as a core competency in all of RWU's programs.
- **Conclusion**

Please note that the completed guidebook as its own entity has a Table of Contents, which needed to be removed for inclusion in this master's project paper (beginning on the next page).

The Creativity and Humility Guidebook is evidence of all that I have learned in the Creativity and Change Leadership Master of Science Degree Program. It includes references to almost every tool and concept that resonated with me and impacted my understanding of intellectual humility. It is my hope that all who read it not only learn more about the symbiotic relationship between creativity and humility but also gain insight into the benefits of studying creative problem-solving at the graduate level.

The Creativity and Humility Guidebook

Fostering creativity through intellectual humility on the Roberts Wesleyan University campus

Samantha Monaghan
Office of Academic Affairs

The Creativity and Humility Guidebook

Dr. Suzanne Simard is a research scientist and professor in the Department of Forest and Conservation Sciences at the University of British Columbia and has devoted her professional career to researching forest ecosystems. She discovered that trees have the ability to communicate with each other. Through fungi that live in the tips of their roots, trees can share resources with their botanical neighbors. These "messages" can help in significant ways, such as in preparing surrounding trees for invading pests or providing nutrients to trees that are overly shaded or in poor health[1]. Trees share their wisdom with each other in order to help create a better future.

In this same way, humans collaborate to bring about a better future, and creativity is a key component of this collaboration. Change is part of human nature, and through engagement, understanding, and growth, creativity enables us to make connections with the world around us in order to solve problems. Change propels us to new possibilities as we work together to improve the world around us.

However, while forward progress solves problems, it also creates problems[2]. Acknowledging that there is a constant demand for creative thinking, we can also observe that current educational systems often fall short when it comes to fostering the skills related to creativity[3]. Because of this, we need to utilize every tool at our disposal to facilitate problem-solving. One of these crucial tools comes in the form of an often misunderstood and under-explored cognitive skill: **intellectual humility.**

In Richard Power's Pulitzer-Prize-winning novel *The Overstory*, one of the characters reflects,

> "As certain as weather coming from the west, the things people know for sure will change. There is no knowing for a fact. The only dependable things are humility and looking[4]."

At the root of intellectual humility is a willingness to look, and the act of looking leads to new possibilities. It's fitting that the Latin root of humility is *humus*, which means from the earth[5]. Like the roots of trees working together to create thriving environments, creative individuals must connect with the world around them to solve problems and achieve goals. Creativity most effectively produces useful and novel change when the diversity of thought within a community is fully embraced.

At Roberts Wesleyan University, humility is inherent in the mission of the institution. Founded by B.T. Roberts in 1866, Roberts Wesleyan was originally developed as a school for underprivileged women and men to earn a faith-based education. Over 150 years later, Roberts Wesleyan University is still providing education for character through institutional learning outcomes encompassed by thoughtful engagement, spiritual formation, and commitment to service.

In fact, teaching in itself can be perceived as an act of humility as it directs focus outward rather than inward. And, anyone who has worked in higher education knows that educators don't just exist in the classroom. They also sit in cubicles, serve meals in the cafeteria, and lead practice on athletic fields. All employees of Roberts Wesleyan University have the opportunity to contribute to the learning of the students enrolled, and this responsibility should not be taken lightly.

Exploration of the symbiotic relationship between humility and creativity is necessitated by not just the turbulent climate of higher education but also the polarizing nature of countless social, economic, and political issues that plague our society. Colleges and universities should be leading the charge for equipping students of all ages with the necessary skills for addressing complex and novel problems through creativity, and the principles related to intellectual humility are crucial to this transformation.

This guidebook will serve as a foundation for understanding the relationship between creativity and humility in the context of higher education. Even more importantly, this guidebook will help conceptualize practical ways in which our institution can promote creativity through intellectual humility and will be used as a launching pad to initiate conversations on campus regarding this topic. We as an institution should be asking ourselves how we can be more creative, and together, let's explore the potential answer in intellectual humility.

What are creativity and intellectual humility?

Before we examine the ways in which intellectual humility can be used to promote creativity, it is important to understand the meaning of each on its own. Both terms are used in a number of different ways, and we should narrow our focus to a manageable scope. Creativity and humility have the ability to positively impact our daily lives, and we can all benefit from exploring them further.

Creativity

What is creativity, and why is it important?

Put simply, creativity is the production of *novel* and *useful* outcomes. Novelty and usefulness work in tandem to form an indispensable superpower: At its core, ***creativity solves problems***.

Novelty, which can be defined as being unique and unusual, is an important component of creativity because we live in a society filled with novel problems that need novel solutions[1]. What was once a solution five years ago, one year ago, or even one month ago isn't necessarily a solution today. Vinyl records were once a solution to a problem yet are now a staple of yard sales and thrift stores.

Usefulness, which can be defined as being functional and helpful, is an important component of creativity because it serves as the motivation to participate in creativity. Without usefulness, problems aren't addressed, and the novelty is wasteful. This practicality should not be ignored, even though it's, admittedly, less exciting than its counterpart.

Inventor and social media influencer Matty Benedetto has an entire web presence dedicated to producing "unnecessary inventions," which are products that are 100% novel and 0% useful[2]. Take, for example, the Shoe-Brella™, which consists of tiny umbrellas that can be attached to ankles in order to protect shoes from getting wet in the rain. By the definition of creativity, most people would not consider this invention to be creative, as it is novel but not necessarily useful. However, Benedetto *uses the unusefulness* of his products to support a career and provide entertainment to his followers. *That* would be considered creativity.

There are a number of scholars, both historical and contemporary, within the field of creative studies who have contributed to the understanding of the term creativity. One of these scholars is Mel Rhodes, an educator who saw the importance of answering the question, "What is creativity?"

In his seminal work "Analysis of Creativity" published in 1961, Rhodes identified four "strands" that "overlap and intertwine" within the concept of creativity[3]. These strands form the foundational *Four P's of Creativity:*

1. Person
2. Process
3. Press
4. Products

Person

Every single one of us is a creative person**.** Humans have demonstrated creative ability since the beginning of our existence, which emphasizes the dominant belief in the field of creative studies that *creativity is innate in all of us*[4]. Therefore, instead of, "*Am* I creative?," an important question to ask ourselves is, "*How* am I creative[5]?"

Process

With this in mind, there are many models, tools, and skills we can use to help us be creative. This applies to the process of creativity, which is how we go about engaging with problem-solving. The process we use can be spontaneous or it can be intentional, derived from research and training plans. An example of a structured process used to solve problems is the Creative Problem-Solving Process (CPS) developed by Alex Osborn in 1953[6]. CPS has undergone various transformations and is still actively used by facilitators today. For instance, the Creative Education Foundation utilizes a 21st Century version of CPS that leads problem-solvers through four distinct stages: *Clarify, Ideate, Develop, and Implement*[7]*.*

Press

Press is our awareness of and engagement with our environment. Keeping our ears to the ground and our fingers on the pulse of the situation will help us diagnose problems and implement solutions. Additionally, a significant amount of research has gone into determining the components of an environment that fosters creativity. Swedish scholar Göran Ekvall studied the factors that contribute to an organization's creative climate. Through his research, he identified the dimensions that positively correlate with creativity within an environment, which include freedom, idea support, trust, and openness[8].

Products

Finally, creative products are the ideas that develop from our problem-solving. They are derived from intellectual activities such as imagination and prediction and can be the result of innovation. We adopt creative products that address problems, and then replace these products with new products when the problems inevitably change[9]. This cycle is a result of the vibrant and dynamic nature of human existence.

While these four strands operate individually, they only result in creativity when they work together in harmony. Rhodes compares this to the use of a glass prism. When a glass prism is held up to a light, a rainbow appears. If this rainbow is creativity, it is only made possible by the four sides of the glass prism working together.

More recently, a strong emphasis has been placed on the ability for creativity to help individuals navigate through **change**. This is especially important in today's VUCA (Volatile, Uncertain, Complex, and Ambiguous) and BANI (Brittle, Anxious, Non-Linear, and Incomprehensible) world. You know our society is complicated when even the acronyms we use to describe it require a cheat sheet.

Change exists in two forms: natural and deliberate[10]. Natural change occurs on its own, like rising tides and ripening fruit, and deliberate change is instigated, like switching careers and going on a diet. While both forms of change can be helpful (or unhelpful), only deliberate change can be harnessed through creative thinking. That's not to say we can't use natural change in a deliberate way. Choosing to color your hair purple is a deliberate change. When you decide you no longer like the color purple and let your hair grow out, you've made a deliberate choice to use natural change to solve a problem.

As a society, we are facing deliberate change at an increasing rate. Take the tech industry as proof. There have been eight variations of the iPhone released in the last six years[11]. We are constantly being challenged to adapt, pivot, and innovate through the changes we face and the changes we enact.

This leads us to an important aspect of creativity: *Creativity helps us direct our relationship with change into an opportunity for* ***new possibilities.***

Education scholar Anna Craft coined the term "**possibility thinking**," which is the process of intentionally asking the question "what if?" in order to think about what could be[12]. In other words, we need to first think about possibilities before we can decide on our path. Building off of Craft's definition, Vlad Glăveanu, head of the Department of Psychology at Webster University Geneva and prominent creativity scholar, describes possibility thinking as a process for "experiencing the world" through activities such as playing games, interacting with others, and taking risks[13]. These types of creative actions open our minds to new ideas and opportunities, providing us with a vastly larger inventory of resources to use to solve problems.

Understanding the skills, tools, and processes related to creativity can help us find novel and useful solutions to complex and ill-defined problems. Creativity pulls from forces, external and internal, often emulating a call-and-response approach to problem-solving. Because of this, creativity requires us to engage with the world in a meaningful way, which can at times be challenging but always rewarding.

What are some myths of creativity?

When defining complex ideas, sometimes exploring what a concept *is not* can be just as helpful as exploring what a concept is. There are a number of myths[14] related to creativity that have been debunked yet still remain a part of the common interpretation of the term.

A popular misconception of creativity is that it is only reserved for eminent geniuses, such as famous artists like Picasso and Andy Warhol or well-known innovators like Thomas Edison and Elon Musk. This contributes to the false notion that creativity is unattainable and elusive. The truth is that creativity is not a rare talent. It's something we practice regularly to improve our everyday lives. Have you ever trailblazed a spontaneous detour to avoid traffic or convinced your child to eat her carrots through an elaborate story about bunnies? Problem-solving is a part of our daily existence.

A second myth is that creativity "just happens," and it's not easily understood or trainable. Those who believe this to be the case often think there is a certain amount of luck or magic attributed to creative breakthroughs that cannot necessarily be replicated on demand. However, numerous studies and research articles have shown that creativity is a teachable skill. For example, a study conducted by Buffalo State University in 2018 found that groups of individuals who were exposed to even just one course on the skills and strategies related to creative problem-solving were able to generate up to four times as many original ideas to solve a problem than groups who received no training at all[15].

Yet another misunderstanding of creativity is that it's fun and enjoyable but doesn't provide tangible benefits. Some believe that creativity is just artistic expression like finger painting, limerick writing, and interpretive dancing. While, certainly, finger painting, limerick writing, and interpretive dancing require creativity, creativity also supports strategic decision-making. It can be used to improve personal and organizational wellness, facilitate effective leadership in turbulent times, and drastically change society[16].

And sometimes, creativity is not fun at all. Colleges and universities had to use creative problem-solving when moving their classes fully online in March 2020 at the beginning of the global pandemic, and there aren't many people who would say that process was enjoyable. Yet, while it might not always be fun, creativity does improve our welfare. Creative problem-solving is often intrinsically motivated and creates more opportunities for success. For this reason, researchers have found that creative activity increases an individual's overall well-being[17].

When we challenge ourselves to think of creativity in ways we haven't before, it becomes more accessible and more easily recognizable in all areas of our lives.

Intellectual Humility

What is intellectual humility, and why is it important?

When asked about humility, many people associate the concept with moral characteristics such as kindness, generosity, and conscientiousness. These relate to the social aspect of humility and the essence of how it is perceived as a virtue. This component of humility emphasizes the way we see ourselves in relation to those around us and often is expressed outwardly through our actions[18].

A good example of expressing humility socially through actions can be found in former elite British footballer David Beckham as he stood in a queue for over thirteen hours to see Queen Elizabeth II lying in state after her passing[19]. As an international superstar, he may have been tempted to utilize his fame and money to earn himself a fast pass through the wait, or he may have seen the line that trailed for miles throughout the city and turned around. However, he considered himself an equal among the other mourners and paid his respects in the same way.

In addition to this social component, humility has a cognitive component related to how one thinks. Both the social and cognitive components of humility are invariably tied together as our thinking informs our actions and impacts our interactions with others, but focusing our attention on one or the other can be helpful in learning how to practice humility. The cognitive component of humility can be explained through the concept of intellectual humility.

Intellectual humility is the acknowledgment of the limitations of our own intellect and can be defined as the ability of individuals "to recognize their own potential fallibility when forming and revising attitudes[20]." In other words, intellectual humility is the ability to say, "I could be wrong[21]."

Founder and CEO of Care.com Shelia Marcelo expressed humility through her thinking when she rehired an employee on a Monday she had fired on a Friday[22]. The employee had violated the values of the organization by publicly using foul language in a written response to a blog post. Marcelo took immediate action and terminated the person's employment in a company-wide announcement. Over the weekend, however, she evaluated her own thoughts and actions. She assessed her decision-making process and considered factors such as the employee's role, the weight of his action, and the number of prior infractions. She also thought about the impact her decision had on the other employees of the organization. After coming to the resolution that she had made a mistake, Marcelo stood in front of her company on Monday and announced that she would be rehiring the employee. Marcelo demonstrated a willingness to consider that she had made a wrong decision. This openness is key to the cognitive component of humility.

In his book *Think Again,* psychologist Adam Grant writes that intellectual humility requires "being actively open-minded" and "searching for reasons we might be wrong - not for reasons why we might be right - and revising our views based on what we learn[23]." This takes intentionality, motivation, and, most importantly, practice.

In 2016, the Comprehensive Intellectual Humility Scale[24] was developed to assess an individual's level of intellectual humility. This 22-item assessment tool evaluates four factors of intellectual humility, which are useful in further defining the term:

1. Independence of intellect and ego
2. Openness to revising one's viewpoint
3. Respect for others' viewpoints
4. Lack of intellectual overconfidence

Independence of intellect and ego

When individuals demonstrate independence of intellect and ego, they do not consider it a personal attack when someone disagrees with their ideas or opinions[25]. Too often, we connect our ideas to our identities, and as a result, admitting errors or mistakes can feel as though we are admitting character flaws[26]. Practicing intellectual humility helps us fight this, oftentimes, unconscious tendency.

Openness to revising one's viewpoint

An openness to revising one's viewpoint requires an individual to consider letting go of previously held beliefs in order to evaluate new information. This is accompanied by an acknowledgment that our views, ideas, and opinions may be limited due to a lack of information or experience[27].

Respect for others' viewpoints

Dr. Elvera Berry and Dr. David Carr wrote in their article "Intellectual and Spiritual Humility" that intellectual humility requires individuals to cognitively travel to the "borderlines between thought communities[28]." As a part of a thinking community, ideas are shared and valued. Opposing views are not to be feared but respected in the same way that we respect the person who holds them.

Lack of intellectual overconfidence

Intellectual humility is a lack of intellectual overconfidence, also referred to as the absence of belief superiority, which is the assumption that our beliefs are better than anyone else's[29]. Belief superiority lays the foundation for dangerous behaviors tied to extremism and fanaticism. This isn't to say we aren't to have opinions or that there isn't a notion of right or wrong. However, intellectual humility maintains a level of openness that protects the boundary between confident and overconfident.

It's important to note that we likely embody varying levels of intellectual humility at various stages of our lives and/or with various topics[30]. For this reason, researchers who study the

construct of intellectual humility choose to use scenario-based measures in evaluations and assessments. For example, in 2019, researchers developed and validated the *Willingness to Admit Wrongness* measure, which is used to determine how likely an individual is to admit when she is wrong[31]. Subjects were asked to self-report how they might behave in a hypothetical situation in order to account for a number of various contexts. Questions included:

> "You are having an argument with a **co-worker** about a child-rearing practice. Both of you are quite convinced of your own correctness. However, you begin to realize that your co-worker is probably right and that your opinion is not standing up to the facts. In this case, would you admit to being wrong?"
>
> "You are having an argument with **your parent** about a child-rearing practice. Both of you are quite convinced of your own correctness. However, you begin to realize that your parent is probably right and that your opinion is not standing up to the facts. In this case, would you admit to being wrong?"

There's a good chance that many of us would be inconsistent in our responses to each of these questions. This has implications for our relationships with friends, family members, coworkers, and strangers. Like creativity, humility requires meaningful engagement with the world around us, and the better we understand ourselves, the closer we are to becoming more intellectually humble.

Further, some argue that the value of intellectual humility comes through our willingness to admit our mistakes *publicly*[32]. This raises the question of whether we are truly humble if we only ever admit wrongness to ourselves. In this way, it's likely that one's level of humility falls on a sliding scale in which the first step is an awareness of our own fallibility which is then followed by public admission, when appropriate.

What are some myths of intellectual humility?

A common criticism of intellectual humility is that it is too altruistic, that when we continue to put others before ourselves and remain open to other viewpoints, we self-sabotage opportunities for success. While it is true that humility is altruistic, it is also true that humility is a form of enlightened self-interest. There are times when a humble approach can earn us a faster and/or bigger reward than when using a more aggressive strategy. In fact, research has shown that when people admit they are wrong, they are often perceived as more competent[33].

Expert negotiators know that the key to successful resolutions begins with asking questions and finding common ground, two crucial components of intellectual humility[34]. Former FBI negotiator Chris Voss writes in his book *Never Split the Difference* that negotiating requires us to put our "all-encompassing focus on the other person and what they have to say[35]." This other-oriented approach requires humility. When we practice intellectual humility we have stronger paths for reaching goals and solving problems.

Another myth of humility is that it requires a lack of confidence, when, in fact, it requires a lack of *overconfidence*. Humility is grounded in transparency and involves having an honest view of ourselves and others. Believing in our own abilities does not run counter to humility. *Confident humility* can be defined as "having faith in our capability while appreciating that we may not have the right solution or even be addressing the right problem[36]." The balance between confidence and overconfidence is delicate but easily navigated with self-awareness.

Additionally, people may believe that humility can't be taught. They think that It is tied to an innate ability that can be expressed by some and not by others. It is true that there are certain factors that can influence an individual's propensity for expressing intellectual humility in various situations, such as life experiences, race/ethnicity, and/or religious participation[37], and there are certain personality dispositions that make practicing humility easier for some than others. But, there are also many thinking skills and tools that can be used to promote the characteristics of intellectual humility. In fact, a study completed in 2019 found evidence to suggest that analytical and flexible thinking skills could be used in training plans for those who are less likely to express intellectual humility in order to promote a willingness to revise attitudes[38].

The study of intellectual humility has become more prominent in recent years, and colleges and universities are exploring what this means for their curricula. For example, the University of Edinburgh offers a course on intellectual humility in which student learning outcomes include being able to demonstrate "a "new interest in and commitment to personal growth in intellectual humility[39]." Roberts plans to incorporate themes of intellectual and spiritual humility into all aspects of its operations as a part of our ongoing strategic plan. This includes embedding these concepts into the curriculum of each program so that students are equipped with the tools to engage with a diverse world.

And, finally, for those of you wondering, a recent study found ***no significant difference*** in levels of intellectual humility between those who identify as Republicans, Democrats, and Independents[40].

What is the relationship between creativity and intellectual humility?

With a stronger understanding of creativity and intellectual humility, we can begin to explore the relationship between the two, and perhaps this relationship is best explained through the *Loss-of-Confidence Project[41].*

Led by psychologist Julia Rohrer, the *Loss-of-Confidence Project* produced the publication of thirteen self-corrections from researchers in the field of psychological sciences, spearheading a movement for more honesty and transparency in scientific research. In an open call, authors from any area within the field of psychology were encouraged to make public statements regarding a loss of confidence in at least one of their previous publications based on the following conditions:

- The study was empirical in nature and resulted in the report of a novel finding.
- The author had lost confidence in the primary result of the article.
- The loss of confidence occurred as a result of problems with the study's design or the data analysis.
- The author was responsible for the error(s).

The results of this call were eye-opening.

One researcher wrote, "I now think most of the conclusions drawn in this article were absurd on their face. My understanding of statistics has improved a bit since writing the article…"

Another admitted, "The main issue was that I ran many more analyses than I reported, and I cherry-picked which results to report."

A third statement read, "…I no longer think that the results provide sufficient support for the claims… These claims may be true, but not because of our experiment."

A significant benefit of this project is the potential destigmatization of admitting errors in scientific research. Alongside the invitation for *public* loss-of-confidence statements, Rohrer and her team issued an anonymous survey to researchers, asking whether any of them had lost confidence in a previously published research article. Of the 316 researchers who responded, almost half (44%) indicated that they lost confidence in at least one previous publication, and the most common reason for this loss of confidence was because of a mistake or shortcoming on the part of the researchers themselves.

Perhaps most notably, of those who anonymously indicated that they had lost confidence in at least one previous publication, 83% admitted that their loss of confidence was *not documented anywhere publicly.*

The fear of admitting wrongness is fervent in scientific research, a field in which careers are determined to be successful based on the number of publications individuals produce. While scientific research relies on facts with the goal of innovation and discovery, the desire to protect reputations often stands in the way of rethinking[42].

Each of the researchers who submitted a public loss-of-confidence statement demonstrated intellectual humility. This, in turn, will promote stronger research practices in the future for themselves and those in their spheres of influence. If this level of openness and honesty were to be fostered in all industries, teams could learn from their mistakes rather than repeat them, advancing the starting point for future projects.

The *Loss-of-Confidence Project* shows that intellectual humility is directly tied to **possibilities.** Humility promotes honest knowledge acquisition, which can inform possibility thinking. In order to think about what could be, we need to have an honest understanding of what currently is.

Creative activities such as seeking diverse perspectives, rethinking, and asking questions are grounded in the practice of intellectual humility. So, it shouldn't come as a surprise that those who most often demonstrate a high level of intellectual humility are more likely to express **cognitive flexibility**[43], which is "our ability to adapt flexibly to our constantly changing environment[44]." This means that when we are exposed to the increasing level of change in today's society (re: the eight iPhones that have been released in the last six years), cognitive flexibility allows us to pivot and creatively solve problems successfully through these destabilizing experiences.

Additionally, intellectual humility positively correlates with **epistemic curiosity,** which can be defined as a desire to pursue new information and "address holes in [one's] knowledge[45]." Epistemic curiosity is rooted in how we think[46] and helps us face change with interest instead of skepticism. When we are curious, we are motivated to ask questions because we want to learn, not because we want to challenge. Intellectual humility promotes truth-seeking, which can inform potential creative solutions.

When we choose to practice intellectual humility, we choose to utilize a crucial tool that opens us up to ***creative possibilities***, as this skill significantly improves our access to new ideas which can be used to solve seemingly unsolvable problems.

How can intellectual humility be used to promote creativity at Roberts?

We've identified that intellectual humility can open us up to new creative possibilities, and these possibilities can be used to solve seemingly unsolvable problems. Now, let's further explore how intellectual humility and creativity can positively impact RWU.

There is no lack of problems in higher education. In a time when colleges and universities are plagued with enrollment and staffing crises[1], creativity is needed now more than ever, and the skills required for success in today's world are much different than in the previous century[2].

Intellectual humility provides us with an abundance of tools that impact the type of creativity we need today. These tools tend to fall under three categories:

- **Embracing uncertainty** - the willingness to accept ambiguity and complexity
- **Detaching** - the process of taking a step back, either physically, cognitively, or both
- **Listening for understanding** - the act of hearing what has been said and internalizing the information

When these key aspects of intellectual humility are embedded into the daily operations of our institution, we can expect to see the benefits of an environment that is steeped in honesty, flexibility, and openness. As employees of RWU, we can explore these skills if we want to make an impact on our institution's ability to solve problems.

Embracing Uncertainty

Why is it important to embrace uncertainty?

Uncertainty is uncomfortable yet has an enticing quality that draws many of us to action.

In the Old Testament, God calls Abraham (Abram) to embrace uncertainty. Genesis 12:1 states, "The Lord had said to Abram, 'Go from your country, your people, and your father's household to the land I will show you.'" This command didn't come with details. Abraham was being told to leave his family and his status without knowing where he was going. Yet, he took action. The scripture continues in Genesis 12:4a, "So Abram went, as the Lord had told him," and he became the father of a new nation.

Want a more recent example? Take Princess Elsa in Disney's *Frozen II*[3], who sings about her desire to embrace uncertainty in a belting ballad, "Every day's a little harder, as I feel my power grow. Don't you know there's part of me that longs to go…*into the unknown*." This song has played in the living rooms of countless homes with young children, perhaps ad nauseam, but comes with a strong message about the importance of moving forward even when we do not have all the answers.

Context can have a significant impact on how we experience uncertainty. For instance, the question, “What will I eat today,” is a mundane uncertainty for those of us who have access to food and resources. However, the question is a profound uncertainty for those of us who do not[4]. Harvard University Psychologist Dr. Ellen Langer points out that while the equation 1 + 1 = 2 is considered to be a fact, the equation 1 wad of gum + 1 wad of gum = 1 wad of gum is also a fact[5]. Life is often more uncertain than we realize.

The ability to embrace uncertainty has a significant impact on our problem-solving abilities. Dr. Langer observes, “When we believe we are encountering something novel, we approach it mindfully. When we believe we know something well, we tend to view it mindlessly. …there is power in uncertainty, yet most of us mistakenly seek certainty[6].” A willingness to embrace uncertainty serves as a foundation for a humble mindset. This comes through the recognition that an opinion or stance could change due to the discovery of new evidence, the identification of flawed methods, or the use of insufficient tools[7, 8].

In 2021, Dr. Ronald Beghetto, an internationally recognized expert on creativity, delivered a keynote conference address entitled, “Dubito ergo creo” (I doubt therefore I create), in which he shared his response to the question, “What role does our experience with uncertainty play in our creative thoughts and actions[9]?” He proposed that uncertainty and inconclusiveness are a part of all creative thinking and can even be re-introduced into seemingly resolved ideas.

During his address, he presented a model of *creativity under uncertainty*, which demonstrates how instability can create room for new possibilities. He explained that destabilizing experiences lead to ***uncertainty***. When the uncertainty is felt deeply, we are faced with disruption, which can lead to ***genuine doubt***. Doubt can impact the way we think about a situation or it can go as far as to impact our perception of how we exist in the world.

But there is good news! Doubt can be channeled productively to generate ***new possibilities.*** The level of openness and vulnerability that accompanies doubt makes room for flexibility and novelty. Profound uncertainty is what leads to positive change. We can use these possibilities to respond to uncertainty with ***creative action*****,** as long as we have confidence in our own creative abilities, we value the power of creativity, and we are willing to take creative risks.

Put simply, a key notion Beghetto argues is that individuals can be surprised by uncertainty or they can use it intentionally. When used intentionally, uncertainty leads to genuine doubt, which leads to new possibilities.

How should we embrace uncertainty on campus?

Many of us structure our lives in ways that allow us to avoid disruption and doubt. As creative individuals, we need to fight this urge and open ourselves up to the possibilities that come with uncertainty.

Accept complexity and ambiguity

Tolerance for complexity is a well-studied creativity skill that can be defined as our ability "to stay open and persevere without being overwhelmed by large amounts of information, interrelated and complex issues, and competing perspectives[10]." Tolerance for ambiguity, an equally important skill, is "being able to deal with uncertainty and to avoid leaping to conclusions[11]." Both skills are crucial to the creative process, so much so that they are embedded in the *Thinking Skills Model*, a contemporary iteration of the formal Creative Problem-Solving process.

Our willingness to accept complexity and ambiguity is especially critical in today's world. We live in a society in which many, if not most, believe everything is black or white, but real life is actually gray. We are constantly bombarded with the pressure to simplify complex issues. Tweets are limited to 280 words. Headlines are created as clickbait. GIFs are animated to automatically loop redundantly.

If we intentionally fight the urge to simplify and, instead, become willing to live in the gray area, we start to open up to the broad spectrum of opinions, views, and beliefs that exist. For instance, polls have shown that there are at least six different camps of thought related to climate change, yet we typically lump individuals into two: believers and non-believers[12]. When we demonstrate a willingness to accept complexity and ambiguity, we avoid making premature conclusions and, as a result, open ourselves up to new ideas and possibilities. This specifically comes into play when entertaining other perspectives.

Many of us are familiar with the famous Einstein quote, "Insanity is doing the same thing over and over and expecting different results." What this quote doesn't address is how difficult it is to *not* do the same thing over and over.

In organizations in which budgets and personnel are stretched thin, admittedly like Roberts, it's understandable that a common response to an inefficient or outdated way of doing something is, "That's the way we've always done it." Without the benefit of time and resources to implement a change, it may feel as though *maintaining* is the most attainable option over *improving*. Rather than face the uncertainty of a new way of doing things, we feel the need to cling to the comfort of what we already know. A first step we can take to foster creative thinking is to bring awareness to our urge to simplify and mentally document every time we say the words, "That's the way we've always done it." Even if we aren't able to make a change at that moment, we can bring awareness to our areas of opportunity that we can address as our knowledge and environment evolves.

Engage with diversity of thought

In ecology, the *edge effect* occurs when two different ecosystems overlap. The *Encyclopedia of Ecology* states that this overlap is the site of incredible biodiversity that creates "novel interactions[13]." In this same way, according to Dr. Elvera Berry and Dr. David Carr in their article

"Intellectual and Spiritual Humility," intellectual humility requires individuals to cognitively travel to the "borderlines between thought communities[14]." It's in this context that creativity thrives. With different perspectives come more possibilities, born from unique experiences.

Research has shown that scientific articles written by authors from multiple cultures are more likely to be cited by other research articles, implying that their contributions are more impactful than those of articles written by authors from the same lab and/or culture. Social psychologist Adam Galinsky found that students who are or have been involved in intercultural romances are more likely to score higher on creative assessments. This is because those who are deeply immersed in or connected to a culture different than their own significantly increase their creative capacity[15].

When we make a conscious effort to listen to different perspectives, we adopt a more nuanced view of the world, and this new lens gives us a greater appreciation for uncertainty. New ideas challenge our preconceptions and force us to acknowledge that we don't know what we don't know. A willingness to accept this new idea or perspective takes openness and humility.

And, yes, this is hard.

Adam Grant in *Think Again* writes, "When a core belief is questioned… we tend to shut down rather than open up[16]." But, he assures us that every little bit counts. He states, "I think most of us would benefit from being more open more of the time[17]."

The first step in engaging with diversity of thought is to surround ourselves with diverse teams. Our traditional views of diversity, including factors such as gender and ethnicity, are crucial to providing different lenses. In addition to this, we should also seek to work in teams that are *cognitively diverse*, meaning that members have different thinking styles.

For instance, *FourSight* theory argues that individuals have preferences for various aspects of the creative process. Some find it easy to generate many ideas at a time, often entertaining wild ideas with strong imaginations. Others prefer to create implementation plans that utilize their gifts of responsibility and determination. Both roles are crucial to creative problem-solving. In a team full of "idea people," nothing would get done. In a team full of "implementers," there would be no novelty[18]. An ideal team has both.

Especially at an institution of higher education in which we are often separated by academic discipline, it's easy to find ourselves working with like-minded people. While comfortable, there is little opportunity for the benefits of uncertainty. This is where *cross-disciplinary initiatives* shine. Take, for example, the exercise for Roberts students that involves the Nursing, Social Work, and Criminal Justice Programs. Students in all three programs work with faculty, actors, and programmed manikins during a realistic emergency room simulation. Not only do students gain practical hands-on experience, but they also benefit from the unique expertise of faculty and students outside of their own curriculum, exposing them to new perspectives and ways of engaging with the world.

Detaching

Why is it important to detach?

There is a common belief in test-taking that revising one's answer while taking an exam will lower the overall score[19]. In fact, Kaplan, a large test-preparation organization, publishes training manuals that strongly discourage students from revising their answers during test-taking[20]. However, multiple studies have shown that when test-takers change their responses while taking an exam, they are far more likely to adjust answers from incorrect to correct rather than the opposite[21, 22]. This is because the ability to detach from previously held ideas is an important skill.

Detachment is the process of taking a step back, either physically, cognitively, or both, and the purpose of detaching is to allow space for new perspectives[23], which makes room for growth, change, and creativity.

Adam Grant identified two forms of detachment as being especially helpful:

1. Detaching one's opinions from one's identity
2. Detaching the present from the past[24]

These two forms of detachment directly relate to the evaluative factors of the Comprehensive Intellectual Humility Scale (CIHS)[25]. The evaluative factors of the CIHS are:

1. Independence of intellect and ego
2. Openness to revising one's viewpoint
3. Respect for others' viewpoints
4. Lack of intellectual overconfidence

Detaching one's opinions from one's identity can be compared to the independence of intellect and ego, which means we do not consider it a personal attack when someone disagrees with our ideas or opinions[26]. Detaching the present from the past relates to openness to revising one's viewpoint, as it requires an individual to consider letting go of previously held beliefs in order to evaluate new information. Due to its inherent nature of directing focus outward rather than inward, intellectual humility can improve a person's likelihood of utilizing detachment when solving problems.

Detachment is a key component of ***incubation***.

Incubation occurs when an individual steps away from a task to allow for the unconscious processing of thoughts and ideas. Have you ever been deeply embedded in a problem that you are frustratingly unable to solve, and it's not until three days later when you are brushing your teeth that you finally have an epiphany? *That's incubation.* Periods of incubation have been shown to improve an individual's performance in generating not only more ideas but more

unique ideas when problem-solving[27]. Incubation is facilitated when we make room for space between ourselves and the problem.

Certainly, there are times when a deep connection to an idea, rather than severance, is important in the creative process. Glăveanu addresses this balance in what he calls ***immersed detachment***[28]***.***

Immersed detachment is a productive balance between *connectivity and disconnection* and is the ability for actions to be "attuned to, but not determined by existing conditions[29]." This can be compared to a master pianist's ability to be completely immersed in the performance of a classical piece, yet simultaneously have the distance to make her own embellishments. While immersion enables creators to feel deep connections to their material and to be present at the moment, detachment provides distance to allow for new perspectives and ideas. Both are critical to creativity that leads to problem-solving.

How should we use detachment on our campus?

The ability to loosen one's grip on ideas through detachment can be supported through skills that promote flexibility and openness. As with our hands on a steering wheel, loose grips enable us to make quick adjustments and detours when faced with obstacles.

Be willing to rethink

Intuitively, we all know the importance of being able to rethink ideas, opinions, and methods… when it comes to coaching others. But the ability to rethink becomes more difficult when it involves our own ideas and opinions.

According to Grant, we are all wired to fall into different personas when faced with competing views. For instance, we become **prosecutors** when we see flaws in someone else's argument. We become **politicians** when we want to win. To combat this natural tendency, Grant explains that we, instead, need to think like scientists, or similarly, creatives. When we approach problems, issues, and disagreements as experiments, we start with questions rather than pre-determined answers. This leaves room for rethinking[30].

One way in which we can loosen our grip on our current thinking is through respect for shared ownership of ideas. The theory of distributed creativity argues that ideas do not come from one individual mind. Glăveanu states that "creative action is distributed between multiple actors, creations, places, and times[31]." An emphasis is placed on ideas being creative rather than individuals being creative[32].

This is important because if we honor the fact that our ideas are the result of social networks, we are less likely to feel as strong a sense of ownership of those ideas, thus making us more likely to be willing to detach from them.

An example can be found in the development of a new academic program. Dr. Edward Clapp of Harvard University challenges us to think about the "biography of an idea," which forces us to examine and reflect on the various individuals, events, and tools that have contributed to a creative breakthrough[33]. With this in mind, ownership of an academic program can be assigned to all who participated in the creation, even beyond the program sponsor and the immediate department personnel. This could include the support staff of the institution, the students who inspired the development of the program, or even the retired colleague who mentioned one contributing idea over coffee six months ago.

Due to the ever-changing climate of higher education, programs continually need to be evaluated and adapted to meet the needs of incoming students. When we feel a strong sense of individual ownership of programs, we may be less likely to entertain legitimate critiques and suggestions for improvement. Once we can recognize our important role in the program's current existence, along with the important roles of others, we can embrace a model of shared ownership in which all members of the institution can actively participate in the continual improvement of our academic portfolio.

Defer judgment

Because problem-solving requires novel and useful outcomes, a crucial component of creativity is the ability to *diverge* and *converge*[34].

- Diverging is the process of generating many ideas
- Converging is the process of narrowing down those ideas

A guiding principle for diverging is to defer judgment, which means we don't evaluate ideas while suggesting them. Numerous studies have shown the importance of keeping the diverging and converging processes separate. For the most effective brainstorming session, these two acts should not be completed at the same time. A study conducted in 2018 found that when challenged with developing a solution for encouraging more people to utilize public transportation in the city of Buffalo, teams that followed instructions that included deferring judgment were more successful than teams that did not, generating not only more overall ideas, but also more original ideas[35].

We've all been in meetings in which ideas have been suggested that we don't agree will be successful. When this is the case, a natural tendency is to impose our judgments on the situation. However, this tends to prevent more ideas from being proposed. It is for this reason that creativity researcher Göran Ekvall identified **idea support** as a key component of creative environments[36]. If the goal is to strive for a large number of ideas, people are far more likely to suggest ideas if they believe they won't be immediately rejected.

As with the previous skill, deferring judgment can have a significant impact on new program development. When the idea for a new program is being born, our initial energy should be

aimed toward thinking about the ways in which the program could work rather than the ways in which it couldn't.

When we feel the urge to immediately judge ideas we believe won't work, it's helpful to remember that evaluating ideas is still a part of the creative process. *There will be a point at which converging is necessary.* It is true that some ideas are not feasible and will not work. But, we need to be intentional about setting aside future time to evaluate so that we are free to suspend our judgments at the outset. The most important thing we can do to help ourselves defer judgment is to schedule two separate stages of a process: one for idea generation and one for idea selection. Clear and detailed process timelines help all involved know when it is time to generate ideas and when it is time to evaluate ideas.

Listening for Understanding

Why is it important to listen for understanding?

Theologian and author Henri Nouwen once wrote, "Listening is much more than allowing another to talk while waiting for a chance to respond. Listening is paying full attention to others and welcoming them into our very beings[37]."

Listening for understanding requires the listener to hear what has been said and to internalize the information, purposefully processing the meaning tied to the content. Listening finds its foundation in being "other-oriented," which is defined as having an "awareness of the thoughts, needs, experiences, personality, emotions, motives, desires, culture, and goals of your communication partners while still maintaining your own integrity[38]." When we practice being other-oriented, our focus is not on personal gain or self-indulgence. With this barrier removed, we are far more open to hearing what has been said.

Due to its perceived passiveness, listening may seem to run counter to creativity, which relies on action and forward progress. However, according to former FBI hostage negotiator Chris Voss, listening is the "most active thing you can do," as negotiating is a process of "discovery[39]." When relationships contain a solid foundation of mutual respect and understanding, creativity can be cultivated to help solve problems.

A clear impact that listening for understanding has on creativity is its power to help clarify problems. Albert Einstein once stated, "If I had an hour to solve a problem, I'd spend 55 minutes thinking about the problem and 5 minutes thinking about solutions."

Why? Because if we don't take time to clarify a situation, the eventual solution might be addressing the wrong problem. The solutions generated for solving one problem can be very different than the solutions generated for another, and we can save time and resources if we commit to asking the correct questions.

Understanding problems is key to every creative-problem solving model that exists. Let's take the **Integrative Thinking Model** as an example.

The theory of Integrative Thinking as a strategic decision-making model was developed by Roger Martin, former Dean of the Rotman School of Management at the University of Toronto. At the core of Integrative Thinking is the ability to see two opposing ideas and use them to create a new idea that is more impactful than each original idea on its own[40].

The concept of equally considering two opposing ideas is not new, and we can take an example from the elementary school classroom: color mixing. We are shown at a young age how mixing two different colors can create one entirely new color (Red + Blue = Purple). The benefit of Integrative Thinking is the ability to say "both/and" instead of "either/or[41]."

In order for Integrative Thinking to be effective, individuals need to dig into the two conflicting concepts in order to gain a better understanding of the actual problem. There are four formal stages of the Integrative Thinking Model, and each stage involves asking questions and listening to the answers.

Suggested discussion questions include:

- How are the ideas similar?
- What assumptions underlie each model?
- What are the crucial causal relationships?
- What problem are we trying to solve?
- What would have to be true for the new solution to be a truly integrative result[42]?

Martin emphasizes that it's not enough to simply ask the questions. We need to take time to reflect on the answers and, when concerns are raised, gather data to address each one.

In a society that is about "doing," models like Integrative Thinking encourage thoughtful reflection. When facing urgent problems, this step may seem obtrusive. The natural tendency is to simplify whenever possible, which often means cutting corners at the expense of understanding. But, if we don't take time to understand the situation, we might get to the end of our process and find that we need to start over, which, in turn, takes more time. Clarifying problems helps us work smarter, not harder.

How should we listen for understanding on campus?

A seminal study conducted in 1957 on listening revealed that the average person only remembers approximately 50% of what she hears[43]. Listening is hard work. But, there are exercises we can practice to help strengthen our listening muscles.

Ask good questions and listen to the answers

Not surprisingly, the first step in listening for understanding is to ask questions. More importantly, we should be asking open-ended questions. Have you ever tried talking to a child who only responds with yes or no answers? When we reframe the question, we get more information. We can ask a young girl if she is excited about Halloween, to which she responds, "Yes." Or, we can ask a young girl what costume she plans to wear on Halloween and learn that she plans to dress as a dragon and will be trick-or-treating with her cousins who are in town from Albuquerque. If we need information to help us solve our problems, asking open-ended questions earns us more information.

But of course, asking questions is only as helpful as our willingness to hear the answers, which leads us to the importance of listening before formulating a response.

We all begin to prepare our responses to others while they are still talking. But, when we do this, we are only pretending to pay attention. The United States Institute of Peace encourages listeners to "*silence [our] internal dialogue*[44]*."* A helpful practice is to summarize what we have heard before responding to someone. Prior to formulating our own response, we can state to the other individual, "This is what I hear you saying," which we then follow with what we believe we've heard the other person say[45]. This is a skill that can be practiced daily. Bonus points for doing it during an argument.

It's pretty easy to identify when the person we are interacting with is listening poorly, but it's not always easy to tell when we, ourselves, aren't listening well. If we find that people are often saying to us, "You didn't let me finish," that's typically a good indicator.

Poor listening occurs frequently in meetings in which difficult conversations are taking place. We are far more likely to listen to someone we agree with than someone we don't. However, it's in interacting with those we disagree with that asking good questions and listening to their answers is most valuable. In these moments, we are more likely to realize that a response of "no" when we want to hear "yes" isn't necessarily motivated by a desire to be difficult. A response of "no" can come from a place of sound reasoning that is informed by that individual's experience. This acknowledgment gets us one step closer to a solution.

Only once we have successfully understood the individual we are interacting with can we respond effectively and fruitfully. This helps us pull the focus away from the assumed intentions of a person's thoughts to the reality of what has been spoken. In other words, listening for understanding helps us focus less on the motives of the person and more on what the person has actually said.

It's a challenge to be good listeners in a fast-paced environment such as a university campus where resources and personnel can be stretched-thin. When students come to our offices, it may be tempting to have one eye on them and one eye on our growing inbox or the stack of ungraded papers on our desks. We may even feel that's necessary in order to get through all

the work that is waiting for us. But, the lasting impact of mindful interaction with our students could potentially contribute to the solutions related to one of the biggest problems existing in higher education today: *student retention.*

A common rationale provided by students who have withdrawn from an institution is that they experienced a lack of positive interactions with employees of the college or university. While students' interactions with their faculty have a clear impact on student retention, there is another group of individuals who play an important role in a student's academic career: administrative assistants.

A research study conducted using interviews, observations, and focus groups found that not only do administrative assistants introduce life skills to the students who come to them for assistance, further emphasizing that all employees of an institution are educators, but administrative assistants have also been shown to identify barriers students face and help them achieve their academic goals[46].

This impactful relationship is the result of listening for understanding. Administrative assistants can (and do at Roberts) make students feel seen and heard by directing their all-encompassing attention to their questions and concerns. While a seemingly small step, these mindful moments can have a big influence on a student's decision to stay at an institution.

Practice Assertive Inquiry

Many of us feel called to advocate for causes in our lives, and advocacy has an especially important place in higher education. However, there are times when a situation doesn't call for advocacy. It, instead, calls for inquiry. Roger Martin defines **assertive inquiry** as the ability to articulate and defend our own ideas while being open to and having the desire to fully understand the ideas of others. It is a reason to entertain another person's idea, not with the intent to adopt it for ourselves but in order to tease out the components that may help us make our own ideas stronger[47]. In his book *The Opposable Mind,* Martin explains that when we meet individuals with opposing ideas, we often put all of our energy into defending our own ideas. Instead, what if we put our energy into acquiring information from other ideas to improve our own[48]?

This brings us back to the basic focus of intellectual humility. Intellectual humility does not require us to state that we are wrong (although this certainly requires intellectual humility); rather, it requires us to be open to the possibility that *we could be wrong*. This is a mindset that serves as a launching pad for creative problem-solving.

When exploring how to practice assertive inquiry, we return to the value of questions. Martin explains that there are questions we can ask to gain an understanding of another way of thinking. These questions include:

- Could you please help me understand how you came to believe that?
- Could you clarify that point for me with an illustration or example?
- How does what you are saying overlap, if at all, with what I suggested[49]?

Notice that these questions are not argumentative, judgmental, or challenging. Rather, they are sincere, earnest, and thoughtful, with an appreciation that people can disagree yet still understand each other.

We can see the value of assertive inquiry in the debate between in-person instruction vs. online instruction. Instructors tend to not only have strong views on what they perceive to be the most effective modality; they also have strong preferences as to what they are willing to teach. We can use assertive inquiry in this instance, not necessarily to change our preferences but to improve our preferred teaching style.

For those of us who feel in-person is the most effective instructional method, we can ask our online teaching friends about the benefits they believe exist in online instruction. Their answers may include that online education is flexible, accessible, and affordable. With these things in mind, we can challenge ourselves to explore ways in which our in-person instruction can become more flexible, accessible, and affordable.

Conversely, those who favor in-person instruction see the benefits as more meaningful interactions with students and focused environments. What are the ways in which the virtual classroom could move toward these goals? We will continue explore the virtual classroom in the next section.

In Summary

It's important to note in closing that while the use of these tools at RWU can help us to creatively determine how best to solve the organizational, financial, and programmatic problems we face, there is a more primary purpose of exploring intellectual humility on our campus.

A goal of Vision 2030 is for all students to be empowered to understand the deep concerns of the world and to respond in local and practical ways. When Roberts explores the fostering of creative problem-solving through intellectual humility, it's not just beneficial for our own operations. It's also beneficial for our students who can, both through how they are taught in the classroom and by observing our modeling of intellectual humility, come to increase their ability to embrace uncertainty, detach, and listen for understanding.

How can intellectual humility and creativity reinforce each other in the classroom?

We've explored how intellectual humility can equip us with crucial tools that open us up to new creative possibilities at RWU. In this section, we are going to focus on ways in which intellectual humility and creativity can together help students be prepared to contribute to society in meaningful ways. We'll first consider four models and approaches from creative studies and then discuss how intellectual humility can support and enhance these models in ways that will instill in our students the problem-solving skills needed today.

Creativity in Education Models and Approaches

Possibility Thinking

In the late 1990s, Anna Craft coined the term "possibility thinking," which is defined as "the means by which questions are posed or puzzles surfaced - through multiple ways of generating the question 'what if?'[1]." Creativity scholar Vlad Glăveanu expanded on this definition, stating, "at the heart of this notion stands a commitment to the idea that the world is not yet finished, that it is in a continuous process of becoming…[2]" This is important because our students are living through a moment in time that is filled with global illness, social injustice, and climate crises. Possibility thinking can help our students feel empowered to imagine the ways in which they can help improve the world around them.

Possibility thinking in the classroom requires the learner to think about "what could be," and for this reason, students should be encouraged to seek out and solve problems. Core strategies for implementing possibility thinking include:

- *Question posing:* Questions stimulate a tone of curiosity.
- *Innovation*: Students are encouraged to make unique connections.
- *Self-determination and risk-taking:* The learning should be empowering[3].

Of the strategies above, Craft focused specifically on the important role of encouraging students to pose questions. A key way in which we can help our students become better listeners is to help them become better questioners. When students ask good questions, they are far more likely to be interested in the answer. Further, the more often they ask questions that result in problems being solved, the more motivated they will be to keep asking. Questioning is most effective when the instructors allow space for students to explore different paths, while also being present and attentive to their needs[4].

Craft continued her work with the concept of possibility thinking throughout the 2000s before her untimely passing in 2014. Other scholars have carried the torch, and possibility thinking is now a widely explored concept in the field of creative studies. Ronald Beghetto and Vlad Glăveanu continued this work by proposing **"pedagogies of the possible[5],"** which provide ways to foster

possibility thinking among our students. These techniques include utilizing:

- Open-endedness
- Nonlinearity
- Pluriperspectives
- Future-orientation

Open-endedness

A key skill related to creativity is a willingness to improvise. Those familiar with improvisational comedy know that one of the guiding principles is to say, “Yes, and…,” when faced with a new idea. Carrying this principle over to a classroom setting can be challenging as academia is dictated by lesson plans and standardized objectives. For this reason, Beghetto and Glăveanu argue that instructors should go through a process of “lesson unplanning” in which they schedule creative openings in their curriculum to allow students to explore open-ended, unexpected, and changing topics.

A way to incorporate open-endedness into the classroom without sacrificing useful structure is to ask reflective questions with unknown answers (even to the educator) rather than questions with known answers that strictly test for student knowledge. Beghetto and Glăveanu point out that one benefit of this approach is that the student and the instructor become teammates, working together to problem-solve and find an agreeable answer.

Nonlinearity

Additionally, Beghetto and Glăveanu suggest a non-linear approach to teaching, stating that there is more than one way to climb a mountain. When developing the content of a course, whenever possible, we should leave room for detours. Not only does this allow students to explore various routes to an idea, but it also empowers students to feel a sense of ownership of their learning.

A nonlinear pedagogical approach includes the utilization of incorrect answers. Embracing mistakes in the classroom can help students learn how to adapt to failures. Creative thinking relies on perseverance[6], and we should seek to provide opportunities for our students to face failure in a safe environment, such as the classroom, in order to develop their ability to persevere.

Clearly, there are negative implications for inviting incorrect answers into the classroom without addressing them appropriately; this is why we determine learning goals and strive to meet them. But, there are effective ways for wrongness to be embraced in a way that is productive and contributes to learning. Incorrect answers “represent the beginning of a creative thought process that could, especially when facilitated well, lead to new insights and to deeper forms of learning[7].”

Pluriperspectives

Pluri-perspectivism is a "commitment to acknowledging and engaging with a multitude of different perspectives,[8]" and this commitment is crucial to creativity. The act itself of intentionally attempting to understand other perspectives can increase a person's creative ability. When individuals embrace the intricacy of opposing views, they strengthen their tolerance for complexity and ability to avoid premature closure.

When in their developmental years in K-12 education, students may be able to recognize different perspectives, but they don't necessarily have the maturity to *engage with* the different perspectives. The ability to engage in a dialogue is more accessible with adult learners, making a college or university the perfect environment to utilize pluri-perspectivism.

Bringing diverse perspectives into an academic program can include choosing resources from authors of diverse backgrounds and populations, inviting guest speakers to provide a different point of view than that of the instructors teaching the courses, and presenting students with destabilizing experiences that challenge their existing way of thinking. Further, the diverse perspectives represented by the students within each course can be used to promote pluri-perspectivism. This can be accomplished through safe group discussions in which students are expected to listen, ask questions, and respond. It's also found in healthy debates about relevant issues in which students are empowered to think about their own stance, as well as the positions of their classmates.

Future orientation

Beghetto and Glăveanu state, "Human action is intrinsically future-oriented in the sense that whatever we do, including remembering the past, responds to the needs of the present and, implicitly, is oriented towards an anticipated future[9]." We help our students when we acknowledge and address this propensity in the classroom. We can equip students with the tools needed to enter the workforce in a turbulent society by showing them how to envision future scenarios and make informed predictions.

One way to accomplish this is through presenting students with complex real-life challenges to solve, which requires them to apply the lessons they've learned in the course and in the program. Through this problem-solving, they should be encouraged to think about the potential implications of their decisions. If a goal of Roberts is to graduate leaders who can make a significant impact on their local and global communities, a future-orientation approach to teaching lays the foundation for this vision.

Pedagogies of the possible enable creative learning, and creative learning is accomplished when students are exposed to an idea that is different from their existing understanding. Glăveanu writes, "To engage with the possible means to infuse 'what is' with new perspectives and, in doing so, to radically transform it[10]." By promoting possibility thinking in our students, we

prepare them to be active participants in critical conversations that can lead to the transformation of society.

Torrance Incubation Model

E. Paul Torrance is popularly known as the father of creativity in education. The author of countless books and articles on creative potential, he focused much of his research on the field of educational psychology and how creativity can be fostered in students, which culminated in the development of the Torrance Incubation Model (TIM)[11]. This model has evolved over the course of the last seventy years and is still used today by educators who have an appreciation for creativity.

TIM is designed to promote optimal levels of incubation in students, meaning, when students leave the classroom, they continue to think about the instructional content and use it to make connections with the world around them. Through TIM, students experience the effectiveness of incubation, and in turn, may be willing to utilize its power in other aspects of their lives, such as in problem-solving. Incubation encourages students to stay open and avoid premature closure, two skills that contribute significantly to intellectual humility.

TIM is accomplished by arranging the curriculum into three stages (or themes) that can be used in individual class sessions, across a course, or throughout an entire program[12].

- Stage 1 - Heightening Anticipation
- Stage 2 - Deepening Expectations
- Stage 3 - Extending the Learning

Stage 1 - Heightening Anticipation

In the heightening anticipation stage, the content should serve as a stimulus to get the students engaged. This is typically achieved through techniques such as:

- Creating exercises that encourage active participation
- Asking thoughtfully posed questions that raise curiosity
- Providing meaningful examples that offer a purpose for learning

The heightened anticipation stage should set the motivation for the students to continue to progress, both in the class and in the overall program.

The first stage of TIM can be considered the appetizer for the course or program. While a weak appetizer won't necessarily prevent someone from eating the rest of her meal, she may be less likely to look forward to the next portions.

Stage 2 - Deepening Expectations

Once the students are motivated, they can enter the deepening expectations stage, in which they are challenged to engage with the instructional material through delivery methods that promote critical thinking skills. This is the stage for exploration. Examples of techniques instructors can employ to deepen the students' learning include:

- Encouraging students to remain open and consider view ideas from different perspectives
- Presenting students with destabilizing experiences that are challenging and appropriately overwhelming
- Challenging students to use all of their senses through visuals, sounds, movement, and imagination.

The deepening expectations stage contains the largest portion of instruction and thought, providing students with an opportunity to develop the skills they need for a productive lifestyle. It can sustain them through the most challenging parts of the curriculum in which they need to grapple with the material to work toward understanding.

Stage 3 - Extending the Learning

In extending the learning stage, teaching strategies can be implemented with the purpose of encouraging students to continue to think about the instructional information after the course/program has ended. Within this stage, Torrance emphasized the importance of letting “one thing lead to another.” Examples of techniques include:

- Showing students how to use the information in order to further their personal and professional goals
- Encouraging students to connect the material with personal experiences
- Providing students with access to a number of resources they can use to continue research on their own

Stage 3 should offer students a clear vision of how the material can be used in their current and future lives.

As an added benefit of TIM, instructors are encouraged to incorporate a creativity skill into each stage of the model - the same skill throughout all three stages - that helps the students to grow in their creativity and problem-solving abilities. Examples of the skills include:

- *Flexibility:* Students are presented with variety and change.
- *Openness:* Students are encouraged to embrace tension and not complete tasks in the quickest way possible.
- *Humor:* Students are taught how to respond to surprises with wit and resilience.

- *Emotional Intelligence:* Students recognize their own emotions and the emotions of their peers in order to better understand situations.
- *Idea Fluency:* Students are told to generate many ideas for one problem[13].

This one creativity skill should be integrated throughout the entire model to demonstrate, implicitly or explicitly, the ways in which it can be used to augment learning.

TIM is a model that focuses on the thinking of both the student and the instructor. Rather than relying on benchmarks and standardization, it emphasizes "interaction, anticipation, and participation[14]." While there are many approaches educators can use to ensure students continue to think about the material after the course ends, TIM is a helpful and effective option for those wanting to do this deliberately while adding a focus on creativity. When students continue to entertain ideas, they are better equipped to engage in thoughtful dialogue around complex issues, thus helping them to learn how to make connections and persevere through the urge to simplify.

Exploration of Virtual Spaces

Virtual spaces like social networking, gaming, and interacting with robots are driven by openness and democracy. They are also risky because of their ethical ambiguity. This combination can create a fruitful learning environment for students to develop "collective wisdom," as they are motivated to make decisions collaboratively. In the digital age, learners can be risk-takers, collaborators, and culture developers with the help of virtual spaces[15].

Dr. Anna Craft developed the **Four P's** of student development in the digital age, which requires educators to think outside of the traditional classroom and into the virtual space. When instructors encourage the use of new technology, the following benefits are fostered:

- *Plurality of identity* - Learners are provided with opportunities to explore understanding in complex environments they wouldn't be introduced to outside of the digital space. This includes interacting with people, places, and activities not available in person.

- *Possibility awareness* - In the digital age, learners have access to many options, which is something we all want for our students.

- *Playfulness* - The virtual space allows students to stay cognitively younger, longer. The learner has the power to engage in youthful environments that are less accessible as one ages.

- *Participation* - In the virtual space, all are welcome. Participation in the digital age is popular due to playful co-participation and its ability to make voices heard[16, 17].

Similar to her work with possibility thinking, Craft emphasized the importance of student empowerment and self-determination when utilizing technology and virtual spaces. In an

environment in which the instructor strongly dictates the ways in which the virtual space is used, the students may be highly participative but show less engagement with possibilities. An ideal environment would utilize the virtual space in a way that promotes the ownership of learning, which happens when we trust students to explore digital media constructively and collaboratively. While Craft's research was primarily focused on creativity in the early years of education, she was always insistent that possibility thinking and creative education in the digital age are important for learners of all ages, including adults[18].

Admittedly, embracing new and unknown, technology is risky. Most recently, the emergence of artificial intelligence (AI) programs like *ChatGPT* has schools scrambling to determine if and how AI can be used in the classroom. Concerns include the promotion of plagiarism and the potential degradation of critical thinking skills.

Yet, students are already exploring the virtual space out of the classroom, and technology like AI will only become more sophisticated. When instructors allow students to explore the virtual space in the classroom, it can be done in a way that fosters healthy and smart learning. We can help students understand the risks of using AI, as well as the potential advantages, which include enhanced research through accessible information. Instructors can be intentional about communicating when AI can and cannot be used for assignments, with the goal of teaching students discipline, responsibility, and accountability.

While the field of higher education is still determining the ways in which AI and other virtual spaces should be used in the classroom, there are some approaches instructors can take in order to explore it with their students:

- *Start small:* Instead of revising an entire course to include AI and other virtual spaces, start by exploring low-impact existing assignments that could benefit from the instant feedback provided by AI or imaginative exploration found in resources like online games.

- *Ask critical thinking questions:* Instructors can accompany the introduction of AI or virtual spaces into the classroom with discussion questions that require the students to think critically about the implications of their actions.

- *Be informed:* The institution and individual programs can develop clear policies and guidelines regarding the use of technology and AI. The only way in which we can teach our students the benefits and risks of AI is if we have a firm understanding of them ourselves[19, 20].

Exploring virtual spaces requires embracing uncertainty, which, in turn, requires sensible risk. AI and other new technology can be intentionally incorporated into the curriculum to allow students to explore tools that will likely follow them throughout their professional careers. The workforce of the future will most certainly include AI, and if a goal of RWU is to graduate students who are ready to lead, we should offer our students a learning environment that mirrors the real world.

Mindful Learning

The focus of education is often on equipping students with the skills they will need in the future in order to be successful, which we can all agree is an important goal. At the same time, education can also focus on what can be done in students' lives immediately so that they can actively contribute to their current communities[21]. One way to achieve this is through mindful learning.

Like creativity, mindfulness is a concept that has ancient roots. It's not until recently, however, that the practice of mindfulness has entered the mainstream, establishing its own footing as it has been embraced by modern society[22]. Jon Kabat-Zinn, founder of Mindfulness-Based Stress Reduction defines mindfulness as "…the awareness that arises from paying attention, on purpose, in the present moment and non-judgmentally[23]."

Mindfulness is the antidote to mindlessness, which causes us to spend a lot of our time "not there." We aren't always able to tell when we are engaging in mindless thought and behavior. Dr. Ellen Langer, Professor of Psychology at Harvard University, states, "We cannot have the felt experience of being mindless; that would require mindfulness[24]." For this reason, more and more individuals are turning to mindfulness exercises to improve their awareness of the present moment[25].

Dr. Langer advocates for mindful learning over mindless learning. She believes that "what we teach" may not be as important as "how we teach it," and her research provides evidence to demonstrate that effective learning requires mindful engagement with the subject matter.

The difference between mindful learning and mindless learning is simple. In mindful learning, students are able to make connections by actively noticing new things. In mindless learning, students rely on habit to absorb information, unable to entertain alternate perspectives. Langer states, "When we are mindless, our behavior is rule and routine governed; when we are mindful, rules and routines may guide our behavior rather than predetermine it[26]."

In order to encourage our students to engage in mindful learning, we need to be intentional about how we present information, no matter the subject. When students accept information without considering alternative ways of understanding it, they are likely committing themselves to this one way of understanding from that point forward. Mindlessness relies on fixed mindsets, which limit a learner's ability to put concepts into context.

Langer provides an example of a history lesson in which a student is asked to respond to the question, "What are the three reasons for the Civil War?" Perspective is important when answering this question. A 30-year-old black woman from Georgia in 1865 would respond differently to this question than a middle-aged white politician in 1968. Encouraging students to explore these different perspectives stretches their tolerance for complexity and promotes the pursuit of understanding.

There are a handful of ways we can motivate our students to be mindful with their learning. We can:

- Use statements of probability
- Reframe “pay attention” to “notice new things”
- Avoid the promotion of delayed gratification

Use statements of probability

Studies have shown that statements of probability are more engaging and empowering than factual statements. This means, that when presenting students with information, even facts, statements that begin with “This could be” could potentially be far more impactful than factual statements such as “This is a…” For instance, Langer and her team conducted a study in which they presented groups of students with a dog toy. One group of students was told, “This *is a* dog toy,” and another group of students was told, “This *could be a* dog toy.” The students were then presented with a problem that required an eraser. The students who had been told, “This *could* be a dog toy” were more likely to use creative problem-solving to turn the dog toy into an eraser. In using statements of probability, students are shown how to release fixed mindsets in order to think outside of the box.

Reframe “pay attention” to “notice new things”

Often, the act of paying attention is mistaken for an unwavering focus on a single target. The problem with this misconception is that unwavering focus is extremely difficult, even for the most disciplined student, to achieve. In order to promote mindful learning, educators can, instead, encourage students to notice new things about a concept or idea. In an experiment that asked participants to engage in self-identified activities that they did not enjoy, such as listening to rap music, watching football, or visiting an art museum, individuals were instructed to identify a set number of new things about the activity they were completing. Through the act of noticing new things, participants found that they began to enjoy the activity that they previously disliked. When students are encouraged to notice new things, rather than pay attention, they begin to discover new ways of experiencing concepts that previously seemed difficult or uninteresting.

Avoid the promotion of delayed gratification

A common approach to teaching may include encouraging students to put their heads down and “get through” the challenging material with the goal of a reward at the end, such as a successful grade. While there are lessons to be learned from hard work, there are also benefits to making the journey pleasant, not just the destination. For instance, Dr. Langer and her colleagues conducted a study in which they asked participants to review comic cartoons. Half of the individuals were told that this task was “work” and the other half were told it was “play.” Not surprisingly, the individuals who were told that the task was “work” were more likely to mind-wander and less likely to experience joy when reviewing the cartoons. When students greet

lessons as enjoyable experiences rather than material they need to “get through,” they are more likely to want to stay engaged with the material.

Too often, educational settings require repetition and memorization. Techniques that promote mindful learning help keep students engaged in the present moment and challenge them to use critical thinking skills to fight fixed mindsets. This approach in the classroom is a valuable step toward offering the character education that Roberts strives to provide to its students, equipping them with the right mindset to actively seek understanding.

The symbiotic relationship between these classroom creativity models and intellectual humility

In the previous section, we explored the crucial tools related to intellectual humility that can be used to solve problems: the ability to embrace uncertainty, the ability to detach, and the ability to listen for understanding. The connection between these skills and the creativity models above is strong. Students who are open to embracing uncertainty can, to the extent possible, detach from what is already believed and felt in order to listen with the goal of understanding. The incorporation of these intellectual humility skills in the classroom will enhance the value and impact of the creativity skills being taught.

The students who encounter the key components of possibility thinking – such as openness, nonlinearity, pluriperspectives, and future orientation – will be much more likely to be active participants in critical conversations that can lead to the transformation of society. Those who are intellectually humble are often curious[27], and students who are curious actively seek information with the goal of answering difficult and challenging questions with their own reasoning, rather than the reasoning provided to them.

The Torrance Incubation Model proposes three stages of classroom activity that encourage students to continue to think about what they have learned and use it to make connections with the world around them. Students who experience these stages with the belief that there is much they don’t know but can learn are better equipped to engage in thoughtful dialogue around complex issues that will enable them to persevere through the urge to simplify.

Exploring virtual space requires both teachers and students to think outside of the traditional classroom and enter an environment of new technologies where they are exposed to individuals and activities not available in person, new methods of communication, and the challenge of collaborative decision-making. Students who can embrace uncertainty are much more likely to explore and understand new technologies in ways that will lead to creative problem-solving.

The key goal of mindful learning is to heighten our students’ awareness of the present moment in ways that will better enable them to make important connections in their learning. Key techniques include talking in terms of probability rather than fixed truths, asking students to notice new things rather than pay attention, and helping students sense that what they are

learning can be of immediate value. Students who detach themselves from that which seems obviously true and embrace uncertainty will be more open to being mindful.

In each of these approaches, creativity and intellectual humility work hand-in-hand to support one another. It's not just the case that intellectual humility enhances creativity. The types of creativity techniques presented in these educational models and approaches can also be of value to those students who are less likely to be intellectually humble. These techniques "force" students who would benefit from more intellectual humility to encounter challenges to their current belief systems. This has the potential to produce the type of creative thinking that can lead to increased personal uncertainty and openness to the views of others.

In Summary

Creativity in education scholars Bob Jeffrey and Anna Craft advocated for teaching creatively and teaching *for* creativity, not either/or[28]. Teaching creatively has a focus on effective teaching; teaching for creativity has a focus on the learner's engagement with the content.

We have focused in this section on some models and approaches that are regularly used by creative educators to promote creative thinking in their students. These creativity models can benefit from the intellectual humility students bring to the classroom, and the promotion of intellectual humility can benefit from the practice of these creativity models.

This symbiotic relationship will be further explored at Roberts in order to help us integrate intellectual humility and creativity into all of our programs. In combination with other efforts, informed by the expertise of our faculty and staff, students can leave our institution with an understanding of the importance of intellectual humility and creativity and how the use of both together can help them leave RWU ready to resolve the problems of our world.

Conclusion

Roberts Wesleyan University already understands the benefits of and need for intellectual humility. In today's world filled with countless social, economic, and political issues, we are prepared to offer character education to our students in order to help them successfully join the workforce or advance their already successful careers in a way that is meaningful and impactful. And perhaps even more important than vocational implications, we strive to mold good humans who know how to love and support those around them.

What may be less clear, not only to RWU but also to many other institutions, is the impact intellectual humility has on creativity and vice versa. In the face of increasing change, creativity is critical for individuals and organizations to persevere through complex and ill-defined problems. Creativity makes use of engagement, understanding, and change in order to foster thriving communities. The same can be said for intellectual humility. Intellectual humility requires a desire for truth-seeking that promotes engagement through sincere attempts to understand one another.

Inherent in the concept of engagement are the principles of connectedness. In her TED Talk, Dr. Simard, research scientist and professor in the Department of Forest and Conservation Sciences at the University of British Columbia, explains that scientists have found nitrogen from salmon stored in rings of trees that have existed for centuries. This nitrogen is soaked up from decaying fish that bears carry into forests and is used to create healthy environments[1]. Trees demonstrate understanding by welcoming part of their environment into their very beings.

In this same way, we are called to connect with those around us in order to foster healthy environments. As explained in 1 Corinthians 12:12, "The human body has many parts, but the many parts make up one whole body. So it is with the body of Christ." Each RWU community member plays a unique role in the success of the institution. Our acknowledgment of this comes through intellectual humility, and our ability to utilize this comes through creativity.

Operationally, the Roberts faculty and staff can strive to embrace uncertainty, detach, and listen for understanding in order to foster creativity through intellectual humility. Within each of these themes, there are practical tools we can use to help navigate our way through the important conversations taking place on our campus:

- Accept complexity and ambiguity
- Engage with diversity of thought
- Be willing to rethink
- Defer judgment
- Ask good questions and listen to the answers
- Practice assertive inquiry

In our programs and curricula, we can incorporate models and approaches from the field of creative education to help promote the development of intellectual humility in our students. These approaches and models include:

- Possibility Thinking
- The Torrance Incubation Model (TIM)
- The exploration of virtual spaces
- Mindful learning

Using these concepts as a starting point, we can begin to explore the ways in which Roberts can affirm its current position as New York's leading institution for character education throughout our entire organization and academic portfolio.

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End of Project

SECTION FIVE: KEY LEARNINGS

The completion of the first draft of *The Creativity and Humility Guidebook* has been a tremendously rewarding experience in which I have been able to travel back to the material I encountered in the Creativity and Change Leadership Master of Science Degree Program and explore the ways it has informed my research focus of intellectual humility. There are a number of lessons I have captured through the completion of this project, and I know I will continue to identify key learnings after the course has ended. For the purpose of this paper, I would like to focus on one lesson I have learned that relates to my content and one lesson I have learned that relates to my process.

A key content learning I have captured through the completion of my master's project is the prevalence of intellectual humility in the field of creativity. Through my research in *CRS 625: Current Issues in Creative Studies*, I was able to confirm a link between creativity and intellectual humility, but this project allowed me to explore just how strong the link is. While not used by name explicitly, every course in this program has had implicit references to the need for humility in the creative process. A colleague in my cohort introduced me to the term "cognitive gardening" and used it to reference the number of concepts and tools I was able to harvest from my educational experience and incorporate into the guidebook.

For instance, in *CRS 560: Foundations of Creativity Learning,* I was given the opportunity to study the works of Dr. Anna Craft. Craft developed the term "possibility thinking," which is defined as "the means by which questions are posed or puzzles surfaced - through multiple ways of generating the question 'what if?'" (Craft, n.d.). Creativity scholar Vlad Glăveanu (2022) expanded on this definition, stating, "at the heart of this notion stands a commitment to the idea that the world is not yet finished, that it is in a continuous process of becoming…" (para. 2). Through my understanding of possibility thinking, I was able to explore the ways in which intellectual humility is directly tied to possibilities. In order to think about what

could be, we need to have an honest understanding of what currently is, and understanding is supported by intellectual humility. This is a key theme throughout my project, which emerged because of my introduction to Dr. Anna Craft.

Another example of the principles of intellectual humility being weaved throughout the curriculum can be found in creativity assessment tools and theories. Diversity is critical to creative problem-solving. Traditional views of diversity, including factors such as gender and ethnicity, are crucial to providing different lenses. In addition to these factors, teams should also seek cognitive diversity, which relates to the various ways in which people think. For instance, *FourSight* theory argues that individuals have preferences for various aspects of the creative process. Some find it easy to generate many ideas at a time, often entertaining wild ideas with strong imaginations. Others prefer to create implementation plans that utilize their gifts of responsibility and determination. Both roles are important in the creative problem-solving process (Puccio, et al, 2011). A similar benefit can be found in the *Kirton Adaption-Innovation Inventory* (KAI) assessment tool. Through his research, Kirton (1976) discovered that when adaptors work with innovators, they are able to provide stability and continuity, and when innovators work with adaptors, they are able to provide unusual ideas and new directions.

A popular metaphor used in biblical scripture is the idea that a community is one body, and a body has many parts. 1 Corinthians 12:17 reads, “If the whole body were an eye, where would the sense of hearing be? If the whole body were an ear, where would the sense of smell be?” (*NIV Foundation Study Bible*, 2016, p. 1239). Intellectual humility helps individuals understand their unique roles within a larger context. It also increases one’s likelihood to consider diverse perspectives. Through the completion of my guidebook, I was able to reflect on my educational experience to see more clearly the importance of cognitive diversity.

These are just two examples of many concepts introduced in the program that are rooted in the skill of intellectual humility. Because of the courses I completed in the last two years, I was provided with an abundance of tools and resources to draw from when making a

connection between intellectual humility and creativity. This served as an affirmation that I chose an appropriate and fulfilling subject on which to focus my project, along with the acknowledgement that there is much more available to explore.

In terms of process, this project helped me gain a stronger understanding of my approach to writing. I have always enjoyed writing, and I knew that I wanted to complete a master's project that resulted in a written product. The guidebook is one of the most extensive projects I have worked on to date, and the experience helped me identify my strengths and the areas I can work to improve.

For example, I have a better awareness of the need for diverging and converging when writing. Diverging is the process of generating many ideas, and converging is the process of narrowing down those ideas (Miller at al., 2011). Just as in creative problem-solving, diverging and converging are necessary to the writing process. It is important to defer judgment as one starts to write so that the writing does not gets stalled by too much editing. Whenever I found myself beginning to edit before I had completed a section, I would remind myself that there would be a later time at which I would be able to converge.

Outside of writing, I would identify myself as someone who enjoys the converging process and finds converging easier than diverging. However, when writing the guidebook, I found it much easier to diverge. There are many concepts and tools that I am eager to share with my colleagues, and therefore, I had no difficulty coming up with the content to write. When I reached the stage in my writing process when it was time to synthesize, I struggled. This likely has to do with a concept I discuss in my guidebook: detachment. I found myself emotionally attached to passages I worked hard on, and it was difficult to let them go, even if analytical thinking revealed that they weren't necessary or helpful. This greater sense of self-awareness will improve my writing moving forward.

I also have stronger appreciation for the benefit that flexibility brings to a writing project. Before I started the actual writing of the guidebook, I created many versions of an outline that

were reviewed by classmates and colleagues. After a number of edits, I finally landed on a structure that consists of three parts: a section dedicated to definitions, a section dedicated to campus operations, and a section dedicated to student learning. I am happy with this format as it allows me to be flexible with how the guidebook is utilized. Each section can be used on its own, as necessary, to be read, discussed, and shared.

Moving forward, if I were to complete another large writing project, I have learned to be more targeted in my subject matter. One of my goals of the guidebook was to create a document that impacted the faculty and staff of RWU equally, focusing on both campus operations and the classroom experience. In hindsight, this approach required me to be broad in my thinking, considering the timeframe of the project. As a result, I lightly touch on a number of topics that I would have preferred to dig much deeper into in order to provide readers with a fuller understanding. The topics are presented at an introductory level, which readers will need to use as a starting point for their learning. While this will help start important conversations on campus, my goal in the future will be to expand further on many of the concepts.

The two lessons I have highlighted in this section, which are the affirmation of the strong connection between intellectual humility and creativity and the greater awareness of my writing process, will be vital to my future work at RWU and to the direction of my professional career. I will continue to unpack the other valuable lessons I have learned through completing this project and know that the benefits have laid the groundwork for future thinking and growth.

SECTION SIX: CONCLUSION

The first draft of *The Creativity and Humility Guidebook* is available for employees of RWU to utilize as conversations related to the strategic plan progress. I will work with the Chief Academic Officer in the upcoming months to explore the ways in which the product can be used on campus. The weeks leading up to the start of the Fall 2023 semester will include a number of kick-off events for faculty and staff that include professional development and community building opportunities. These weeks will include a heavy focus on Vision 2030, and the guidebook could potentially be used to support the events. I am happy to move toward a shared ownership model for the guidebook in which the entire the community contributes to its evolution. With this mindset, I can let go of a strong sense of personal ownership and allow the guidebook to become what the institution needs it to be over the next few months.

In the development of future drafts of the guidebook, I would like to consider the ways in which discussion questions could enhance a reader's understanding. I can envision the benefit of questions at the end of each section to help readers further their thinking and make connections to the material in their own lives. Additionally, a number of my reviewers suggested that charts and/or images would be helpful in describing some of the more complex concepts. While I wasn't able to create these images within the scope of my master's project, I would like to partner with some colleagues who will be able to assist with the design.

I would also like to explore the other modalities in which the content of the guidebook could be presented. For those who are less likely to pick up a book to read, could I share the material in an engaging video series? For those who prefer hands-on experience, could I develop workshops in which my colleagues practice tools like assertive inquiry and deferring judgment? The guidebook allowed me to capture my research in a way that best fits my personal thinking style. However, I would like to challenge myself to examine whether the material can be shared in different formats just as successfully.

The completion of *The Creativity and Humility Guidebook* will act as a springboard for my future thinking, in both my personal and professional life. I have identified a number of research topics I hope to explore moving forward. For example, I have found myself drawn to the concept of distributed creativity, which is the idea that creativity does not come from one individual mind. Rather, creativity "is distributed between multiple actors, creations, places and times" (Glăveanu, 2014, p. 2). In this same vein, Dr. Edward Clapp of Harvard University challenges individuals to think about the "biography of an idea," which forces them to examine and reflect on the various individuals, events, and tools that have contributed to a creative breakthrough (Warr et al., 2022). Distributed creativity has strong implications for intellectual humility. If one honors the fact that ideas are the result of social networks, she is less likely to feel as strong a sense of ownership of those ideas, thus making her more willing to rethink them. This mindset doesn't come easy in an individualistic culture yet is important in understanding the collaborative nature of creativity. While I touch on distributed creativity briefly in the guidebook, I would like to further conceptualize how this counter-cultural concept can be taught in a way that helps others be open to understanding its importance.

Another topic I plan to research moving forward is the importance of balance. Polarities within creativity are the balance of two opposing concepts that work together to support creative action. For example, creativity is supported by a polarity between conformity and adaption. Humans create products, processes, and ideas in order to solve problems (adaption), with the goal of these products, processes, and ideas being accepted and utilized (conformity) (Puccio, 2017). Having been introduced to the concept of polarities in creativity, I now want to explore the importance of balance, not just in the creative process but also in daily life. A number of the concepts in my guidebook are strengthened by stability. For instance, detachment requires an equal balance with immersion (Glăveanu, 2019). Listening requires an equal balance with speaking. Uncertainty requires an equal balance with certainty. I would like to dig into other

concepts that require equilibrium, such as sadness and joy, and study the benefits that come with seeking balance in one's life.

Through the writing of my guidebook, I was able to identify that a link between humility and creativity is possibilities. As a result of this project, I have been introduced to a number of new possibilities to help me move forward with my learning. The completion of my graduate studies marks the accomplishment of hard work but is not the end of my thinking in this area. The topic of intellectual humility is one I believe to be fundamentally important to solving problems, and I look forward to all that I still have left to discover. *The Creativity and Humility Guidebook* is a snapshot in time of my current thinking, and I hope that it continues to evolve as I continue to learn.

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Appendix A

Letter of Support from Dr. David Basinger, Chief Academic Officer at RWU

ROBERTS WESLEYAN UNIVERSITY

March 14, 2023

To Buffalo State University:

Roberts Wesleyan University has a mission to prepare thoughtful, spiritually mature, service-oriented students who will transform society. With this vision in mind, the University has developed a strategic plan that will focus on specific initiatives to help us remain New York's Leading University for Character Education.

One of these strategic initiatives includes the integration of intellectual and spiritual humility into all aspects of the organization in order to support our goal of having all graduates meaningfully engage with a diverse world. The Office of Academic Affairs has been charged with determining how this may be achieved in ways that promotes the personal and spiritual development of our students.

The guidebook Samantha is creating will serve as crucial foundation for understanding the relationship between creativity and humility in the context of higher education. Even more importantly, this guidebook will conceptualize practical ways in which our institution can promote creativity through intellectually humility and will, as such, be used by the Office of Academic Affairs as a launching pad to initiate a series of campus dialogs on this topic. An aspirational goal is to embed this skill as a competency in all programs.

We are grateful that your institution is allowing Samantha to apply what she has learned in a manner that will prove beneficial for our institution.

Sincerely,

David Basinger, Ph.D.
Vice President for Academic Affairs
Chief Academic Officer, Office of Academic Affairs
585.594.6550 | BasingerD@roberts.edu

Permission to place this Project in the Digital Commons online

I hereby grant permission to the Center for Applied Imagination at Buffalo State University permission to place a digital copy of this master's Project, The Creativity and Humility Guidebook, as an online resource.

Samantha Monaghan

Samantha Monaghan

April 29, 2023

Date