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Exploring the Use of Tabletop Role-Playing Games (TRPGs) to Highlight and Develop Creativity Competencies

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Exploring the Use of Tabletop Role-Playing Games (TRPGs) to Highlight and Develop Creativity Competencies

by

Ryan Hill

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, Buffalo
Department of Creativity and Change Leadership

Abstract of Project

Exploring the Use of Tabletop Role-Playing Games (TRPGs) to Highlight and Develop Creativity

Competencies

This project explores how tabletop role-playing games (TRPGs) are an underutilized mechanism for developing the affective skills that constitute the foundation of creativity and reinforcing the emerging concept of the creative experience through the application of experience design principles. Outlining the core concepts of creative experience, experience design, and gamification, along with the associated role of phenomenology and embodied cognition, the project establishes a case for the intersectionality of these elements in understanding how to develop creativity. Expanding further, the project explores what existing literature shows about TRPG ability to exercise and develop cognitive, psychological, sociological, and emotional competencies through unique elements like narrative, immersion, transference of experience, and skill acquisition. This project posits that the unique manifestation of these inherent elements is what differentiates TRPGs as a creative experience tool unmatched by other training approaches. The outcomes of this project identify how existing TRPGs might be modified to maximize the effect of character creation, game mechanics, and the role of the Game Master to start exploring and testing the effectiveness for developing creativity skills and creative experience identifiers. Additionally, the outcomes include a brief description of the need to expand research in this area, with three initial suggestions for research opportunities that address gaps in existing knowledge and open doors for more research on creativity and the creative experience.

∕Ryan Hill

12 May 2023

Date

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

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SECTION ONE: BACKGROUND TO THE PROJECT

Purpose and Description of Project

The primary purpose of my project is to further explore how tabletop role-playing games (TRPGs) might be highly effective in developing the core competencies necessary for overall creativity. While gamification research has demonstrated a trend toward the implementation of customized virtual platforms to train a variety of skillsets across multiple industries, the principles of gamification are rooted in traditional gameplay. TRPGs are not well-researched and understood with respect to their application in creativity training and education, though a strong emphasis on many of the same affective skills and divergent thinking traits are documented within existing research in other focus areas, such as sociology, various disciplines of psychology, education and learning theory, communication, and imagination (Zagal & Deterding, 2018). This project will explore how existing research on TRPGs supports the concept of intentionally developing or modifying TRPGs to provide "lived experiences" that actively and passively hone the core competencies that enhance creative potential.

A secondary purpose of this project is to explore an expansion of the standard definition of creativity (Runco & Jaeger, 2012), leaning instead on the more emergent concept of creative experience (Glăveanu & Beghetto, 2021). As such, the emphasis will shift away from more traditional focal points like creative process and/or creative products, and instead take a closer look at the more unique elements brought to light through the lens of the creative person, and to a lesser extent the creative environment. To effectively explore both purposes of this project, the primary areas of focus with respect to creativity skills are drawn from suggested identifiers of the creative experience posited by Glăveanu and Beghetto (2021), which are open-endedness, non-linearity, pluri-perspective, and future orientation.

To illustrate the connection between creative experience identifiers and more traditional divergent thinking traits, the Torrance "beyonder skills" are used to identify overlap between

these identifiers and the affective skills already widely accepted as foundational to the mastery of creative thinking and creative problem-solving (Torrance & Safter, 1999). Due to time constraints, the ability to effectively develop and test TRPG scenarios for all four of the creative experience identifiers is unfeasible, so this proof-of-concept will focus on discovering potential mechanisms that can address these identifiers and their associated beyonder or affective skills, with particular emphasis placed on pluri-perspective. Critical to the success of this project is thoughtful consideration of how to best assess the competency levels of the creativity identifiers and beyonder skills of the players prior to and following their participation in the game, as well as ways to approach construction of the game itself.

Many variations of TPRGs exist, though the "best" format may not be from a specific game, but rather from a combination of elements adapted from a variety of games. These gameplay elements must strike a balance of both structured and unstructured, inviting a sense of autonomy without eliciting a sense of disorder or messiness that would counteract the ability for players to fully immerse themselves into the game. Immersion is essential to the effectiveness of this endeavor, as it is a key trait that sets TRPGs apart from other types of gameplay, and from adjacent forms of RPGs such as electronic RPGs and live-action role playing (LARP) (Cover, 2010).

Immersion or a sense of world-shifting is the element of TRPG gameplay that best provides a lived experience that transcends the game itself. Within the concept of Glăveanu and Beghetto's (2021) creative experience, the identification, understanding, and defining of creativity shifts to an emphasis on creativity as a lived experience, with each person's collective background, culture, perspective, and ways of thinking all contributing to their creativity whether or not an identifiable creative output is reached. In other words, creativity is something that can happen at any point in our waking lives, even if just within our understanding and processing of the world around us in that moment. Therefore, a degree of immersion must be met during TRPG play in order for the experience to be cognitively processed in a similar manner to an

actual lived experience, giving the players something to recall and use as a frame-of-reference when confronted with future challenges and opportunities that demand them to apply creativity.

This application of TRPG experiences into real-world encounters has been documented before. In his book, Laycock (2015) covers multiple ways that studies have connected TPRG experiences to the real-world lives of the players, building on theories such as liminality, phenomenology, and developmental and behavioral psychology. In these studies, players have reported leveraging their immersive experiences in the game to reflect upon their life and the world around them, and in some cases have even adjusted their behaviors in response to learned lessons from gameplay experiences (Laycock, 2015). RPG participation in general has been shown to aid in skill acquisition across personal, interpersonal, cultural, cognitive, professional, and other domains (Bowman, 2010).

The primary outcome sought in this project is a clear demonstration of how the storytelling, problem-solving, and character interactions that define TRPGs can positively impact the divergent thinking and creativity of the participants, with the heaviest emphasis placed on pluri-perspective. The very nature of TRPGs' non-prescriptive and highly flexible application may result in observable outcomes that connect with other creative experience identifiers such as open-endedness and non-linearity. The secondary outcome is better articulation of how the creative experience concept captures the essence of what it means to "be creative" more holistically than a strict adherence to the traditional 4 P's and the seeking of an output that is "novel and useful." This secondary outcome is of high importance, as it implies (if not outwardly demands) that the future of creativity research should begin to reframe creativity as something that is a personally lived experience, existing regardless of whether any definitive output ever manifests.

Rationale for Selection

My journey through the Creativity and Change Leadership program can be defined as transformative, because it has positively impacted multiple facets of my personal and professional life while opening my eyes to new opportunities and pathways within the field of creativity that I never imagined possible. I relished learning about the universal nature of creativity, learning about the evolution of creativity research across the last 70 years and how to not only be more creative myself but to lead others on similar journeys. I was always troubled, however, by my seeming inability to fit neatly into the predominant models presented to measure and understand creativity. While I do not identify as a prodigy or a creative genius, there were aspects of my creativity and my creative journey that I felt transcended or altogether defied existing understanding as presented in present research.

I felt that my neurodivergent condition of ADHD was a part of that disconnect, but I found only disappointment and more questions from the seemingly inconsistent conclusions presented in attempts to study ADHD and creative propensity. It was only upon a somewhat serendipitous collision of seemingly disparate interests (the type that only a person with ADHD might relate to) that I started to formulate the mustard seed of an idea that has since become the driving force behind this project. I discovered the field of experience design first-hand, while also stumbling across a revelation about my own creative competency through reflection on my participation in an ongoing TRPG, and more-or-less accidentally reading a thought piece that challenged the strict adherence to the "standard definition of creativity." Three completely unrelated occurrences all happened to manifest simultaneously and formed the foundation of my own philosophy on creativity: everyone is creative because everyone processes experiences in unique ways, and these lived experiences are what define our individual creativity and creative expression.

The creative experience concept must be embraced and explored, because it finally accounts for the aspects of creativity that are less definitive, less empirical, and incredibly nonlinear. If creativity is developed and cultivated through more than just academic knowledge and repetition of a specific process, if it also is influenced by the embodied cognition that is unique to each person's lived experience and encounters with the world as Glăveanu and Beghetto (2021) suggest, then it stands to reason that experiences can be intentionally designed to provide opportunities for individuals to explore and cultivate their creativity.

Tabletop RPGs are a way to deliver an intentionally designed experience that is not confined by the limitations of the real world because TRPGs are not beholden to the real-world. More importantly, TRPGs are not beholden to real-world consequences that may otherwise discourage the experimentation and risk-taking that developing and practicing creativity skills demands.

It is my mission to demonstrate the potential of TRPGs to create lived experiences that translate into increased everyday creativity of the players in a meaningful way, with the hope that this project's outcomes open the door for curious, adventurous, and groundbreaking research that pioneers the next 50 years of creativity training and education. It is already clear to me that this project is only the first step, because there is a demand for data and analysis to validate the concept. I see this as an opportunity to create something unique, something that not only aids in the training of creativity but also opens the door to new research pathways. It may come to be at the end of this project that I am left with more questions than answers, and that isn't necessarily a bad outcome. If all I have to show for this is a series of unanswered questions, then I hold the keys to several enticing doors, and the journey continues on with the same goal in mind.

SECTION TWO: PERTINENT LITERATURE & RESOURCES

Introduction

This project is a convergence stemming from what began as three disparate areas of interest, so it's important to highlight the anchoring literature and resources across these three fields (creative experience/embodied cognition, experience design, and gamification through role-playing games). Creativity is said to be transdisciplinary, and I cannot claim to be a subject-matter expert in any of these fields, though I am increasingly well-read on the aspects of each that are most relevant to this project. In the transdisciplinary spirit of creativity, this project and its foundational research are multidisciplinary in nature. The goal is to identify the overlapping elements in these fields that impact creative potential, and to explore their convergence in ways that are not necessarily obvious or well-documented.

Gamification, for example, is an incredibly broad field of study, but my focus is predominantly on role-playing games. Unfortunately, gamification research itself is lacking in RPG-specific contexts. Therefore, the use of more general gamification sources by Burke (2014) and Bell (2018) are paired with the limited research available on RPGs and creativity from Chung (2013) and Dyson et al (2018) and assessed alongside general RPG literature and analysis from authors like Laycock (2015), Bowman (2010), Cover (2010), and Zagal and Deterding (2018). These sources form the basis of not only defining how TRPGs work, but why they are so uniquely suited for cultivating creativity competencies and substantiating the creative experience concept.

Likewise, embodied cognition and its subcategories demand a strong background in cognitive psychology, though my focus is not on becoming an expert in the field as much as in identifying the role it plays within the concept of creative experience. Glăveanu & Beghetto's (2021) article is the spark that lit this wildfire, but to better understand how a person's experiences manifest in highly individualized creative expression, an examination of embodied

cognition is required. A broad foundation is pulled from Shapiro & Spaulding (2021), and areas of specific relevance like phenomenology and Possible World Theory that are explored through Doyle (2022) and Cover (2010) and reinforced by Bowman (2010) and Laycock (2019).

Experience design, as a profession, is dynamic and highly contextual, but my area of concern is on its place in cultivating opportunities for an individual's journey, not on the mastery of designing professional-tier services. Rossman & Duerden (2019) lay the groundwork for defining experience design, outlining crucial elements for achieving transformative outcomes. Endean (2017) reinforces the importance of intentionality behind experience design, and more ephemeral considerations such as time and the senses are found in works by Spence (2020), Mainemelis (2002), and Lupton & Lipps (2018).

This project's aim is not to discredit, dismiss, or diminish the seminal creative works already in existence, but rather to expand upon them in meaningful ways. Rhodes' (1961) 4 P's model is integral to this project, as is work by Runco & Jaeger (2012) and Csikszentmihalyi (1996). Works by these authors are integrated throughout the project, even if not explicitly cited, as they all contribute to the growing body of research on creativity.

Beyond these works, there are several other sources that were evaluated and utilized for the project. These sources are:

Gray, S. F., Carter, M., Sims, C., & Wilkes, J. C. (Eds.). (2014). *Dungeon master's guide.* Wizards of the Coast, LLC.

This was utilized as a reference guide on structure and key elements necessary in the creation and implementation of TRPG modules. This guide also provides a greater context of the Dungeons & Dragons universe, a potential option for the setting of designed modules due to its decades-long development and existing canon.

Dr. P. Beaulieu-Brossard, personal communication with the author, March 30, 2023.

Dr. Beaulieu-Brossard is an educator at the Canadian Forces College in Ontario,

Canada and the originator of a custom-developed game that uses elements of role-playing and
traditional board games to develop sense-making. This skill is similar to pluri-perspective and
open-endedness, and the objective of the game is to highlight this skill prior to entering an
educational block on the use of design thinking methodologies. I was able to observe the
game's execution, particularly the game mechanics and the Game Masters' role in facilitation
and heard from Dr. Beaulieu-Brossard about how the developmental process for the game
progressed.

Literature Review and Foundation for Project Premise

To further expand upon the topics outlined in the introduction of section two, a more detailed analysis of the literature is provided in two categories: the foundations (creative experience, phenomenology and embodied cognition, experience design, and general gamification) and key RPG elements. This analysis is provided to add greater understanding of this project and to provide greater context for the project outcomes with respect to the use of TRPGs for creativity development. A more specific review is provided to then connect TRPGs specifically with skill acquisition and transference, and a final position on the purpose for this project is provided to succinctly capture the importance of the existing research to date.

Creative Experience, Experience Design, and Gamification

Creative Experience

Creative experience as a proposed non-standard definition of creativity was introduced by Glăveanu and Beghetto in 2021. The main premise is that creativity is something more than meets the eye, and in some cases, it can be difficult to properly identify creativity until after it happens. According to the authors, this is partially due to how creativity has been defined and

researched to date, where a bias has arisen toward outcome-based creativity, placing more emphasis on the product of creativity or the creative process over other factors. While not refuting the validity of the most common "standard" definition of creativity put forth by Runco and Jaeger in 2012, the authors raise several valid concerns about why we trend toward outcomesfocused creativity identification (Glăveanu & Beghetto, 2021).

Instead, Glăveanu and Beghetto (2021) put forth a new perspective for identifying and defining creativity, which they titled creative experience. By defining creativity as an experience, research may begin to account for psychological and cognitive elements of creativity that do not necessarily manifest uniformly or linearly (as a process approach might imply), nor in an observable outcome (as a product approach might imply). They were also clear to distinguish that their perspective on creative experience should not be taken as resting solely on the role of the person in creativity, either, and insist that this concept should be seen as something that goes beyond the existing understanding of Rhodes' (1961) "4 P's" entirely, bringing person, product, process, and place together in conjunction with the appreciation of the context of individuals' lives (Glăveanu & Beghetto, 2021). In this way, creativity is represented as present in dynamic and indefinite encounters, experiences, artifacts, situations, and contexts, and is more fluid in its meaning as those variables shift between individuals and across cultures. With this definition, creativity would become something that presents itself in an unpredictable and varied manner based on how people encounter life (Glăveanu & Beghetto, 2021).

Creative experience is something that can be shown by characteristics or "identifiers" other than the production of something novel and useful. Glăveanu and Beghetto's (2021) proposed working definition outlines these identifiers, stating "creative experience can be defined as novel person-world encounters grounded in meaningful actions and interactions, which are marked by the principles of: open-endedness, nonlinearity, pluri-perspectives and future orientation" (p. 76). These identifiers are not new to creativity, as it is often understood that such cognitive skills like multiple perspectives/empathy, possibilities thinking/future

orientation, tolerance of ambiguity/nonlinearity, and being open to new ideas are essential for creativity to thrive. What is new is how they're being used to identify when creativity is happening or has happened, even if only within our minds or through our personal connections and perceptions of new concepts and ideas.

Creative experience connects nicely with other concepts that help frame the dynamic nature of creativity, such as Kaufman and Beghetto's (2009) "Four C's" model of creativity and other psychological research about the impact of creativity on well-being, emotions, and quality of life. Additionally, despite Glăveanu and Beghetto's (2021) attempts to distance creative experience from the person-centric exclusivity that phenomenology takes, creative experience does overlap heavily with phenomenological concepts simply due to the nature of the definition revolving around the uniqueness of person-world encounters (Doyle, 2022).

Phenomenology and Embodied Cognition

Phenomenology investigates the nature and structure of our conscious, lived experiences by analyzing those experiences through the lenses of temporal, spatial, attentional, kinesthetic, social, and self-awareness (Shapiro & Spaulding, 2021). Phenomenology is one of the roots of a larger approach to cognitive psychology known as embodied cognition, which places greater emphasis on an agent's physical body within cognition as opposed to the brain being the sole source of cognition (Shapiro & Spaulding, 2021). From the perspective of phenomenology within embodied cognition, there is no separation between the brain and the physical body's interactions when it comes to thinking, learning, and processing: the body is an integral part of how the brain makes sense of the world and vise-versa, and this results in a definition of cognition that is inherently more physically interactive than isolated within the mind of the person (Shapiro & Spaulding, 2021). We can see this demonstrated when we reflect on how we adjust our own patterns of interaction when transitioning from work to home, for example: it is likely that the version of yourself you embody in a professional workplace is

distinctly different (and potentially unrecognizable) from the version of yourself you embody at home, and even within the home when shifting from specific areas of focus (like from parenting to writing a paper for school). This reinforces how the sense of self and our perception of our interactions with the surrounding world are socially constructed, as we adopt the appropriate persona to suit specific social and environmental pressures (Bowman, 2010).

In a response article to Glăveanu and Beghetto's (2021) creative experience article, Doyle (2022) outlines how pragmatic and philosophical phenomenological concepts put forth by James (1915) and Schütz (1945) reinforce that lived experiences, thoughts, feelings and actions are not separate but are intertwined, inseparable without loss of context and meaning. Citing James (1915), Doyle (2022) explains that experiences can be understood as moving within multiple realities, or versions of reality, which shape the way we process and respond to the given stimuli. Doyle (2022) goes on to connect later work by Schütz (1945) that describes how an individual's pattern of behavior, sense of self, socialization, experience of time, and actions are specific to the "world" that their mind is presently occupying. In other words, a person's pattern of interactions when they are conducting scientific research reflects a mental world that is distinctly different from their pattern of interactions when they are engaged in a "creative writing" world. The person remains the same, though, and while they attend to these "worlds" separately as one can only interact with one world at a time, the outcomes of experiences in these distinct worlds often affect subsequent experiences in another (Doyle, 2022). Another version of this concept uses the comparison of the "Actual World" (AW) with "Alternate Possible World(s)" (APW), called Possible World Theory (Cover, 2010, citing Ryan, 1991). The key distinction between phenomenology's multiple worlds and Possible World Theory is that the latter can be entirely hypothetical: not directly attended to, but useful for projection of what is possible, such as imagining how the coming weekend might play out in either sunny or rainy weather (Cover, 2010).

Understanding the basic position of phenomenology (and to a larger extent, embodied cognition) adds richness to the concept of the creative experience. It also implies that time spent occupying an alternate possible world, even one entirely fictionalized through participation in a role-playing game, influences the actions and experiences within others (such as work, school, or home). This concept is one of the core foundations for this project, which seeks to apply phenomenology and creative experience through TRPGs to develop skills that are measurable in "real-world" contexts and applications.

Experience Design

Experience design, though broad in the sense of the professional field, is unified behind the idea that thought and intentionality when designing an experience can result in a change in behavior of some kind. Rossman and Duerden (2019) established a comprehensive definition of experience design, defining it as, "the process of intentionally orchestrating experience elements to provide opportunities for participants to co-create and sustain interactions that lead to results desired by the participant and the designer" (p. 14). The authors go on to differentiate the levels of experiences on a hierarchal scale, with the pinnacle of an experience being a transformative experience, or one that results in a long-term change in behavior (Rossman & Duerden, 2019).

Since there is a hierarchy to experiences, there are several elements that must be achieved to reach the level of transformative experience, which are: incorporating conditions for the deliberate mindfulness and reflection, emotional connection, discovery, and application of significant change. For it to be experiential, though, participants must be actively involved, not passively engaged, and must keep a degree of autonomy and co-creation throughout the experience journey (Rossman & Duerden, 2019). In this way, TRPGs are well-suited to facilitate the possibility of a transformational experience, because autonomy and co-creation are core characteristics of TRPGs innately, which is elaborated upon in a later section.

Experience design also connects nicely with the creative experience concept, in that the transformational experience (one that results in significant change in a person's life) is unique to the individual, and heavily influenced by a myriad of factors independent of the experience itself (Rossman & Duerden, 2019). Those independent factors that are beyond the experience designer's control are varied and are the result of a participant's collective person-world interactions from across a variety of personal worlds. This is why a group of people can all go through the same experience, and each will come away with a distinctly different interpretation of that experience. This is also why transformational experiences are often unable to be classified as such until afterward, when the impact of the experience manifests in a behavioral change, and which is unlikely to be universally true for all participants who shared that same experience (Rossman & Duerden, 2019).

Lastly, experience design at its core is a highly intentional activity. Intention is the key to successful experiences because each experience must be thoughtful of the audience and how best to guide them toward the desired result (Endean, 2017). Rather than recycling elements from other contexts and events, taking an intentional approach to experience design allows us to ensure we are actively engaging the participants at a cognitive level, inviting them to engage in the experience with emotion, trust, and desire to return (Endean, 2017). In the context of utilizing TRPGs for creativity cultivation, emotion results in increased immersion, trust allows for experimentation with new concepts and ideas that everyday life might not allow for, and desire to return allows for the TRPG journey to go much deeper than conventional methods of creativity training. Longevity is an important consideration for this proposed TRPG-based training concept, as it allows for growth, change, and experimentation in a safe environment, and allows greater opportunity for the TRPG to result in lasting cognitive changes (Cover, 2010).

Gamification

Interestingly, gamification and experience design share the same "pinnacle of achievement," and that is to result in a change of behavior. Gamification has varying definitions depending on the industry context for which it is being used, but regardless of the application or context the definition includes the use of game mechanics and experience design to engage and motivate participants to achieve their goals (Burke, 2014). Gamification is not exclusive to the digital arena, though it is more often seen applied digitally than through analog means. This is evident in the available research, which heavily favors gamification from the digital/virtual perspective. Gamification literature and research center around two primary fields or areas of application: business/industry and education.

Research on the use of gamification that employs TRPG structures was unable to be uncovered, despite my efforts scouring multiple journal databases provided through E. H. Butler Library at Buffalo State University. Other contexts were explored to gain greater understanding of how games in general have been used to teach and train specific skillsets. From educational contexts, gamification leans heavily on social cognitive and adaptive learning perspectives and is employed to increase student engagement and time-on-task (Bell, 2018). This connects directly to the experience design elements reviewed previously, as the underlying idea behind gamified education is to give greater context and meaning to educational concepts. That effect is accomplished by providing engaging and safe ways to explore new concepts, effectively moving beyond simply learning a concept to experiencing a concept in action, in a way that presents feedback and motivation for re-attempting until success is met (Bell, 2018).

Within corporate or industry contexts, gamification has been applied in two ways: for employee training and development, and for customer engagement. In both contexts, there is a behavioral outcome that the company desires to reach, but the ownership for that is passed on to the participant by way of eliciting buy-in. A gamified solution, whether for the customer or for

the employee, must not overtly appear to be for the benefit of the company, because then the incentive to stay engaged is removed. Instead, the corporate approach is to establish a connection from the participant to a personal goal that furthers the company's objective (either directly or indirectly) (Burke, 2014). In this way, corporate gamification applications often leverage more principles of adult learning models than educational applications tend to, though educational applications will vary in approach, adopting appropriate learning models to suit the intended audience. Since businesses predominantly target adult audiences to achieve their outcomes, though, this adult learner approach is necessary, because adult learners have different requirements and intrinsic reasons for engaging in learning than children do.

In both contexts, creating some form of experience and environment that invites the participants to actively acquire the knowledge, skills, and abilities to meet a desired goal or objective while providing a low-consequence, safe arena for them to try and fail, is universal. Similarly, TRPGs are positioned to provide this safe environment for experimentation and learning, where consequences may have emotional impacts (due to immersion and investment by the players), but those consequences often are not of the same gravity as those we might experience when experimentation fails in the real world.

A Brief Differentiation of RPG Formats

Tabletop Role-Playing Games (TRPGs) are distinct from other variations of role-playing applications such as theater/drama, therapy role-play, training simulations or exercises, and wargaming, and from other game variations like Live-Action Role-Play (LARP), Computer or Electronic Role-Playing Games (C or ERPGs), and Massive Multi-Player Online Role-Playing Games (MMORPG, a popular type of CRPGs that are distinct due to their large online player pool). Zagal and Deterding (2018) explain that LARP, C/ERPGs, and MMORPGs do share common roots with TRPGs, all of which evolved from text-based RPG forms, which evolved from a synthesis of historical role-playing contexts like wargaming, reenactments, and

interactive theater, and high fantasy literature like Tolkien's *Lord of the Rings* trilogy, among others.

TRPGs were popularized with the creation of Dungeons & Dragons by Gary Gygax and Dave Arneson in 1974, and since has grown to include many different games spanning themes limited only by one's imagination (Zagal & Deterding, 2018). TRPGs are characterized as openended games limited only by the available time of the players and the limits of their imagination, flexible and adaptable rule recommendations, autonomy in character creation, evolution, and interactions, and predominantly played around a table using paper and pencil, and occasionally mini-figures (hence the "tabletop" identifier) (Zagal & Deterding, 2018). Today, TRPGs are played largely the same way, though modern technology has allowed for "virtual TRPGs" to be hosted, where players use an online tabletop and virtual meeting software to conduct the game. Examples of tools used to play TRPGs in this manner included Roll20's Virtual Tabletop, Discord, Zoom, and a variety of other tools that suit the specific needs of a TRPG group. Most importantly, and unique to TRPGs, is the position of a game master, who generally establishes the initial narrative and serves as "referee" for the conduct of the game (Zagal & Deterding, 2018).

While other RPG variations share some elements with TRPGs, such as fantasy or sci-fi settings, character skill acquisition, player interaction, and a guiding narrative, Zagal and Deterding (2018) point out how those similarities are leveraged in different ways. C/ERPGs, by nature of the limitations of the developed code to run them, are much more rigid in terms of character creation and evolution, have defined boundaries to the world of the RPG, and offer limited narrative influence for players. This applies to MMORPGs, as well, though this format does offer greater interaction between players during the play of the game. C/ERPGs and MMORPGs are governed by the established logic and rules coded into the game itself, which contrasts greatly from the ability that TRPGs provide players to negotiate with the GM and cocreate the story as they go (Zagal & Deterding, 2018).

LARP, on the other hand, offers socialization through the necessity of needing to converge with a large group of players to conduct the game, and these large events are typically held in one long day, or in rare instances over multiple days in succession. LARP is a full embodiment of a character, complete with costumes, mock weaponry, and simulated combat between participants, and the narrative may be guided or pre-planned. Unlike TRPGs, LARP is limited by the actual physical surroundings and the physical limitations of the players involved, and usually involves multiple referees due to the number of players and physical size of the game environment (Zagal & Deterding, 2018).

This project focuses on TRPGs in particular, because of the attribute of the players and the game master co-creating the narrative and the amount of freedom this attribute provides for exploration, which is elaborated upon in the following section. Additionally, as TRPGs are played in small groups averaging four to eight players (including the GM) across multiple engagements over several weeks, months, or years, they present greater opportunity to experiment and learn within the conduct of the game than other RPG forms, which is also expanded upon in the following section.

Key TRPG Elements

With the understanding of creative experience, embodied cognition, experience design, and gamification concepts provided, the following sections will cover the key elements of TRPGs and their relationship with those core concepts. While this is not an exhaustive list of every defining element of TRPGs, it covers the ones pertinent to the scope of this project and shows how they connect all the foundational disciplines in several ways, substantiating the purpose and intent of this project.

Narrative, Immersion and Play

Narrative and immersion, although separate concepts, have a symbiotic relationship within TRPGs. It can be difficult to determine if narrative aids in immersion, or if immersion aids

in narrative construction, though I hold the position that both are equally true and represent a positive feedback loop. Historically, narrative is one of the origins of TRPGs, which evolved from theatrical elements such as dramatic play, scene work, role play and reenactment, and ritual (Bowman, 2010).

TRPGs are set apart from other game styles, RPG variations, and conventional definitions of narrative due to the level of interaction that exists between the players, both with each other and with the narrative itself (Cover, 2010). Further, the narrative is not rigid and does not inherently punish the players for challenging or altering it through their character interactions and decisions, which adds an element of exploration and co-creation to TRPGs that doesn't exist in other game styles (Cover, 2010).

This is known as narrative agency, or control over the story as Cover (2010) outlines. This agency and co-creative power over the game directly connect to the fundamentals of experience design previously outlined, pointing to the potential for intentional experience design principles to be leveraged in TRPG game design and modification to achieve a desired effect. The intentionality begins, though, with the game master (GM) creating space for that co-creation to unfold, providing the initial "world" that the players will attend to through their character interactions (Cover, 2010). How players interact with the narrative and influence it occurs through a multitude of pathways, such as their questions, their decisions, their interactions with other characters (to include "non-playable characters," or NPCs, which exist as part of the narrative), and fate or fortune (Bowman, 2010). Fortune is another narrative element and game mechanic that establishes a system within which the game can unfold, allowing for a degree of objectivity, challenge, and reward. This will be covered in a later section on game mechanics.

Bowman (2010) points out that the desire to construct narratives is inherent to the human experience and is understood to be one of the primary means that humanity makes sense of the actual world and generates social constructs that help us define our sense of self.

Laycock (2015) adds to this by stating that narrative is our oldest form of "world-making,"

highlighting that the narratives we construct are also constructing the world as we perceive it.

Narrative can also be associated with "theory of mind," which is our ability for understanding other people. Constructing a narrative and immersing in it allows us to become more skillful at applying theory of mind to real world situations, thereby gaining empathy and understanding of why other people think and feel the way they do, a particularly powerful tool when applied against divisive topics such as religion, politics, or ethnic tensions (Bowman, 2010).

The establishment of narrative space not only creates the conditions for player interactions, agency, and co-creation, but also invites greater immersion into the TRPG itself. Murray (1998) is cited as writing that "a good story puts us safely outside ourselves," creating a world set apart from the actual world (Cover, 2010, p. 119). This immersive element is what bridges the gap between TRPGs being "just a game" and them being analogous to lived experiences. It is also important to understand that by allowing the narrative to unfold and shift through player interactions, the narrative is effectively being constructed in real time, and is recalled by the players after the fact in the same cognitive manner that any other lived experience is recalled (Cover, 2010). The more richly detailed the narrative, the greater the immersion, and the greater the immersion, the more narrative agency players experience, allowing for more powerful recalled experiences afterward.

Citing Fine (1983), Cover (2010) explains that immersion is an engrossment in the game, a sense of losing oneself, though in TRPGs this is not necessarily total or constant.

Immersion can be understood as happening within three frames: spatial immersion, temporal immersion, and emotional immersion. These can happen independently, or in various combinations simultaneously, but all play a key role in understanding how TRPGs function, how immersion drives the narrative, and subsequently the perception of an experience (Cover, 2010).

Spatial immersion refers to the idea that the narrative must create a space for players to explore both the game world and the persona of the character they are embodying (Cover,

2010). TRPGs don't require visual elements to establish spatial immersion, turning instead to the narrative structure and continued co-creation of the narrative by players, but at certain points the use of simple visual aids like graph paper or minifigures assist in understanding the narrative space within which they are immersed (Cover, 2010).

Temporal immersion has to do with time, but within the context of the narrative plot, not necessarily the actual passing of time by itself. The plot's points of suspense increase temporal immersion, with tension and immersion increasing with greater consequences and fewer variables (Cover, 2010). Other mechanisms for increased temporal immersion tie back to narrative agency, as Cover references Murray's (1998) position on causality and the sense of control that players feel they have over the possible outcome of the suspense, with immersion increasing during times of perceived greater control or impact (2010). In many TRPG game systems, the game mechanics alter depending on the scenario. A game may not keep track of time very strictly until a moment of intensity, such as combat, at which point "time" is slowed down and players switch from free-form interactions between characters to "rounds" with established turn orders, where each full round represents a short period of time (often six seconds, if in combat) (Cover, 2010).

Temporal immersion is also associated with the concept of creative flow put forth by Csikszentmihalyi (1996), which in this application is best summarized as the balance between skill and challenge that allows players to lose themselves within the activity they're engaged. Bowman (2010) and Laycock (2019) both reference this flow concept when explaining how TRPGs' incorporation of co-creation of the narrative results in a loss of oneself in the character as a player encounters challenges during the game. Mainemelis (2002) references how creative works such as Homer's Odyssey leverage temporal boundary blurring in delivery of the hero's journey, which connects the previous discussed role of narrative and narrative construction in TRPGs to their ability to foster immersion and ultimately a deliver a lived experience for players. Later in his writing, Mainemelis (2002) also defines timelessness as the result of losing a sense

of consciousness of self, adding further support to the importance of immersion in achieving an experience perceived the same as any real-world experience might be.

Emotional immersion is regarded as the most powerful aspect of immersion, and within TRPGs this is often observed as response to character. Response to character can come from two perspectives, though: increased emotional immersion in response to character as an extension or representation of one's real self, or response to character as an identity distinctly separate from one's real self that has matured and developed over a long investment of time and narrative exploration (Cover, 2010). The latter can also be observed in emotional connection between characters, as immersion increases the longer groups consistently play together and co-create the narrative experience, effectively building strong relationships with the adjacent characters in the same way we might build relationships with people in the actual world (Cover, 2010). This emotional immersion is also a powerful catalyst for theory of mind, as players develop greater understanding of roles and identities distinctly different from their actual identities through embodying a character with fundamentally different paradigms than their own. Much like in the real world, the greatest emotional responses in connection with character immersion are often the result of traumatic in-game events, such as deaths, rejection, or lost love (Cover, 2010).

Separate from the immersion of players within the narrative and the characters of the TRPG, there is also a unique requirement for social immersion when exploring TRPGs. Social immersion has much less to do with the in-game narrative, and much more to do with the social setting of the game itself (Cover, 2010). This element explores how TRPGs foster immersion within a social group that is still physically tied to the actual world, but where players are immersed in the conduct of the game with one another, both as players and as characters (Cover, 2010). Since socialization and camaraderie are two of the most frequently cited reasons by players for involvement in TRPG play, it is important to point this element is equally as important as other types of immersion. Social immersion, as Cover (2010) points out, can either

reinforce or interfere with other types of immersion. If all the players are socially immersed in the conduct of the game, then the overall shared experience of the group is enhanced, to include shared emotional, spatial, and temporal immersion. Studies show that the level of social immersion increases over time due to improved group dynamics. Conversely, when even one player is not socially immersed (distracted, doing other activities unrelated to the conduct of the game, etc.) then the entire flow of the game and, by association, the elements of immersion for all participants are disrupted (Cover, 2010).

Immersion holds a special significance in TRPGs and within this project, as it is the defining element that allows for a fictional experience to influence and translate to the actual world. TRPGs offer a safe place to explore alternate possible worlds and alternate identities that might challenge our actual selves, whether because those intensities are fundamentally different from our lived experience (race, gender, etc.) or because we are embodying attributes or characteristics that we perceive we lack or desire to gain (optional or ideal self) (Bowman, 2010). Immersion in characters and within the narrative allow us to try out new skills, communication styles, perspectives, and cognitive sense-making, which is both driven by and drives the narrative.

The longer players spend immersed in both narrative and character, the greater the effect of these narrative experiences and the more influential they become on our perception and understanding of the actual world. TRPGs specifically allow for a fracturing and refracturing of multiple aspects of reality, which allow us to experiment with alternate social constructions, where consequences matter contextually but don't carry over to the actual world in detrimental ways (Bowman, 2010). Immersion and narrative both serve as an opportunity to not only escape the constraints encountered in the actual world with respect to social norms, gender roles, and other social elements, but to explore and discover new understandings of the world through alternate lenses gained during exploration of alternate possible worlds, a unique combination of mental exercise and entertainment only found within TRPGs (Bowman, 2010).

The entertainment or play aspect is another distinguishing feature between TRPGs and other forms of RPG applications used in education, business, and clinical settings for gaining new perspectives. Bowman (2010) identifies that while it is entirely possible to achieve a sense of immersion in these other applications, immersion through play specifically increases the capacity for attention and concentration, and simultaneously works to develop systemic thinking patterns necessary for holding multiple theories of mind within the context of a singular situation. Just as pretend play is a vital cognitive and social development tool for children that begins as early as 18 months of age, so to is play linked to improved cognitive functions like memory, oral communication, self-regulation, and pattern recognition in adults – all coalescing in greater ability to construct multiple narratives in a given context (Bowman, 2010).

Another unique feature of TRPG's "play" factor is a repurposing of a psychological skill known as depersonalization. Bowman (2010) explains that depersonalization is observed during traumatic events as our sympathetic nervous system response makes time appear to slow down while we react to these moments in which every second counts. Within TRPGs, this process is typically replicated through pleasing and engaging moments rather than traumatic ones (Bowman, 2010). The ability to perceive life-or-death moments as a player means that they are processed with a certain degree of standoff distance, effectively happening to "the character" rather than to the person themselves. This ability to mimic depersonalization in TRPGs is often facilitated by the adjustment of temporal immersion during critical points of the game, as discussed in the section on temporal immersion. This means that players, through playful emotional immersion, gain experience and insight from processing traumatic moments with a healthy standoff that allows for learning and growth in response to the event, and without the other negative side-effects that often accompany the experience of traumatic events in the actual world (Bowman, 2010).

In addition to gaining valuable skills for processing traumatic events at an individual level, social immersion through play allows for the development of group problem-solving and

recognition of multiple competing paradigms (Bowman, 2010). As part of the immersion, players often clash with one-another "in character" despite whether they do in the actual world or not. Players also get to experiment with skills for consensus building and team dynamics through a lens of playfulness, removing the risk of causing long-term harm to their real-world personal relationships.

The value of TPRGs in providing crucial skillsets through narrative, immersion, and playfulness is what sets the conditions for psychologically safe environments for the application of otherwise difficult skills to train and learn. This project promotes the leveraging of these unique elements to increase those skills and identifiers most necessary for creativity, such as empathy/pluri-perspective, in an experiential way that enables practice and failure in a constructive environment. The following section will expand upon how TRPGs create an experience that transfers beyond the alternate possible world and into applications within the actual world and the daily lives of the players.

Transfer of Experience

Having explored the required elements of the experience hierarchy necessary to reach the level of a transformative experience as presented by Rossman and Duerden (2019), it is necessary to now explore the ways in which TRPGs are positioned to achieve these elements and how they have been shown to transfer out of the alternate possible world and into the actual world. This section will highlight the integrated nature of phenomenology, experience design, and TRPGs, because to speak of one requires the inclusion of the other two.

Developmental psychologists have a different term for the pretend play and playful immersion discussed in the previous section, calling it "mastery play," or a form of play in which a person engages in behaviors that require new levels of courage or physical coordination to learn the application of abilities they did not know they possessed (Laycock, 2019). Mastery play and role-playing often occur simultaneously in children, and the same is true of adults who

engage in TRPGs, though the emphasis in popular commentary is often on the "escapist" elements, usually depicted as a derogatory aspect despite consistent reports that gamers often gain new competencies through role playing (Laycock, 2019).

To understand how TRPGs can provide players with new competencies, we can look to phenomenology and embodied cognition as a mechanism for understanding this transference of new skills from a fictitious setting into the actual world. Just as Doyle (2022) explains in citing both James (1915) and Schütz (1943), an alternate possible world is real so long as it is attended to, and that attendance to the alternate world in TRPGs is accomplished through narrative and immersion. Attendance to the game world makes that experience real to the players, and as Doyle (2022) again points out, these multiple worlds are not isolated and do influence and inform the patterns of behavior we employ in other worlds. Cover (2010) writes that within TRPGs there is also a manifestation of this phenomenological concept between incharacter play and other levels of immersion. Dialogue that is "out of character" but still contained within the social immersion of the game group transfers to both the APW of the game as well as the actual world beyond the game, occupying a liminal space between both worlds (Cover, 2010).

Laycock (2019) states that it is this ability for players to perceive the alternate possible world as both real and an externalized version of reality that enables them to safely explore new identities and perspectives, and then use these insights to better understand their sense of self and the actual world. This process can be exploratory and cathartic as players often revisit or reexamine events from the actual world that they felt too constrained to deal with at the time. The advantage of TRPGs is the freedom of exploring these situations and the possible choices one can now make within them through a game system that applies good or bad consequences. These "consequences" are important for translating the experience within the APW into learning and feedback tools rather than simply fantasizing, and they are enhanced through the degree of immersion a player achieves within the narrative structure (Laycock, 2019).

The mechanism behind this transference of experience psychologically fits within the concept of phenomenology, but occurs through a process that anthropologist Tanya Luhrmann called, "interpretive drift" (Laycock, 2019). Interpretative drift is a slow shift in someone's manner of interpreting events, making sense of experiences, and responding to the world, which involves three aspects of transformation: interpretation, experience, and rationalization (Laycock, 2019). Referencing the earlier section on experience design, we can now begin to see more clearly how the achievement of a transformational experience (one marked by a change in behavior following the experience) connects with this process of interpretive drift.

Within TRPGs, Laycock (2019) asserts that interpretation and rationalization are naturally occurring, accounting for two of the three elements, though I argue that by necessity the third element (experience) is accounted for simply because the immersion into the TRPG constitutes an experience outright. Therefore, as in any intentionally designed experience, the direction of the ultimate outcome for a person resulting from the experience cannot be predetermined, which Laycock (2019) identifies. This is what makes TRPGs suited for the application of creative experience as defined by Glăveanu and Beghetto (2021) – creative experience is highly individualized based on the sum of all the person-world interactions that constitute how someone perceives a given context and how they manifest their creativity within it.

The inherent experiential nature of TRPGs is demonstrated by the presence of critical components that Rossman and Duerden (2019) identify as necessary for constituting an experience: autonomy and co-creation. As the section on narrative shows, this is achieved within the TRPG through narrative and narrative agency. Whether or not scholars want to continue the debate over the ability for a game to also be a narrative, the fact remains that TRPGs are experienced narratively (Cover, 2010). The experience by way of the narrative itself is enhanced in TRPGs by constructive and performative speech (immersion), and this is what

sets the APW of a TRPG world apart from other fantasy worlds that exist in novels or movies: the ability to shape and "experience" it through construction and performance (Cover, 2010).

Cover (2010) points out that another mechanism by which experience transfers from TRPGs into the actual world is by the constant frame shifting that occurs during conduct of the game. No matter what degree of immersion a player is in, there is no way to achieve total, continuous immersion in any one frame. The mechanics of TRPG play require shifting between the frame of in-character immersion (the narrative frame), to the frame of conducting the game itself (the game frame), and even to the frame of the actual world and it's demands, such as restroom breaks, snacks, or interruptions (the social frame). These frame shifts happen constantly during TRPG execution, and this is one of the ways that TRPG play best replicates how children's pretend play builds new cognitive pathways. The overall sense of the narrative experience of TRPGs comes not exclusively from immersion in the narrative frame alone, but from the maintained immersion throughout all three frames (Cover, 2010).

While character creation can enhance emotional immersion due to a perception of the character as a representation or extension of oneself, or due to an investment of time spent understanding the world (actual and alternate) through the identity of that character, character identity is more than that: it's a part of why I assert that TRPGs are inherently experiential.

Bowman (2010) identifies that the experience of self-directed exploration of alternate expressions of identity is one of the most profound offerings that TRPGs provide and can help players discover parts of themselves that were hidden or repressed, particularly if that repression is due to social pressures or norms.

Character creation is one of the points in time that a player feels they have the most control or autonomy (the first marker of what defines something as an experience), as well as one of the defining mechanisms by which a character establishes a role of co-creation (the second marker of defining an experience) in the narrative (Cover, 2010). The experience

ensues from a feeling of maintaining some control, which refers to previously discussed aspects of how the game system influences immersion, and chiefly the concept of "fate."

Rather than a subjective "god" figure embodied by the GM deciding the outcome for the character (particularly in high suspense moments, like "life or death"), an objective mechanism for determining the fate or result of a character's actions is facilitated through a game mechanic, most often the rolling of dice. While the player cannot directly control the outcome of the dice roll, the ability to roll the dice themselves with the understanding that they must accept the results leaves players "in control" of the action, and also introduces the concept of risk when experimenting with new behaviors, a key component already identified as separating TRPGs from other types of fantasy (Bowman, 2010; Cover, 2010). This objectivity, paired with the subjectivity of the narrative as determined by the game master, is technically a game mechanic, which will be discussed later in the paper, but is important to bring up because that mechanic directly reinforces how a system of reward/consequence results in learning experiences for the players through their characters.

Cover (2010) gives another principle that highlights the effectiveness of TRPGs for influencing real-world behaviors called the principle of minimal departure, which outlines how the creation of fantasy worlds or APWs entails a reliance on our current understanding of the actual world as a jumping-off point, not a complete fabrication of an entirely new world. All fictitious worlds, therefore, share some basic commonalities with the AW as we perceive it (a reflection *of* the AW), which is necessary if these APWs are to serve as mechanisms for reflecting *on* the AW. It is because of this principle that APWs serve as catalysts for the identification and exploration of inconsistencies or limited paradigms that we encounter in the AW, and how we make connections between the experience of the TRPG and the AW, which result in creating opportunities for us to transfer the experience of the game into real-world applications (Cover, 2010).

Laycock (2019) builds on this, stating that as a reflection of the world, game fantasies frequently allow players to take previously ineffable or inexplicable experiences from their lives and make sense of them. It is this aspect of games, he continues, that makes them so well-suited to psychoanalysis, giving players the ability to express elements of their world view they previously may have unable to do. As a reflection on the world, games create opportunities for exploring possibilities, which even goes as far as players reframing the actual world through the lens of the game's APW to rapidly reframe complex situations they later encounter (Laycock, 2010). Bowman (2010) holds a similar position, though from the position of taking on the role of a new character to cultivate that shared experience between worlds. By inhabiting the head space of a character, particularly one who holds fundamentally different world views and experiences the world differently from the player, players cultivate their ability to practice theory of mind and translate that skillset into the AW (Bowman, 2010).

The experience of immersing in both the narrative and the character during a TRPG has been recorded in several surveys and ethnographic studies as manifesting in the actual lives of the players, especially if they've participated in TRPGs over a long period of time. Laycock (2019) interviewed several TRPG players who have used their experiences in the games they've played to explore alternate identities that helped them establish their actual identity and worldview in the real world. The experiences helped them create their own narrative for perceiving and interpreting the actual world even in the most complex or ambiguous of situations. Other interviews highlighted attributional transference from character to player, where characters that possessed attributes that the players desired but felt they personally lacked ultimately became points of reference for how the players reacted in certain situations. Players reported channeling those attributes, facilitating an active change of behavior in personal and/or professional lives (and in some cases, going as far as influencing career paths) (Bowman, 2010; Laycock, 2019).

This aspect of the TRPG experience can be further enhanced over time, as the game master begins to learn more about the players, giving them the ability to intentionally curate the narrative experience to incorporate situations and contexts that reflect the real lives of the players, good and bad (Cover, 2010). As a result, the theory of mind skillset for players is pushed beyond simply imagining "what someone else might think/feel/do in this situation" to actively embodying that headspace through narrative interaction, forcing paradigm shifts and the adoption of belief systems alternate to their own (Bowman, 2010). The specific considerations for how best to do this are explored as part of the outcomes of this project, as it is an important aspect of leveraging TRPGs to develop and highlight creative experience identifiers and skills.

TRPGs and Skill Acquisition

Before transitioning into the outcomes of how TRPGs can be used, it feels prudent to articulate why, given the previous sections on narrative, immersion, and play along with transfer of experience, I believe TRPGs are under utilized tools primed for the cultivation of creativity. This section will highlight with greater specificity how existing research supports the primary purpose of this project.

Bowman (2010) writes that the practice of role-playing writ large entails three major functions: scenario building, problem-solving, and skill training. This project's focus on TRPGs addresses all three, but the project specifically emphasizes skill training above the others, though this is made possible because of the added inclusion of scenario building and problem-solving that are inherent to TRPGs. TRPGs are a form of active learning, which is recognized by many researchers to be superior to passive learning because it allows for high levels of engagement, interactivity, and divergence as opposed to passive learning, which is unidirectional delivery of information (Bowman, 2010).

According to Bowman (2010), TRPGs provide an expedient transition from learning to application compared to passive education and the subsequent need to acquire "real-world experience." TRPGs can often facilitate a greater number of ideas, concepts, skills, and techniques than traditional learning approaches, with research showing that a 10-minute role-play is more effective than a 30- or 40-minute passive learning delivery approach. This is largely due to the ability for TRPGs to provide immediate feedback during and after the game, and because of the element of play and enjoyment experienced in the activity, made possible by the mitigation of real-world risk outlined in previous sections (Bowman, 2010).

The opportunity to shift perspectives and adopt alternate world views, with the added benefit of not just imagining but embodying these alternate identities, gives TRPG players a safe way to examine their ethical value systems in tough decision-making situations and test their comprehension of the acceptableness of certain behaviors through feedback and consequences. Additionally, this helps cultivate coping skills in complex situations, foster prioritization of goals and actions, and develop their ability to delay gratification through self-regulation. The safety to explore all of these skills, as well as personal, interpersonal, cognitive, and professional skills simultaneously through the disarming and enjoyable mechanism of game play that is not bound to the same rules and social norms of the actual world, is unique to TRPGs (Bowman, 2010).

The occupation of an alternate possible world and an alternate form of identity that is both separate from and yet exists within the actual world is a process of reaching liminality or occupying the space "betwixt and between" (Bowman, 2010; Laycock, 2019). Within this liminal space, players embody the archetypal "Hero's Journey" first introduced by Joseph Campbell, wherein the struggles or challenges of the players' actual lives are symbolically represented within the greater narrative of the game, giving them an opportunity to explore how to overcome these challenges and reemerge into society with newly developed skills and abilities (Bowman, 2010). This reemergence with new skills and abilities honed through facing and ultimately

conquering fears, weaknesses, or challenges is common in the creation and telling of myths and lore, a practice that society has long abandoned outside of television and movies, and therefore is increasingly difficult to apply and practice. Particularly with creativity skills, which are built upon what are commonly referred to as "soft skills" or affective skills, this challenge is present and real.

Given that a multitude of affective skills, to include empathy/pluri-perspective, tolerance for ambiguity/nonlinearity, open-endedness, and orientation toward the future (as opposed to the pragmatic approach Western society emphasizes) are not easily quantifiable or observable, the challenge of fostering them to increase personal and professional creativity is difficult.

TRPGs present an opportunity to leverage the elements of myth that once made them a ubiquitous tool for transferring knowledge and experience across generations through narrative for now exploring and practicing the application of these affective skills.

Cognitive research has shown that practicing the arts can cultivate the capacity for creativity overall, and practices such as process drama allow instructors to teach difficult content like moral concepts by using drama as a vehicle (Bowman, 2010). Process drama allows learners to enact the material, making it more relevant and unforgettable over time. It is, however, a specific form of role-playing, and is better suited for pedagogic applications than andragogic applications, since adult learners typically want a sense of autonomy, relevance, and observable transference of skills to contexts they consider valuable (Bowman, 2010). TRPGs provide a better venue for addressing the concerns of adult skill development because they provide a venue for building buy-in and relevance that transcends the actual world, potentially drawing a larger audience of learners than might otherwise be possible.

Bowman (2010) discusses how TRPG character identities develop empathy skills by fostering emotional immersion and theory of mind. Citing Marsh (2006), Bowman (2010) shares how player-character interactions increase compassionate empathy, while player-player and player-narrative interactions manifest increased cognitive empathy, and reiterating that

emotional empathy is uniquely felt through TRPG character roles as if the emotions were the players' own. In addition to enhancing empathy, role-taking in TRPGs also enhances group conscience and self-awareness, which are not specific goals for this project but present a bonus in terms of return-on-investment (Bowman, 2010).

Bowman's (2010) ethnographic work included surveying a large population of TRPG gamers, the majority of whom report that the practice of TRPGs introduced them to a variety of different paradigms they never would have been exposed to otherwise. Through the process of enactment of different states of consciousness inherent to immersive role-play, players became more aware of prejudices, oppression, and other moral quandaries present within systems residing in the actual world. This ability to cultivate empathy and pluri-perspective from a systemic view is the result of practiced repetition through immersion in different theories of mind, something that is not able to be replicated in the actual world without real consequences for failure and missteps. The threat of consequences and their impact on a person's actual livelihood are primary reasons I believe that empathy/pluri-perspective and other affective skills are so difficult to train without TRPGs, and why I propose they are the best vehicle for cultivating creative potential and validating that creativity is, as Glăveanu and Beghetto (2021) suggest, a lived experience identified by more than just a creative output. This is especially true when considering the role that gender, race, sex, and/or religion plays on the perspective, as it is incredibly difficult to simply imagine the lived experiences presented by differences such as these, which often come with incredibly different socially constructed norms.

TRPGs offer a way to experience these dramatically different social contexts and develop a better theory of mind from which to consider them in the actual world compared to just imagining them, because TRPGs allow players to experiment with a variety of different social behaviors and receive feedback (and in some cases, consequences) that may or may not be "fair." Alternatively, and equally important, the immersion into a narrative where players are assuming identities that force them to adopt completely different belief systems allow players to

explore and make better sense of why certain people may tolerate racist, homophobic, or sexist attitudes in themselves or others (Bowman, 2010). This is not meant to justify such behaviors, but rather to allow players to translate those experiences into applications to understand and better communicate with those in their lives that do hold those positions, as well as to potentially identify where they may subconsciously have similar inherent biases of their own that need to be adjusted.

Cover (2010) explores this skill acquisition concept from the perspective of the social motive for TRPG participation by the players, explaining that there is usually one or more instances of an exigence, or societal imperfection, that players and/or their characters are united in rectifying. The nature of TRPGs as a means of interpreting an experience from the AW in the APW gives the players tools for creating a narrative which provides clarity, making TRPGs especially effective for examining current political or cultural flashpoints in the real world (Bowman, 2010).

The additional benefit to immersion in an alternate identity and within a narrative structure is the ability to acquire skills in understanding the perspectives of different cultures (both macro and micro) (Bowman, 2010). The capability to understand cultural paradigms is critical for fostering a more systemic way of thinking about how actions impact parts of the world differently, in the same way that the capability to develop theory of mind through individual paradigm recognition helps us foster individual empathy. This systemic perspective of the world leads to increased appreciation for nonlinearity and orientation toward the future. Gaining experience of living in alternate cultural paradigms, even through the use of fantasy worlds and characters, helps players explore the nonlinearity of social constructions like geographic boundaries, socioeconomic conditions, impacts of war and natural disasters, and other frames that we often perceive as well-defined and isolated in nature (Bowman, 2010). Additionally, this new recognition and understanding of different cultural paradigms associates with the creative experience identifier of orientation toward the future, because it allows players to begin to

examine the possible on-going impacts of a particular action more systemically: what's good for the goose is not always good for the gander, especially if the goose is not able to conceptualize that what is true for the goose's experience of the world is not universal, particularly for otters, lions, or salmon.

Due to the co-creation of the ongoing narrative and shaping of the alternate possible world occupied by the players during TRPG play, skills such as tolerance for ambiguity/nonlinearity are further developed. Players learn to address spontaneity, as many contexts and situations of the TRPG narrative unfold in real-time because of the actions and interactions of all the characters. This forces players to think on their feet almost continuously to address complex problems creatively and in ways that they feel might result in positive outcomes (Bowman, 2010). The mental agility and constant opportunity for practice within the TRPG helps players build a mental model for creativity that can be applied to the real world, and Bowman (2010) points out that the rewards and consequences in-game foster reflective thinking, self-awareness, observational abilities, and moral sensibilities. Possibilities thinking, or orientation toward the future, is another trait that was reported in Bowman's (2010) surveys as noticeably increased by TRPG players within their daily lives, not just within the context of the TRPG itself.

While many forms of gaming have demonstrably shown a capacity for increasing a variety of cognitive skills depending on the game, several key elements set TRPGs apart, many of which have been mentioned throughout this literature review. First, TRPGs utilize rewards and consequences for feedback and learning. While many games may have some form of consequence for poor decisions or actions made by the player, TRPGs differ in that the consequences happen to the character (which is more impactful due to immersion) and impact the overall narrative, often permanently, in ways that video games do not. There is no reloading the game at a previous point or respawning if you die, the consequence is permanent, and the narrative is forever altered.

Secondly, the narrative itself: TRPGs utilize a co-created, emergent narrative where each player has narrative agency to some degree, allowing vast possibilities for exploration of both the alternate possible world and the character alike. Cover (2010) highlights how TRPGs are unique in that they are ripe for narrative possibility, a trait that is not replicated even in other RPG formats. Third, TRPGs are social by nature, meaning that the players and the game master interact within a separate frame that is entirely liminal in nature, yet critical to the immersion that is a hallmark of the TRPG experience. Other game styles may have socialization options, but the social frame does not directly impact the immersion or narrative of the game in the way that is seen in TRPGs.

Why This Project Exists

The myriad of cognitive skills impacted by playing games, in general, are often underappreciated, though Bowman (2010) makes a strong case for the importance of TRPGs in skill acquisition that I will echo as a primary driver for the use of TRPGs in creativity cultivation: the brain is a muscle, and the more repetitions and varieties of ways we use it, the better we become at reshaping and developing cognitive abilities. While there are potentially innumerable varied activities to exercise our brains' cognitive acquisitions, TRPGs are clearly shown to exercise and enhance our social and mental processes in multiple dimensions (Bowman, 2010). I suspect that there are few activities rooted in play or games that specifically allow for the exploration, practice, and mastery of the affective skills comprising the foundation of creativity better than TRPGs. The outcomes of this project will lay the groundwork for how we might intentionally design the TRPG experience to highlight and develop those skills through the provision of a creative experience.

Laycock (2019) supplies an outline of how reality is socially constructed that was adapted from a book by Peter Berger, arguing that human beings and the realities they create mold each other in a three-part process of externalization, objectivation, and internalization. The

imposition of meaning onto the world that occurs in externalization becomes objectified when the perception of subjectivity that exists during the time of its initial externalization fades, and at this point the social construct becomes internalized and objectively "true," influencing how humanity shapes itself in response to that perceived truth (Laycock, 2019). While Laycock goes on to extrapolate this concept to account for the position of oppositionists during the time of the moral panic against fantasy role playing games, I am extrapolating it from the position that TRPGs provide real experiences that shape our lives.

Participating in a TRPG requires the players and the GM to co-create the narrative together, adding meaning and symbolism to the alternate possible world, then experiencing that world and that identity narratively just as in any other lived experience. The longer that narrative experience holds true, the more the players can objectify the meaning, ultimately internalizing it and allowing it to shape them. It's this model that best articulates from a sociological perspective the power of TRPGs to create meaningful experiences that directly impact our ability to acquire skills and knowledge that extend beyond the game itself and into our actual world.

SECTION THREE: PROCESS PLAN

Plan to Achieve Goals and Outcomes

Given the broad scope of this project's content area, success is defined as a comprehensive collection of considerations and gameplay elements that may be modified to achieve increased individual creativity of the players when using an existing TRPG framework. The collection will focus predominantly on the overlap of the creative experience identifier of pluri-perspective and the affective skill of empathy. Empathy is being used as an encompassing term for the beyonder skills "produce and consider many alternatives," "look at it another way," and "be flexible" (Torrance & Safter, 1999). Each table will also include a list of additional creative experience identifiers and affective skills (I&S) that are engaged by the modification options.

To properly achieve the goal of creating this initial collection of elements for TRPG modification, several aspects must be explored and analyzed. First, the existing lore and game system mechanics of off-the-shelf TRPGs must be understood well enough to ensure relatively universal fit and cohesiveness of the recommended modifications. Second, the components of TRPGs that contribute most to player immersion and world-building must be identified and understood so that they can be modified to leverage the value of immersion on long-term player outcomes. Third, character creation elements must be explored for opportunities to deliberately alter the perspective and frame of player characters (PCs) enough to be differentiated from the context of their actual daily lives, but not so much that they lose autonomy and freedom to cocreate. Lastly, to the greatest extent possible, a collection of Game Master (GM) guidelines and considerations that better facilitate skill development without direct coaching should be included. The GM collection must be understandable enough that a GM can adequately adjudicate and improvise during gameplay without loss of coherence or consistency, and without disrupting the immersion of the players.

While achieving an actual assessment of all identifiers and skills (I&S) is not tenable during the scope of this project, consideration of precisely how future participants may be assessed prior to and following the conduct of the game will be included as part of the modification developments. These assessment possibilities will be used to inform how TRPGs might be designed or modified, particularly with how the GM introduces opportunities for exploration, experimentation, and application of creative competencies related to the I&S but will not be specifically articulated in this project.

If completed successfully, this project will be the beginning of a GM guide for creative competency development through TRPG facilitation, and the groundwork for creating standalone modules for TRPGs designed specifically for exploration of creative experience identifiers and foundational affective skills. This allows for future development of TRPG modules (either independent of, or integrated within, an existing story system) that explore different creative competencies, as well as influencing which assessment mechanisms are used for the intended I&S. Future development of these TRPG modules and GM guidelines presents the opportunity to start testing and gathering data on the effectiveness of the concept, which is a fundamental requirement for validating the approach and spurring interest in expanded development of the TRPG training concept for creativity.

Project Timeline

Key Submission Deadlines

Initial concept paper submission: February 13, 2023.

Sections 1-3 submitted: March 21, 2023.

Sections 4-6 submitted: April 23, 2023.

Completed project submitted: May 1, 2023.

Key Project Milestones

Initial module design mapping: February 25, 2023.

Assessment criteria exploration completed: March 4, 2023.

GM framework outline completed: March 11, 2023.

Scenario modification exploration and experimentation: March 18, 2023.

GM modification and experimentation: March 25, 2023.

Character creation modification and experimentation: April 1, 2023.

Initial compilation of key elements and considerations: April 8, 2023.

Final refinement of TRPG and GM key elements for modification: April 15, 2023.

Completed project package (all elements): April 22, 2023.

Detailed Weekly Timeline

Week of 13-19 February (20 hours).

Background research, part one. During this week, I will begin assessing and analyzing the additional resources outlined in section two of the concept paper. This will require approximately 20 hours of reading and annotation alone. Additionally, during this week I will identify any living sources related to game design or RPG research that may be open to interviews and dialogue that would inform the project's completion successfully.

Week of 20-26 February (15 hours).

Background research, part two. This week's focus will be completing the assessment and analysis of the additional resources, as well as the finalizing of any interview timelines and question sets. Anticipated time commitment:10 hours.

Initial project mapping. I will outline and explore how to frame and create the modules within a chosen TRPG context during this week. This will be a rough outline, not a detailed approach at this point. Observations and reflections will be recorded in a personal project journal for easier recall during later writings. Anticipated time commitment: 5 hours.

Week of 27 February – 05 March (10 hours).

Write section one and section two of the project paper. Following successful completion of all background research, this week will be spent on the completion of section one (background to project) and section two (pertinent literature or resources) of the project paper.

Anticipated time commitment: 6 hours (2 hours and 4 hours, respectively).

Complete assessment criteria evaluation. This week will also focus on the assessment, analysis, and selection of possible assessment criteria and methods associated with the project. Observations and reflections will be recorded in the personal project journal. Anticipated time commitment: 4 hours.

Week of 06-12 March (15 hours).

Develop initial framework for game master (GM) guide. This week will dedicate a large amount of time to the thoughtful development of a framework that captures all of the critical considerations and components that a GM will require to properly facilitate the scenarios for development of desired I&S. This is likely to be one of the more challenging steps of the project, as it will require a high degree of creativity and the incorporation of several background resources to execute properly. Observations and reflections will be recorded in the personal project journal. Anticipated time commitment: 15 hours.

Week of 13-19 March (15 hours).

Scenario modification and experimentation. This week will focus on experimenting with how scenarios might be modified or designed for I&S development. This will be the second-most challenging portion of the project, as it will require a high degree of intentionality and creativity to develop a myriad of opportunities for creative competency engagement that are not overt, yet not so subtle as to be easily dismissed. Initial rewards, consequences, and outcomes will be outlined for key junctures in the story, but refinement of these elements will be completed later. Observations and reflections will be recorded in the project journal. Anticipated time commitment: 10 hours.

Write section three of project paper. This week will conclude with the writing of section three (process plan) of the project paper. While the general timeline is unlikely to change drastically, greater articulation of the process itself will be developed and written. Anticipated time commitment: 5 hours.

Week of 20-26 March (10 hours).

GM modification and Experimentation. During this week, the GM elements will be revisited and experimented with, developing the rough draft into a more complete product. While not quite as cognitively demanding as the first engagement, this will still require a high degree of creativity and deliberate assessment to ensure that all the appropriate elements are accounted for, and that there are not aspects that are too vague or ignored altogether that might impact player immersion into the story. Observations and reflections will be recorded in the project journal. Anticipated time commitment: 10 hours.

Week of 27 March – 02 April (15 hours).

Character creation modification and experimentation. Following completion of the GM elements in the prior week, attention will be given this week to character creation guidelines for participants. While the dominant structure of character creation will be derived from whatever system exists within the off-the-shelf TRPG universe, the guidelines will be developed to help the GM prompt consideration of character creation that is, in some way, fundamentally different from a player's every-day experience. Examples may include suggestions about gender selection, race selection, or other attributes that can be explored which may yield different experiences than players are accustomed to. Observations and reflections will be recorded in the project journal. Anticipated time commitment: 5 hours.

Week of 03-09 April (10 hours).

Initial compilation of key elements and modifications. Initial arrangement and presentation of the modification elements will be done. Final structure and presentation quality will be handled the following week, so the goal for this week is to take the myriad of

observations and notes and synthesize them into more articulate statements and instructions.

Anticipated time commitment: 10 hours.

Write initial portion of section four. The latter half of this week will be dedicated to writing the bulk of section four (outcomes) of the project paper. Using the project journal as a guide, the outcomes of the project will be articulated and explored in-depth. The intent is not to complete the entire section, as some elements are still not complete, but rather to capture the outcomes up to this point and complete the section after the remaining outcomes are finalized. Anticipated time commitment: 5 hours.

Week of 10-16 April (12 hours).

Final revisions and completion key elements guide. This week's intent is to make any final revisions, edits, or additions to the scenario, character creation, or GM recommendations as necessary. The compiled guide will be reviewed for cohesion, as well as key skill applications. Aspects that would inform assessment criteria during implementation will be reviewed, and any inconsistencies or ill-defined elements will be corrected accordingly.

Observations and reflections will be recorded in the project journal. Anticipated time commitment: 5 hours.

Write the initial portion of section five. This week will dedicate time to drafting most of section five (key learnings) of the project paper. Using the project journal as a guide, a reflection and articulation of all the key learnings up to this point will be completed. Anticipated time commitment: 7 hours.

Week of 17-23 April (10 hours).

Write section six of the project paper. This week will focus on writing section six (conclusion) of the project paper. Deliberate evaluation of the project, start to finish, using the project journal as a recall source will be done. Articulation of the conclusions reached, possible areas for future study/research, and a completed reference section will be finalized. Anticipated time commitment: 5 hours.

Complete sections four and five of project paper. Sections four and five will be revisited to ensure final outcomes and key learnings are appropriately captured, ensuring that the entirety of the project is accounted for in both sections. Particular attention will be given to the final evaluation of the project for section five, to include reflection on areas that did not meet the desired intent as appropriate. Anticipated time commitment: 5 hours.

Week of 24-30 April (10 hours).

Completed project package. The final full week of the project will be used to complete the total project package, paying attention to the actual project elements and developing a refined and aesthetically pleasing presentation of the GM Guide and Scenario module. Time will also be given to developing and/or compiling any visual aids, such as maps, character sheets, or illustrations that accompany the module. Observations and reflections will be recorded in the project journal. Anticipated time commitment: 7 hours.

Finalized project paper. The latter half of the week will focus on completion of the total project paper. Formatting, citations, and appendices will be reviewed and incorporated into the existing written sections. Anticipated time commitment: 3 hours.

Evaluation Plan

Success in this project is an exploration that results in the creation of a workable guide for modifying existing TRPGs and establishes a starting point for future guidelines to develop intentionally designed TRPGs that facilitate a creative experience. In order to evaluate this, I will use the timetable presented (did I hit each benchmark in a timely manner, and if not, did I at least complete all elements prior to the end of the project?), as well as how well the created guide is positioned achieve pre- and post-assessments. Part of the project journey itself is exploring what elements have the greatest impact on the experience of TRPGs, so substantiation within the background literature as well as expansion within the outcomes is paramount.

Since this project is simply creating modification elements for future TRPG testing and experimentation, quantitative evaluation is not possible. Instead, the focus will be qualitatively evaluating how well the project leverages and builds on the background research and literature. The other means for evaluation will be articulation of project components' connection to the engaged I&S. Lastly, a subjective initial assessment of whether the final outcomes are capable of an initial round of testing with actual participants will be done. Future work in developing and play-testing the elements will go a long way in determining if the initial hypothesis is even realistic or worth exploring, which is the long-term aspiration behind the project.

SECTION FOUR: OUTCOMES

Throughout the execution of this project, the overall goal and outcomes were incredibly fluid, with the original goal quickly being identified as too large in scope for the time constraints of the project. Additionally, shortly after the acceptance of the project proposal, my discovery of a veritable treasure-trove of previously undiscovered research fundamentally altered the direction of the project, both due to the amount of time it took to read and synthesize and to the insights made during synthesis. Ultimately, the project outcomes evolved to produce the following deliverables:

- Modification Considerations to TRPG Character Creation for Creativity Skill Cultivation (Table 2).
- Modification Considerations for TRPG Game Mechanics and Game Master Facilitation for Creativity Skill Cultivation (Table 3).
- 3. TRPG and Creativity Research Opportunity Assessment

All deliverables are intended for a broad selection of TRPG systems, but were designed using Dungeons & Dragons, 5th Edition as a reference framework. This was due to the accessibility of the Dungeon Master's Guide and the overall popularity of the game in comparison to other TRPG systems. These deliverables are only a starting point and require consideration before inclusion, as some may be mutually exclusive or may not be appropriate for the desired outcome that is sought. All recommendations will facilitate a higher degree of intentionality in designing a creative experience using a TRPG system. The third deliverable is the opportunity assessment, which identifies the shortfalls in existing TRPG research and presents a list of possible future research pathways substantiated by existing knowledge and research gaps.

The following table is provided as a creative experience identifier/creativity skill reference for the subsequent tables. Beyonder Skills were adapted using Burnett and Figliotti's

(2020) revised skill list, which is slightly expanded from the original list of skills provided by Torrance and Shafter (1999). Creativity skills are listed in each box, and creative experience identifiers are in bold text. Each deliverable table lists the engaged identifiers and skills (I&S) using the alphanumeric symbol(s) in each box. A combination of creativity skills and creative experience identifiers will be conjoined in the tables where applicable.

Example: An option that engages both the skill of "Keep Open" and the identifier of "Open-Endedness" would be annotated as: (a2). An option that only targets one skill, like Playfulness & Humor, would be labeled: (k).

Table 1Creativity Skill and Creative Experience Identifier Reference Table

a. Keep Open	b. Curiosity	c. Look at it Another Way	d. Risk-Taking
e. Embrace the Challenge	f. Highlight the Essence	g. Produce & Consider Many Alternatives	h. Be Flexible
i. Elaborate, but not Excessively	j. Be Original	k. Playfulness & Humor	I. Enjoy and Use Fantasy
m. Make it Sing, Make it Ring	n. Visualize it Richly and Colorfully	o. Be Aware of Emotions	p. Embrace Ambiguity
q. Mindfulness	r. Break Through and Extend Boundaries	s. Get Glimpses of the Future	t. Put Ideas into Context
u. Combine & Synthesize			
1. Pluri-Perspective	2. Open-Endedness	3. Nonlinearity	4. Future Orientation

Deliverable 1: Modification Considerations to TRPG Character Creation for Creativity Skill Cultivation

As highlighted in section two, character creation represents the highest degree of control players perceive during participation in a TRPG, and this perception of control is critical for fostering a sense of emotional and spatial immersion as well as the first sense of narrative agency for the players (Bowman, 2010; Cover, 2010). In consideration of the project's position that TRPGs are well-suited to develop creativity identifiers and skills, some options presented were developed from the perspective of possible single-day, short duration training events with specific desired goals, but tried to maintain some degree of creative autonomy for the players. The following table outlines considerations for possible additions or modifications to existing TRPG character creation systems to foster creativity identifiers and skills.

Table 2 *Modification Considerations to TRPG Character Creation for Creativity Skill Cultivation*

Element 1: Character Creation as an Extension of the Ideal Self		
Use these options when players are likely to generate characters that are extensions of their real identities (most common in new players) to encourage exploration of alternate identities or traits.	c1, e2, f1,	
Option 1: The Ideal Self Approach	p3, o1, q3	
Employ prompts during character creation that identify player traits they		
wish they had, traits they wish they could minimize (temper, social		
anxiety, etc.), and traits they are proud of.		
 Have players use this list to create a character that represents this ideal 		
list of strengths and mitigates these weaknesses but keeps the traits they		
like most about themselves.		
Option 2: The Frame Shift Approach		
 Players identify and articulate their personal identity like race, sex, gender 		
identity, religion, economic position, etc. as appropriate.		

Using this list, encourage players to create a character that does not	a2, b2, c1,	
share the same identity. This can be all factors, or scaled to changing	e2, g1, h2,	
only 1 or 2 of these factors (i.e., Gender and Race).	o1, p3, q3,	
For fantasy games, race can be altered to accurately reflect the closest	t1, j	
version of the game system equivalent (i.e., White, Black, or Asian don't		
exist, but an analogous "majority" group and an antecedent might).		
Option 3: Rolling for Perspective		
During character creation, establish one or more lists in categories you	a2, e2, d2,	
wish players to explore during the TRPG, such as prejudices, biases,	h2, i, l, o1,	
gender identity (separate from their character sex that they choose),	q3, u3	
vices, traumas, dispositions, character flaws, or others.		
 After players have created their characters, have each player roll the 		
appropriate dice (6 options = 6-sided die, etc.) to identify which attribute		
off of each list they must now incorporate into the creation of their		
character.		
■ If possible, have players clarify details, i.e., "Prejudiced. Okay, well my		
character is an elf, so they would naturally have a prejudice against		
humans due to centuries of conflict and oppression that humans placed		
upon elves."		
Element 2: Pre-Generated Characters for Short-Duration/One-Off Events		
Use these options when you are using TRPGs in a one-off/single event setting		
that is unlikely to result in episodic continuations and/or where time is limited and character creation must be expedited.	f1, g1, h2, j,	
Option 1: Generic Character Set (Specified Breakdown)	I, o1, p3, q3,	
 Identify the number of characters required to run the game. 	t1, u3	
 Using the overarching narrative context and desired behavior exploration 		
]	

as a reference, create a diverse set of characters that are heterogenous and represent a contextually appropriate spread of backgrounds, identities, and experiences.

- Generate a brief backstory of no more than 1 page to orient players to the initial perspective of their character.
- Identify two or three "challenge points" to integrate into the story for each character that highlight a unique element of their experience.
- For added benefit, distribute characters intentionally to participants to challenge what you perceive their perspective might be (i.e., give female characters to male players, etc.) if this is possible.

Option 2: Survey-Generated Character Options

This is ideal for intentional training-based applications with a clearly articulated desired effect, i.e., "increase employee empathy."

- Create a survey that players/participants complete prior to the day of the game that allows them to provide you with key aspects of their identity.
- Beyond the basics of race/sex/age/gender/etc., allow players to incorporate ideal traits they aspire to, their strengths, their weaknesses, how they define family, and other personal stories/anecdotes as appropriate. These must be optional.
- Utilize the surveys to create custom character creation sheets for each participant. Sheets should include options, but deliberately remove options that too closely align a player's real identity wherever that might be counter-productive to achieving the right outcome. This provides a sense of choice/control in character creation, but keeps it expedient and targeted for the intent of the application.

q3, i, f1, c1, a2, e2, r3, p3, i, d2

Element 3: Character Evolution During TRPG Execution

These options are most appropriate if you need to introduce alterations or modifications to facilitate new perspectives after characters are already involved in the narrative of the TRPG.

Option 1: The Magic Item Switch

- To facilitate a perspective shift between sex/gender interactions with the world, introduce an item that forcibly changes the sex/gender of the character (either/or, or both, at your discretion).
- The item's feature must not be known. Once the character takes the item and/or uses it unwittingly, their gender, sex, or both is permanently changed. This magic cannot be undone, blocked, or reversed.
- For continuity, be sure to establish an origin for the item and the curse/spell/enchantment that is canonically sound.
- It is up to the GM to determine if/when the spell fades, reverses, or can be undone.

Option 2: The Role Reversal

- When characters appear to establish social structures that are adherent to conventional social norms due to player personality (aggressiveness, domineering, etc.), guide the narrative toward an environment and context that is directly contradictory, thereby forcing "supporting" characters into more of a lead role and pushing "dominant" characters into more supporting roles.
- Example: a group of coed characters has a dominant male character played by dominant male player take the de-facto "lead" and final decision-making authority on behalf of the group. Their journey, then, might take them to a society/culture where the polar opposite of a

a2, c1, d2, e2, g1, h2, k, l, o1, p3, t1, u3

a2, c1, d2, e2, g1, h2, l, o1, p3, t1, u3 patriarchy exists, where the female leadership of the society (and the population in general) pays little regard to the male(s) and defaults to the female characters instead, thus reversing the power dynamic in the group while also giving the male players some perspective through the lens of their characters on the female experience within a male-dominated system.

Option 3: The Body Swap

- A less intense version of Option 1, this option can be done through a variety of mechanics, but a magical item is the easiest.
- Two or more characters, through some happenstance or circumstance, are shuffled, and each "awaken" to find they are now occupying another character's body, complete with that set of skills and abilities.
- The duration and conditions are entirely up to the GM, though they should be consistent with the narrative and provide a mechanism for an eventual return to normalcy, whether through a series of demonstrated perspective shifts or prescribed actions.

a2, b2, c1,

e2, g1, h2,

k, l, o1, p3,

q3, r3, t1,

u3

Deliverable 2: Modification Considerations to TRPG Game Mechanics and Game Master Options for Creativity Skill Cultivation

Game mechanics are one of the best ways to accommodate the exploration of multiple creativity I&S during TRPG play due to their wide-ranging and customizable nature. While every TRPG system has its own core set of rules and game mechanics, they all offer the GM the ability to add to, modify, or reinterpret the system as they see fit. It would be unfeasible to attempt to account for all of the possible game mechanics of any given TRPG within this project,

as a single game system alone can span 300 or more pages, as the Dungeons & Dragons Dungeon Master Guide does (and still requiring a second volume, Advanced Dungeons & Dragons). It's important, to at least provide an overview of how game mechanics serve multiple purposes within a TRPG game system, though, to better frame the offered considerations in Table 3.

Game mechanics represent one of the game master's strongest vehicles for guiding the narrative and maintaining structure as the co-creative process is undertaken. As such, regardless of the rules in place, the GM is accepted as having the final word on an interpretation of any rule or situation, with authority to discard those rules entirely if the GM deems it appropriate for the progression of the game. That said, this does not mean that the GM has free reign to simply make arbitrary decisions, and adult players of TRGPs expect that the game system (the established rules, set within a plausible reality and context for the alternate world) is clearly agreed upon and accepted prior to the TRPG beginning (Bowman, 2010). The absence of this social contract between all the players and the GM results in a derailment of the narrative and a likely rapid dissolvement of the group.

Game mechanics and the game system establish a foundational understanding of how the characters receive rewards and consequences, and usually set a basic guideline for the use of dice rolling (or a comparable "fate" system). As outlined in section two of the project, this objective "fate" element is critical to players feeling that they maintain control and agency over the decisions and outcomes of their characters, and deepens their immersion in the experience (Bowman, 2010; Cover, 2010). Bowman (2010) points out that due to the relatively extensive rulesets of TRPG game systems, players may opt to start with looser interpretations and adherence to the game mechanics, gradually adjusting them as they gain experience, both in the game and with one-another, which is paramount to achieving longevity of play.

The more common game mechanics have been widely adopted across games or incorporated with other elements from a variety of TRPG systems. One of the earliest innovations in game mechanics was the introduction of the "skill-based" game system, which came about with the rise of mainstream science-fiction books and movies (Bowman, 2010). The skill-based system was introduced to replace the traditional "class-and-level" system, which was rigid and did not allow for a high degree of character story customization as the narrative and game progressed. Additionally, the skill-based system was reflective of a more modern conceptualization of personality and expanded characters beyond classic archetypes and binary alignments. This allowed players to have more say in how their characters evolved and grew with each level, affording them "points" to spend on certain skills, abilities, and attributes and giving them freedom to expand the character's personal narrative as to how or why they possessed the skills they did (Bowman, 2010).

In addition to established rules for the execution of the game and the acquisition of new skills and abilities for the characters, game mechanics also exist as an expanding social contract between players, and between the players and the GM. The modification of existing mechanics or the introduction of new mechanics is a large contributing factor to increasing social immersion by allowing agency in narrative condition setting (Cover, 2010). Through the collaborative development of mechanics, adjudication of disputes (in character and within the game frame) are more easily resolved and accepted, and the perception of bias or a "rigged" system is mitigated. More robust game mechanics also offer the GM more freedom in directing the narrative toward individual or cooperative learning opportunities due to an increased ability to respond to the individual needs of the players (Bowman, 2010).

While game mechanics are generally adjusted through consent and discussion of the players, the GM ultimately reserves the right to adjust them regardless of how the players feel.

That said, the following Table 3 includes only a handful of possible game mechanic alterations,

and it is recommended that they be incorporated as early in the game as possible, not arbitrarily interjected, to maintain social immersion and narrative consistency. It is also encouraged that the GM understands the foundational game system of the chosen TRPG prior to the implementation of these recommendations, so that they may be contextually modified and adjusted to fit the game system appropriately.

Originally, I had two separate tables: one for game mechanics, and one for GM considerations. Given the undeniable interdependency that game mechanics have on the GM and vise-versa, it was more sensible to combine these tables into one, since neither can effectively exist without the other.

Table 3Modification Considerations to TRPG Game Mechanics and Game Master Options for Creative
Skill Cultivation

These options are provided if a GM wishes to introduce more complexity/chaos into a narrative. This might be appropriate if you perceive players are playing it safe or if they are trying to meta-game too often due to robust understanding of the legacy game system. Option 1: Incorporating Dice/Fate to Mimic Chaos/Complexity At key decision points, crises, or junctures, predetermine a list of several responses/reactions players might receive based on their choices/actions/interactions within the narrative frame. In addition to the most obvious response options, generate three or four more options, with varying degrees of rationality or plausibility. Aim for at least six. When players make a decision at that juncture, roll the appropriate die to	Element 1: Enhance Nonlinearity/Reduce Causal Thinking Patterns	<u>I&S</u>
 At key decision points, crises, or junctures, predetermine a list of several responses/reactions players might receive based on their choices/actions/interactions within the narrative frame. In addition to the most obvious response options, generate three or four more options, with varying degrees of rationality or plausibility. Aim for at least six. 	into a narrative. This might be appropriate if you perceive players are playing it safe or if they are trying to meta-game too often due to robust understanding of	
determine what response the system/person/etc. uses, and allow the	 At key decision points, crises, or junctures, predetermine a list of several responses/reactions players might receive based on their choices/actions/interactions within the narrative frame. In addition to the most obvious response options, generate three or four more options, with varying degrees of rationality or plausibility. Aim for at least six. When players make a decision at that juncture, roll the appropriate die to 	e2, f1, g1, h2, j, k, l, n, o1, p3, q3,

narrative to build itself from there.

Note: This is not recommended at high-stakes junctures or life-and-death decisions. It is also recommended that you have a rough idea of the next few moments following each reaction/pathway but keep it broad and flexible to allow for improvisation based on the character interactions.

Option 2: "God Mode"

- Select a player that you will secretly provide with limited-duration power to alter whatever game mechanic they want at will (so long as they do it through the GM).
- e2, g1, i, j, k, l, m, n, p3, q3, r3, s4, t1, u3

b2, c1, d2,

- Inform them that this can be to add advantages, take away advantages, create uneven odds in their favor or against someone else, or something of that type.
- Develop a narrative-consistent source for this temporary power, and consequences if the rest of the group figures out that they possess this gift or identifies their involvement in seemingly disrupting an otherwise assumed causal action-reaction.
- Set a usage limit (one time/three time/etc.) and a time limit as a
 precaution against use of this power in the wrong context.

Option 3: Drop Your Tools

• Introduce an environmental condition or contextual element that places a "block" on the go-to skills/abilities/tools/attributes that a given character(s) defaults to most often. (i.e., a character that uses intimidation to progress dialogue options frequently suddenly loses all of their muscle mass and is now at disadvantage when using intimidation, if they can even use it at all, forcing them to explore new ways of communicating with other

a2, b2, c1, e2, g1, h2, j, o1, p3, q3, r3, t1, u3 characters)

- Nest this condition within a context that challenges players to start
 exploring how they can reframe situations and make use of other skills, or
 perhaps rely on other characters for assistance where previously they
 have not.
- Predetermine conditions that will remove this inhibition based on the desired outcome for the character, but do not immediately communicate this condition. In some cases, never communicate this condition until they've met it, at which point narration of how/why the condition was fixed is appropriate to reinforce the learning.

Element 2: Better Feedback System for Affective Skill Usage Attempts

These options are intended for situations where there is perceived apprehension or "awkwardness" related to players adopting/exploring character identities that are vastly different from their own.

Option 1: Affective Skill Acquisition System

- An adaption of the introduction of the skill-based game system, this option allows GMs to construct a separate system that rewards the use of affective skills in-character that results in a gain of game system attributes over time.
- Develop a conversion rate for affective skill use to skill point accumulation (and feel free to modify accordingly as needed). An example might be: for every 6 observable instances of true adoption of character identity/perspective, a player will be granted one skill point to spend on their character.
- To reinforce that part of the learning journey is trying, a value system for failed attempts is also recommended. In the context of learning to apply

a2, b2, d2,

e2, f1, g1,

h2, i, j, k, l,

n, o1, q3,

r3, s4, t1, u3

affective skills, every attempt counts, even unsuccessful ones. An example might be a three to one conversion, where three failed attempts made in honest effort count as one successful attempt accumulated.

It is up to the GM to determine if they wish to keep this tabulation secret,
 or if they want the players to know about the system.

Option 2: Creative Inspiration tokens

- A twist on "bardic inspiration" within Dungeons & Dragons, this option allows you to reward instances of creativity or other skills with a special token.
- If a character tries something truly unique, creative, or otherwise unexpected and surprising (in a positive way) that demonstrates a greater exploration of new thinking patterns in-character, they earn a "creative inspiration token" or whatever you wish to title it.
- This token, much like bardic inspiration, can give them the ability to leverage it during particularly difficult situations, though there are multiple ways to manifest this.
- Potential ways to use the token(s) are: to roll an additional die and add it to a particularly difficult roll; to restore spell slots/charges without taking a rest; to accumulate skill points through some form of point-buy system that utilizes accumulated "tokens" through some deity/entity/etc.
- The way the token is incorporated will be highly dependent on the GM, the TRPG system, and the needs of the group. The important element here is introducing a mechanism for rewarding this type of thinking, and developing a way to identify it/qualify it.

Option 3: The Evolution of Man

a2, b2, c1, d2, e2, g1, h2, j, k, l, n, o1, p3, q3,

r2, s4, t1, u3

- Develop and introduce an added skill or trait system that functions more like an evolutionary tree than a point-buy system.
- In the tree, outline options/pathways with what buffs, abilities, and features are associated with varying levels along the pathway.
- Introduce the system to the players, explaining the criteria for reaching certain stages of evolution. Thes criteria should be unique to different pathways, allowing players the freedom to choose which pathway (and which requisite skills/abilities) they wish to focus on developing. Ideally, these skills will be related to creativity skills and creative experience identifiers.
- For added immersion/buy-in, develop each path into an "archetype" that the characters can look at as an example to embody in their characters, similar to how myths used to use different archetypes to embody the attributes of certain heroes or deities.

Element 3: Opportunity Provision for Multiple Perspectives/Identity Shift

Option 1: Conditional Mood Swings

- To help players explore their characters in a more dynamic way, acknowledging that identities are rarely singular and often manifest in a variety of positive and negative ways, incorporate conditions to alter character dispositions in minor ways.
- You may choose to use an alignment system, or to create your own system for representing the highs, neutrals, and lows of mood and emotional well-being.
- Each "day" in the game, have the players roll a die that determines the secret prompt they will receive from you.

c1, d2, e2, f1, h2, i, j, l,

o1, p3, q3,

t1, u3

- Rolls that correspond with negative effects, such as a nightmare about a repressed childhood trauma, should result in a secret prompt instructing the player to explore how their character's mood, actions, interactions with others, and motivation might be altered after such an event.
 Particularly low rolls might even come with certain conditions that are disadvantaged, like exhaustion or depression.
- Rolls that correspond with positive effects, similarly, should result in prompts that encourage an exploration of their character through that lens, perhaps more playful, talkative, or self-confident than usual. A particularly high roll might even come with advantages on skill checks, like dexterity, charisma, or perception.
- bad, one bad, one neutral/melancholy, one neutral/cheerful, one good, one very good) for each character. These prompts can be generic and even the same, but the trick is to not let the characters be able to discern what one-another is receiving in the prompt initially. If characters embrace the prompt as designed, the other characters should be able to discern when a particularly extreme mood shift has occurred, and will likely ask why they're so out of sorts or particularly upbeat.
- The "reason" behind the prompt is something a GM can narrate to the player or they can ask the player to share why their character woke up in that particular state that day (which encourages more ownership and immersion in the exploration of these mood states).
- As appropriate, GM direction of rolls with advantage or disadvantage
 based on the activities of the characters is a good way to enhance this

option. For example, the first night of sleep after losing a member of the party might be rolled with disadvantage, with the lower of two rolls being taken.

Option 2: Environmental Mood Swings

- This option is executed the same way as option 1, but instead of using mood shifts that occur each day, the rolls occur when something environmental/contextual might play an impact on mood/disposition.
- This might be a moonless night in a deep woods, a lack of light in a cave system that is unsettling, or even the crowd of a bustling urban environment impacting a city-dweller character or a hermit character in different ways. If conditions are particularly well-suited to present an advantage or disadvantage, GMs may opt to forego rolls altogether and just narrate the mood shift as needed.

Option 3: The Deep Empath

- GMs may choose to provide one or more characters with a limited use ability (think once daily, once per long rest, etc.) that gives them the ability to go beyond a standard insight check and get deeply immersed in the headspace of another character (either player character, or narrativedriven non-playable character).
- This deep insight, when used on the right character, should result in the acquisition of highly useful knowledge that would otherwise be unobtainable or at least incredibly difficult to ascertain.
- A variation of this ability might not be to use a limited amount of charges,
 but to incur a temporary penalty or status for gaining this deep insight,
 such as a temporary confusion about which character they actually are,

c1, d2, e2, f1, h2, i, j, l, o1, p3, q3, t1, u3

a2, b2, c1, d2, e2, h2, k, l, n, o1, p3, q3, r3, s4, t1, u3

confusing themselves for the character they explored periodically, likely		
through a series of die rolls during interactions.		
Element 4: TRPG Condition Setting for Deeper Immersion		
Option 1: Pre-Game Rituals		
 In an effort to facilitate the transition from the actual world into a state of 	a2, b2, l, m,	
liminality that fosters immersion, GMs should establish a pre-game ritual	n, o1, q3, r3	
that is consistent, symbolizing the transition into the game world.		
 These rituals need not be elaborate, but should be consistent so as to 		
establish a sort-of Pavlovian effect that acts as a mental cue for both the		
GM and the Players and signifies the start of the game.		
 Examples might include lighting candles prior to starting the game, 		
conducting a collaborative recap of the previous game session, playing a		
particular song or track, or something else that is helpful to the group.		
Option 2: Post-Game Rituals		
 Just as option 1 helps transition into liminality, this option helps transition 	b2, c1, f, I,	
back to the actual world and encourages reflection on the experience of	n, o1, p3,	
the game.	q3, r3, s4,	
 As the session is closing, the GM should establish a ritual that allows for 	t1, u3	
a less abrupt "return to the real world" and gives players a few moments		
to reflect on the experiences of the game, encouraging them to process		
not just what happened, but why it happened.		
A brief guided reflection with eyes closed, prompting players to reflect first		
on the whole of the session, then on something their character did or		
experienced that they are particularly proud of and why, and then on		
something their character did or experienced that they were not		
<u>'</u>		

particularly happy about and why. Then ask them to imagine all the ways the story might go during the next session, good, bad, indifferent. Finally, ask them to reflect on something their character did that they would like to do themselves in their daily life, and explore how they can go about doing that between sessions.

If you did something physical during the pre-game ritual, such as lighting candles or playing a particular song, then close with the blowing out of candles or playing of an outro song to end the transition.

Option 3: Multisensory Experience

- If feasible, introduce elements that interact with multiple senses for the players.
- Background tracks and sound effects, temperature modification, lighting adjustments, adjustable fans for winds or weather, and scents/smells are all easy to achieve using minimal and low-cost materials (Lupton & Lipps, 2018).
- Temperature control can be effectively simulated psychologically with certain lighting colors, which is something to keep in mind if you don't have easy access to a space heater or cooling unit (Spence, 2020).
- To take it a step further, bringing in food and drinks that are similar in nature to what the characters might consume will also help with immersion, but be mindful about over-consumption if you choose to use beverages with alcohol. You should also verify any food allergy concerns or dietary restrictions if you're unsure.

Element 5: GM Options for Greater Creativity Skill Exploration

Option 1: Invite the Narrative Construction

b2, c1, f1, k, l, m, n, o1,

q3, r3, t1

- When you perceive the players are struggling to immerse or get involved in the game, be cognizant of how you are setting them up to co-create through your prompts.
- f1, g1, h2, i, j, k, l, m, n, o1, p3, q3,

r3, t1, u3

a2, c1, e2,

- Keep questions open-ended, such as "what is (character name) thinking/feeling about that?"
- Invite spontaneous character exploration with prompts such as,
 "(character name), give me a memory of your childhood" or "(character name), when you enter this city you suddenly experience a flashback.
 Can you please share it with us?"
- Invite perspective shifting during character interactions, especially in contentious or complex interactions through prompts like, "based on their reaction to your statement/action/attire/physical appearance, where do you think they're coming from?" or "what might they be assuming about you?"
- Avoid being overly-restrictive when world-setting in the narrative. Provide enough detail to set the spatial immersion, but allow enough ambiguity to let the characters dictate how the details of that space unfold.

Option 2: The Personal Touch

- If you have spent enough time with the players or know their personal lives well-enough, then option 2 is a way to start increasing the transference between the alternate possible world and the actual world on a more personal level.
- b2, c1, d2, e2, f1, g1 h2, i, l, n, o1, p3, q3,

r3, s4, t1, u3

Identify the important elements of a player's actual life as they see it. This can be values and successes they're proud of, and it can also be things they might be struggling with or processing emotionally at that time in

their life.

Use these elements to construct narrative opportunities that don't directly mimic but closely mirror opportunities for the character to address and process similar situations within the narrative of the game. This personal touch deepens the player's ability to immerse in the character, but also gives them a healing space to address real issues from their actual life that they might feel unequipped to handle "in real time."

Option 3: Bring in the Disruptor

- To inject more spontaneity, complexity, or nonlinearity as a GM, create non-player character (NPCs) that present challenges to the character group dynamics.
- These NPCs should be positioned in more important rolls than merchants, innkeepers, or other transactional NPCs. Make them indispensable to the party for a certain period of time or quest, such as a guide or a representative of a client there to protect their employer's interest. Whatever the context, they must be a persistent presence.
- Create the NPC to intentionally introduce certain moral dilemmas to the group, such as a character that is racist/bigoted toward certain character races but not overtly so, or a character that is sexist so they speak down to or in a demeaning way about a certain sex (that, ideally, is partially represented in the party). Another option is to have this indispensable NPC be of a competing moral alignment, such as willing to dispense of any witnesses or loose ends without hesitation.
- These situations will present the group with an opportunity to explore where they draw the line, and even valuable feedback in the way of

a2, b2, c1, d2, e2, g1, h2, I, o1, p3, q3, s4, t1, u3 repercussions if they do or don't speak up, and at what time? Do they confront the issue and risk driving a wedge in the group? Do they dismiss the invaluable NPC only to then be lost in a particularly hazardous environment, or risk forfeiture of much needed rewards? This type of NPC introduction will present the characters with opportunities to explore moral thresholds, an invaluable learning advantage in TRPGs.

Option 4: Go from Small to Big, Not Big to Small

- Good advice for GMs regardless of the context, though in this case it's oriented toward the narrative and the exploration of creativity skills and identifiers.
- Be cautious about how much you throw at characters and when, since TRPGs are best when they are extended, episodic engagements over time. Progress is measured in inches, not miles, especially with respect to affective skills.
- Start with little skill development opportunities, and only expand as character competence/confidence in immersion of the identity is ready. If you throw to complex a situation at a relatively new character that has too large of a confidence, it might inadvertently cause the player to shut down and lessen immersion, limiting or even preventing the ability for them to actually explore new skills, concepts, and perspectives.
- When players do try new creativity skills or identifiers, don't over-penalize the failures (if you penalize them at all). The goal is to encourage the use of TRPGs as a place to try, fail, and try again, but if the perceived risk of failure is too great for even the character to bear, players will be less inclined to try and learn.

a2, b2, e2, f1, g1, h2, i, l, n, p3, r3, t1, u3

Deliverable 3: TRPG and Creativity Research Opportunity Assessment

To ensure that the outcomes of this project are the necessary components to initiate subsequent prototyping and testing of the TRPG concept for creativity cultivation, I propose several promising future research opportunities for the use of TRPGs to cultivate creativity based on the gaps in existing TRPG research to date. I attempted to identify possible tools and measures that might be best suited to serve as assessment mechanisms to evaluate the effectiveness of the concept if implemented. Unfortunately, I was unsuccessful in effectively identifying and presenting assessment tools during the time frame of this project. This deliverable, however, is important because one of the major limitations in both of the studies that explored a relationship between TRPGs and creativity was the way that TRPG impacts were accounted for, making the studies interesting but difficult to compare and leaving more questions than answers.

As I highlighted in both section one and section two of this project, there is a fair amount of research available on TRPGs and their impact on a variety of psychological, cognitive, and social variables for players, but relatively little on the relationship to creativity specifically.

Barring observational anecdotes by Bowman (2010) and Cover (2010) that assert that TRPG players tend to exhibit more creativity, or that TRPGs attract those who identify as more creative, there are only two existing studies on how TRPGs correlate with individual measures creativity.

In the first study, Chung (2013) examines the correlation between TRPG play and measures of creativity, done so by using verbal alternate use tests to generate divergent thinking scores in fluency, flexibility, and uniqueness. The study also compared a control group with groups that received two distinct types of priming: an age-related primer ("imagine you were 7 years old...") and an age/imagination primer ("imagine you were a 7-year-old alien in outer space..."). These treatments were done to test whether or not priming would increase the

total measure of divergent thinking, and whether or not tapping into personal memories would increase scores due to cognitively approaching the challenge from a "bottom-up" and blocking out external stimuli to access more novel outcomes (Chung, 2013).

In total, Chung (2013) measured 170 participants across all three groups, and the divergent thinking scores were highest in the control group across all three categories (fluency, flexibility, and uniqueness), though this is not accounting for the role of TRPGs. TRPG influence was accounted for in another analysis of the participants, which showed that 52 identified as TRPG players, 54 identified as "ERPG" players (people who play RPG video games), and 64 identified as non-players. The self-identified TRPG players scored significantly higher than ERPG and non-player participants in the control treatment and treatment two (age/imagination priming), and insignificantly higher in treatment one (age priming only) (Chung, 2013).

While it is interesting to identify that self-reported TRPG players seem to perform significantly better on divergent thinking through the alternate use test, which does imply that there is a correlation between TRPG participation and creative thinking skill development, this study does not actually account for the TRPG play itself or how exactly it contributes to the development of creative thinking skills. The study relied on self-identification only, and does not account for any detailed factors of the TRPG role other than its existence, which still leaves the question posed by both Bowman (2010) and Cover (2010): does TRPG play increase creativity, or are more creatively inclined people drawn to TRPGs? There's no data to establish what the relationship is, only that it exists.

The second study was conducted by Dyson et al (2016), and in this study the conduct of TRPG participation was included. The study examined the relationship of TRPG participation on creative potential and emotional creativity through the development of custom TRPG story modules (scenarios) that participants then played one day per week over the course of four weeks. The strengths of this study design were the curated TRPG story modules tailored to include divergent thinking as a core aspect of gameplay, the use of a GM, and the decision to

conduct the TRPG modules over several engagements rather than in one long sitting. The assessment of creative potential was measured using the Abbreviated Torrance Test for Adults (ATTA), which generates a creativity index score from four sub-scales of creativity: fluency, flexibility, originality, and elaboration. While both Chung (2013) and Dyson et al (2016) used subcategories of fluency, flexibility and uniqueness/originality, the way their measures were collected were different, with Dyson et al (2016) using an administrative manual for issuance and computation of the responses. Further, while the decision to utilize custom story modules that were intended to present divergent thinking opportunities was understandable, it does leave room to question if it was the content of the TRPG or the act of participating in the TRPG that had the most impact on the results.

Dyson et al (2016) found that the overall Creative Index score between the control group and the treatment group was significantly higher, but individual subscale results showed statistically insignificant differences. Upon further examination, it was discovered that the translated version of the ATTA manuals in Taiwanese and Chinese were inconsistent with respect to their test-retest reliability measures, and that due to one participant dropping out, the treatment group had one fewer participant than the control group, which may account for the lack of statistical significance in the sub-categories (Dyson et al, 2016).

This study is much more promising, but still lacks enough data to prove or disprove that TRPGs are effective tools for cultivating creativity skills. Further, the sample size of this study was very small at just 20 participants, which leaves more margin for deviation in the results.

Lastly, both Chung (2013) and Dyson et al (2016) relied only on measures of divergent thinking to assess creative potential, which only accounts for a portion of the creative problem-solving process as it neglects the necessary convergent thinking skills that contribute to creativity.

There was a third study reviewed, conducted by Karwowski and Sozynski (2008) on the effectiveness of role play training in creativity (RPTC), but I determined it was not a relevant study in the context of TRPG trainings for the following reasons: RPTC's structure and

implementation are fundamentally different from TRPGs in that they do not use a GM, but a coach, who does not share narrative co-creation with the participants but instead actively rely on the coach to fulfill an instructor capacity and as an authority figure, whereas a GM is an adjudicating role at in TRPGs; the study did not use a control group, which makes the reliability of the results suspect; the study conducted the RPTC in short durations (one eight hour session or two four-hour sessions), where TRPGs are most effective when done across several weeks or more. As discussed in section two, this prolonged period of engagement allows for deeper social immersion and greater exploration of character identity, which enhances emotional immersion and subsequently a player's capability to develop theory of mind.

Between Chung (2013) and Dyson et al (2016), we are left with more questions than answers with regard to TRPGs and creativity development. We can infer from the studies that there is some degree of correlation between creativity and TRPGs, but we can't identify how or why. We can infer that TRPG players tend to demonstrate higher scores on divergent thinking tests, but we lack the information to clarify the discrepancy between overall scores and the insignificance of the sub-scores. We can infer that TRPGs have greater impact over a longer period of engagement, but we cannot say for sure if or when a point of diminishing returns will be reached. Lastly, we must assume that divergent thinking alone is the greatest indicator of creative potential, which not only ignores the role of convergent and evaluative thinking within creativity, but also reinforces an outcomes-based, linear understanding to what it means to be creative and does not explore other identifiers of the creative experience within the context of the individual's life.

Future Research Opportunities on TRPGs and Creativity Skill Development

The following is a list of possible research studies to begin expanding our understanding of creativity developed through TRPGs based on the most pressing gaps in existing research:

- 1. The role of TRPG participation on long-term creative thinking.
 - a. Sample Group: 80+ participants broken up equally into a control group, short duration group (2 weeks), medium duration group (6 weeks), and long duration group (12 weeks).
 - b. Factors To Possibly Account For: Previous TRPG experience versus new player, age, group familiarity, FourSight preference distribution, GM engagement style.
 - c. Potential Hypothesis: Participants who participate in TRPGs for an extended period of time will show greater increases in overall measures of creative thinking compared to those who participate for less time or not all.
- 2. The role of TRPG participation on creative skills and identifiers.
 - a. Sample Group: 100+ participants, broken up into a control group, test group 1 (intentional character creation to force identity alteration), test group 2 (free reign on character creation), and test group 3 (pre-generated character creation). Each test group should be further divided into two test groups: short duration participation (4 weeks) and long duration participation (8 weeks).
 - b. Factors to Possibly Account For: Previous TRPG experience, demographic diversity in player groups, functional diversity in player groups, creativity training, types of games played most often, GM engagement style, number of personal identity differences between self-identity and character identity.
 - c. Potential Hypotheses: Participants will see increases in creativity skills and identifiers if they role play as characters with identities and world-views that differ from their own, with the greater the departure from their own identity correlating with higher score improvements than less different identities; Prescriptive character generation will result in higher scores than pre-generated characters and free-reign characters, in that order; long duration participants in all test groups will achieve greater increases in scores than short duration participants.

- Assessing differences in TRPG Impacts on creativity skills when comparing customized
 TRPG modules to commercially available/generic TRPG modules.
 - a. Sample Group: 60+ participants divided into three groups: Control group, Test
 Group 1 (custom-designed scenarios) and Test Group 2 (commercially available scenarios).
 - Factors to Possibly Account For: TRPG module setting consistency, GM
 engagement style, character creation elements, game system equitability
 between group 1 and group 2, duration of study.
 - c. Potential Hypotheses: Both group 1 and group 2 will show statistically significant improvements in measures of creativity skills compared to the control group;
 There will be no statistical significance in scores between group 1 and group 2 as it is participation in TRPGs overall that contributes to skill development, not the content of the TRPG story module itself.

While the options presented are only a sample of possible areas for future research on TRPGs and creativity skill development, they will likely generate more research requirements with their outcomes, and present new opportunities for the use TRPGs as a potential model to explore and validate greater understanding of creativity as a lived experience. While I am disappointed that I cannot provide a detailed analysis of ways to best measure all of these different creativity skills and identifiers or overall creativity itself within the context of TRPG participation, I am happy with the amount of synthesis completed to formulate a strong case advocating for this under-researched area of creativity to be given greater attention.

SECTION FIVE: KEY LEARNINGS

This project has been a journey in embracing change and ambiguity from the start, particularly as I uncovered and dove into resources that I had not yet discovered at the time of the project proposal. There is an analogy often used in my workplace that goes, "we're building this plane in-flight," and for me that has been this project in a nutshell. I feel that the bulk of my key learnings came not from the attempt at developing the outcomes as I first imagined, but from the sheer volume of research synthesis that is only partially reflected in the literature review portion of this project.

There were far more resources read and evaluated than made the final cut, and still I feel that my strongest outcome was section two of this paper, because that is where I grew the most in my position on, and understanding of, this concept. To that end, it is difficult to further trim that down to "key learnings" simply because I have already trimmed so much of what I've processed throughout this project just to keep the literature review digestible. To take away anymore feels impossible without losing important context, though I tried to break my key learnings up into the content, and then into the process of "building this plane in flight."

Key Learnings from My Adventure into the Hidden World of TRPG Studies

The bulk of my effort for this project was centered around trying to get through all the relevant research, both because I desired a greater understanding of TRPGs to strengthen the project, and because I did not want to inadvertently duplicate something that has already been done. I can confidently say that all of section two is essentially key learnings, because if it wasn't valuable to the project, it would not be included. Still, in reflecting on everything I've learned in the course of this project, there are certainly things that stand out.

TRPGs Have a History of Being Misunderstood

Though it didn't make it into the project itself because it lacked direct relevance, I did uncover a potentially sound reason for why TRPGs are so under-researched with respect to gamification and other disciplines, especially creativity. At first, I was somewhat surprised at how little I was able to turn up in scholarly journals about TRPGs. Certainly I was able to find studies and articles on RPGs like video games and MMORPGs (massive multiplayer online role playing games, like World of Warcraft), however those do not share the same qualities and attributes that make TRPGs particularly unique with respect to their potential for affective skill training and development. This over-emphasis on electronic RPGs, though, was consistent with most other gamification research I've found, having a bias toward virtual applications over analogue applications.

I discovered that TRPGs are only recently entering a point where mainstream society doesn't treat them as socially taboo. This long-standing aversion is a lasting impact of the moral panic, a topic that Laycock (2019) wrote the majority of his book about, exploring the sociological frameworks that allowed the moral panic against fantasy role-playing games to fester and persist, perpetuating inaccuracies and falsehoods for so long. The ongoing effects of being seen as a social taboo and (inaccurately) tied to occultism does, however, partially explains why there is little research on the valuable role that TRPGs can and have played on skill acquisition despite their origination being the early 1970s.

TRPGs Are Not Just a Catalyst for Transformative and Creative Experience, They Are The Embodiment

Coming into this, I knew a great deal more about experience design and had a stronger appreciation for the value of the creative experience concept than I knew about TRPGs. At the start, all I knew was that I had personally experienced creative growth during my time participating in TRPGs, and that there were only two studies that even dared to touch the topic of TRPGs and creativity, both of which seemed lacking in depth. Once I found the absolute

mountain of work by Bowman and Cover, along with the anthology of interdisciplinary work compiled by Zagal and Deterding, I discovered that TRPGs are more powerful than I had ever appreciated.

As I read and learned about all the facets of TRPGs that make them outstanding mechanisms for psychological, cognitive, sociological, and emotional skill development, I began to see how all the hallmarks of a transformative experience outlined by Rossman & Duerden (2019) weren't just capable of being integrated into TRPGs, they were the primary reason that TRPGs work! They're integrated into the very nature of the game, as are the identifiers of a creative experience put forth by Glăveanu and Beghetto (2021) and the phenomenological concepts highlighted by Doyle (2022). TRPGs simply do not exist without these things being inherently present.

TRPGs Are Complex in Nature, Which Makes Them Difficult to Study

Intuition told me that TRPGs and creativity worked, but I didn't understand why until I consumed all the knowledge uncovered during this project. I learned the complexity of the elements, both living and nonliving, that form the essence of TRPGs, and I have a greater appreciation now of how special those game sessions are, because I now know how many things are occurring simultaneously while we're engaged in "play." It's quite centering, even humbling, to consider just how many psychological and cognitive skills your brain is secretly engaging in while you're immersed in play, and how those seemingly insignificant incremental changes in your thinking manifest in tremendous ways over time, often without you even knowing it. I can no longer accept anyone taking a dismissive position toward TRPGs as "just a game" or "escapism" again, because that statement could not be further from the truth.

Process Observations: A State of Constant Change

Most glaringly, I have learned (or reinforced) that even when I think I have narrowed the scope of a project to an appropriately achievable size, I still tend to overshoot. As someone who loves creating, I suppose there are worse traits than dreaming too big. In the true spirit of the creative experience, I can't say that I am able to clearly articulate a deliberate "process" for this undertaking, because it wasn't as cut-and-dry as that. The more information I discovered, the more I had to adjust my direction and scope, and the more I had to swap or add components, or take away components, until I somehow reached the end.

For me, the most difficult learning curve in this process was an acceptance that perfection and achieving the totality of my initial outcomes does not define success in this endeavor. Naturally, the more I read, the more the outcomes began to grow, and the more stress and pressure I felt. Thankfully, after talking with my advisor for this project, I was told that part of the process and the outcome was experiencing when, where, and how to cut appropriately. In the end, I cut far more than I wanted to, but I'm at peace with it. I just remind myself of the words that were used to describe Camelot in Monty Python's *The Holy Grail*: "It's just a model."

One aspect of the process that I found particularly energizing and encouraging was toward the very end, when I was trying to iron-out the potential options for modifying or adjusting TRPG conditions to better enable creative skill development. I opted to reach out to my Dungeons & Dragons group, who I've been playing with since we first started together during the COVID-19 lockdown in a tent, in the middle of a desert, in Kuwait. I invited those willing to join me for an hour session on Zoom where I put together an impromptu resource group with the intent of conducting an ideation session for this project.

None of them were aware of this project, and none of them have had any formal training in creativity, but it was an incredibly fun session. Not every idea that was thrown out there was

worth refining into a solution, of course, but the real value was in having the conversation with others who understood my thinking behind choosing this project. We ended up going for 90 minutes, because we kept building on one-another and connecting ideas to past game experiences and future opportunities to experiment. Despite all my time in this program and my sincere belief that creativity is better done with a team than individually, it took that until that moment in this project for me to recognize that my isolated attempt at creativity was holding me back. My best ideas sprung forth thanks to the presence of my friends (even virtually).

SECTION SIX: CONCLUSION

At the beginning of this project, I was working on a strongly held belief rooted in nothing more than intuition and personal anecdotes. Now, I understand creativity even more, thanks to an expansion on my conceptualization of creativity as more than the Four P's, now seeing it as this incredibly dynamic and personalized experience marked by a person's unique lived experiences and how those experiences shape their narrative for understanding the world. I have said time-and-again to anyone who would listen that one of the most life-changing moments during this Master's program was when I began to realize the impact of Puccio's (2017) article about creativity as evolutionarily proven to be universal in all humanity: I am creative.

The reason that I am creative, and that everyone is inherently creative, is exactly because of the collective person-world interactions we've experienced. The good, the bad, the ugly, all of it manifests in our individual expression of the creative experience, and it's that part of us that says we're valuable. Our creativity doesn't look the same, and it never will, but that is exactly why the creative experience is so beautiful: it gives our whole lived experience purpose and meaning through our creativity, and everyone's creative experience is worth attention.

Where will my creative experience lead next? I'd like to think that my work with TRPGs, experience design, and the creative experience concept are only just beginning. While I'll be grateful if anyone picks up one of the proposed research directions presented in this project, I truly desire to do so myself, as well. I've learned to stop trying to predetermine the future too much and appreciate the moment (due largely in part to my growth through this program), but should all things go smoothly I hope to apply and begin my doctoral work with the inaugural cohort of SUNY Buffalo State University's newly created program in the fall of 2024. In the meantime, I plan to pursue more experiences and to seek out new interactions with the world that continue to broaden my worldview, my ability to wonder about what's possible, and expand

my individual creativity. And, of course, I plan to continue playing tabletop RPGs, because now I have even more compelling reasons for doing so.

Roll Initiative.

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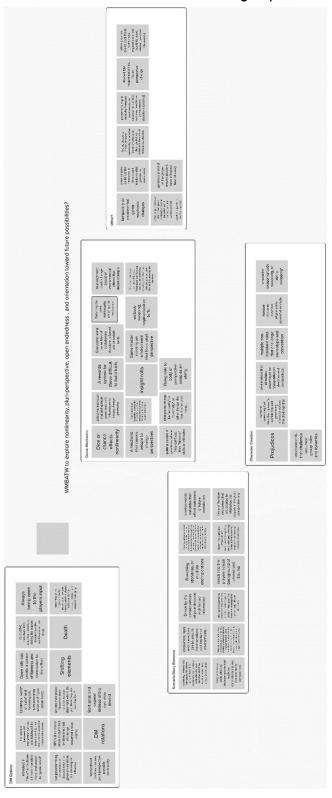
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APPENDIX A

Picture of Mural Board from Ideation Resource Group

Image 1: Mural Board after ideation session with resource group.



Permission to place this Project in the Digital Commons online

I hereby grant permission to the Department of Creativity and Change Leadership, Center for Applied Imagination at Buffalo State University permission to place a digital copy of this master's Project, Exploring Potential Use of Tabletop Role-Playing Games (TRPGs) to Highlight and Develop Creativity Competencies, as an online resource.

Name

15 May 2023

Date