LEARNING THROUGH IMAGINATION:
A SAGA OF TABLETOP ROLEPLAYING GAMES IN EDUCATION

by

Arpit Bawa

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THE PURDUE UNIVERSITY GRADUATE SCHOOL
STATEMENT OF COMMITTEE APPROVAL

Dr. William Watson, Chair
Department of Learning Design and Technology

Dr. Sunnie Watson
Department of Learning Design and Technology

Dr. Jennifer Richardson
Department of Learning Design and Technology

Dr. James Lehman
Department of Learning Design and Technology

Approved by:

Dr. Siddika S. Guzey

I dedicate this dissertation to my parents, who have supported me throughout my life and through my time in graduate school.

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TABLE OF CONTENTS

LIST OF TABLES 11
LIST OF FIGURES 12
ABSTRACT 13
CHAPTER ONE: INTRODUCTION 14
In the Beginning: A TRPG Narrative and Dissertation Goals 14
Narrative 14
Research Goals 15
Why Care About TRPGs? Problem Statement 16
TRPG 101: Background 18
Multidisciplinary Compatibility 18
Ability To Facilitate Multiple Soft Skills Development 19
Tools For Learning and Motivation 20
The Dissertation's Scope 21
Thesis Overview and Dissertation Structure 21
References 23
CHAPTER TWO: THE QUEST FOR MOTIVATION 31
Introduction 31
Literature Review 33
TRPGs and Educational Uses 33
Theoretical Frame: Self-Determination Theory 33
TRPGs' Value in the Context of Motivation 34
Methodology 35
Study Design 35
Participants 36
Data Collection 36
Data Analysis 37
Results 38
Research Question 1: Competence 38
Research Question 2: Autonomy 41

Research Question 3: Social Interaction and Relatedness 42
Discussion and Implications 44
Limitations and Conclusion 46
References 47
CHAPTER THREE: CAMPAIGN FOR MOTIVATION 54
Introduction 54
Literature Review 59
Motivational Lens of ARCS 59
TRPGs as Motivational Assets in Education 61
Game Masters (GMs) 63
Methodology 64
Yin's Descriptive Case Study Method 64
Participants 65
Data Collection 67
Data Analysis 68
Results 70
Attention: Comparison Within Group 1 (Instructors) 71
Perceptual Arousal 71
Inquiry Arousal 72
Variability 73
Attention: Comparison Within Group 2 75
Perceptual Arousal 75
Inquiry Arousal 76
Variability 77
Attention: Comparison Between Group 1 (Instructors) and Group 2 (Game Masters) 78
Universal Approaches: Similarities and Differences Attention 79
Attention Tenets: Similarities and Differences 81
Attention Analysis Conclusion 82
Relevance: Comparison Within Group 1 (Instructors) 82
Goal Orientation 82
Motive Matching 83

Familiarity 85
Relevance: Comparison Within Group 2 (Game Masters) 87
Goal Orientation 87
Motive Matching 88
Familiarity 90
Relevance: Comparison Between Group 1 (Instructors) and Group 2 (Game Masters) 92
Universal Approaches: Similarities and Dissimilarities for Relevance 92
Relevance Tenets: Similarities and Differences 94
Relevance Analysis Conclusion 95
Confidence: Comparison Within Group 1 (Instructors) 95
Success Expectations (Learning Requirements) 95
Success Opportunities (Learning Activities) 97
Success Attributions (Personal Responsibility) 99
Confidence: Comparison Within Group 2 (Game Masters) 100
Success Expectations (Learning Requirements) 100
Success Opportunities (Learning Activities) 102
Success Attributions (Personal Responsibility) 103
Confidence: Comparison Between Group 1 (Instructors) and Group 2 (Game Masters) ... 104
Universal Approaches: Similarities and Differences Confidence 105
Confidence Tenets: Similarities and Differences 106
Confidence Analysis Conclusion 108
Satisfaction: Comparison Within Group 1 (Instructors) 108
Intrinsic Satisfaction (Self-Reinforcement) 108
Rewarding Outcomes (Extrinsic Rewards) 109
Fair Treatment (Equity) 110
Satisfaction: Comparison Within Group 2 (Game Masters) 110
Intrinsic Satisfaction (Self-Reinforcement) 110
Rewarding Outcomes (Extrinsic Rewards) 112
Fair Treatment (Equity) 113
Satisfaction: Comparison Between Group 1 (Instructors) and Group 2 (Game Masters) ... 114
Universal Approaches: Similarities and Differences for Satisfaction 114

Satisfaction Tenets: Similarities and Differences 116
Satisfaction Analysis Conclusion 117
Synthesis of Results 117
Discussion 121
Overview 121
A Pedagogy of Entertainment: Instructors as Game Masters? 122
Using Familiarity to Leverage Buy In 125
Designing With Critical Thinking and Creativity in Mind 127
Combating Challenges with Flexibility and Autonomy 128
Limitations, Future Implications, Conclusion 129
References 132
Appendix A: Interview Questions 152
CHAPTER FOUR: MANA FOR MOTIVATION: A GROUNDED THEORY OF INSTRUCTORS AS GAME MASTERS 'RUNNING' THE HIGHER EDUCATION CLASSROOM 154
Introduction 154
The Problem 154
The Research Design Rationale 156
Research Questions 158
Literature Review 158
Use of TRPGs in Instructional Settings 158
Theoretical Frames 159
SDT and ARCS 160
Constructivist Grounded Theory (CGT) 160
Methodology 161
Constructivist Grounded Theory 161
Theoretical Sampling 162
Tier 1: TRPG Player Perspectives 163
Tier 2: Dual Role Informants (Game Masters and Instructors) 163
Tier 3: Development of TRPG Instructional Framework for Faculty Review and Grounded Theory 164

Data Instrument and Collection 167
The MIF Framework 167
Literature Review 169
Interviews 169
Memoing 170
Data Analysis: Coding Strategies and Processes 172
Results 174
Faculty Perceptions of TRPGs in Curriculum Design 174
Perceived Value and Impact of the TRPG Integration 176
Reflections on TRPG Usability and Adaptability 177
Challenges 178
Recommendations 179
Meaning-Making and Conceptual Integration 180
Summary of Results 181
Discussion: Maneuvering Adventure Systems to Teach, Engage, and Reflect (Master): A Grounded Theory 181
Theory Narrative Summary 181
The MASTER Approach: Principles of the Theory 182
Principle 1: Using Instructional and Game Mastery Processes Interchangeably 182
Principle 2: Augmented Engagement through Autonomy and Role-Play 184
Principle 3: Experiential Learning through Narrative-Driven Scenarios 184
Principle 4: Structured Integration and Assessment Alignment 185
Alignment With Existing Concepts 185
Bowman's (2010) Theory on TRPGs and Identity Exploration 185
Stubb and Sorensen's (2025) Theory on TRPGs and Social and Emotional Learning 186
Mackay's (2017) Theory on Role-Playing as Social Performance 188
Key Contributions of MASTER 189
Narrative-Based Experiential Learning 189
Extension of Self-Determination Theory (SDT) 189
Autonomy + Role-Play as the Core Drivers of Engagement 189
Intentional Structure and Assessment Integration 190

Modulating Faculty Facilitation Roles 190
Bridging Faculty and Student Perspectives 191
Limitations, Implications and Future Research 191
Conclusion 197
References 198
CHAPTER FIVE: CONCLUSION 210
Introduction 210
1. TRPGs as Motivational Systems 211
2. Ludic Pedagogy and the Role of Fun, Play, and Socialization 212
3. Challenges can be Overcome by Transferable Skills 213
4. Designing for Autonomy, Creativity, and Critical Thinking 214
5. Emergence of the MASTER Theory from Participant Interpretation 215
Implications 216
1. Originality and Theoretical Contribution 216
2. Methodological Innovation 217
3. Practical and Professional Relevance 217
4. Broader Educational Impact 218
5. Limitations 218
Future Research 220
References 222

LIST OF TABLES

Table 1. Participant Information in relation to their TRPG experience 36

Table 2. ARCS Overview 60

Table 3. Participant Background 67

Table 4. Attention Similarities and Differences 79

Table 5. Table for Relevance 92

Table 6. Table for Confidence 105

Table 7. Table for Satisfaction 115

Table 8. Consolidated Similarity Table for Synthesis. 118

Table 9. Consolidated Details of Data Sources for 3 Tiers 166

Table 10. TRPG Instructional Framework Focus 169

Table 11. Data collection type, tier and time 171

Table 12. Coding Process 173

LIST OF FIGURES

Figure 1. Analysis Flow 70

Figure 2. A graphical view of the synthesized results for each ARCS tenet. 119

Figure 3. 4 Top Similarities 120

Figure 4. 3 Tiers of Developing the MASTER Grounded Theory 165

ABSTRACT

This dissertation explored the pedagogical potential of tabletop role-playing games (TRPGs) in higher education, focusing on their motivational impact, faculty adoption, and instructional parallels with traditional classroom teaching. The aim was to advance understanding of TRPGs as transformative, interactive, and student-centered learning tools, while addressing the barriers faculty may face in integrating them into curricular contexts. The findings strongly suggest that TRPGs are not only effective motivational tools but may also be readily adaptable to higher education curriculum given the similarities that exist between the processes of teaching/facilitating a classroom and running a TRPG game. However, faculty who are unfamiliar with TRPG game playing will need training and scaffolding to ascertain the bridge between game running and teaching to effectively adopt TRPGs as educational tools. Based on these insights, I developed the MASTER (Maneuvering Adventure Systems to Teach, Engage, and Reflect) theory of faculty adoption of TRPGs in their curriculum through leveraging critical motivational and pedagogical elements of such games as well as harnessing their preexisting skills as classroom facilitators. This dissertation contributes to a growing field of TRPG scholarship by building empirical and theoretical foundations for their use in higher education.

CHAPTER ONE: INTRODUCTION

In the Beginning:
A TRPG Narrative and Dissertation Goals

Narrative

[In the bustling city of Nomadia, there lived a boy named Arp, whose childhood was adorned with the enchanting allure of games. From a tender age his grandparents introduced him to the classic board game of Ludo, while his parents indulged him with pixelated realms of video games. Thus, from a young age Arp's world was always adorned with the magic of gaming.

What he enjoyed most were the family gatherings that were adorned with laughter and friendly competition around the Ludo board, where each roll of the dice brought moments of suspense and joy. Yet, as the years passed, the clattering of dice gradually faded from his life, replaced by the hum of digital screens and the glow of virtual worlds, for that was the way of the children of Nomadia.

Understanding the way of the Balance, Arp's parents allowed him to indulge in video games only as long as he excelled in his studies. While he cherished the adventures he embarked upon through the actions and polygons of his consoles, a part of him always yearned for the tactile experience and face to face interactions that the board games provided. As fate would have it, Arp's journey took an unexpected turn one day, as he was walking down a play park in Nomadia, as he came upon a shimmering tree at the far end of the park. As Arp touched the tree, which was a magic portal, he was transported to the far-off land of Newtopia, a place that was governed by the rules of Imaginarium, where wizardry and alchemy were encouraged. As Arp realized he was unable to return to Nomadia, he resigned to his fate and tried to build a life for himself in Newtopia. One day, as he was wandering cluelessly in Newtopia, he was met by

Nyanard, a human-elf hybrid and game master, who led a team of Draemers, who were a vibrant community of tabletop gamers. Introduced to this captivating realism of tabletop role playing, Arp discovered a perfect fusion for his love of dice, social dynamics, critical thinking and creativity. As he engaged with this community, he became more deeply entrenched in this world. With each gaming session, Arp delved into fantastical worlds where imagination knew no bounds. From dungeons teeming with mythical beasts to galaxies ripe for exploration, he reveled in the camaraderie and collaboration that these adventures offered. It was a rekindling of his childhood spirit, where every dice roll brought forth moments of triumph or adversity.

Arp continued his dalliance with the Draemers, living a good life in Newtopia, and when he was of age, he was offered the role of a Guruer in the Great council of Newtopia. His job was to teach the younglings of Newtopia the ways and rules of Imaginarium. As Arp continued his journey with the Draemers, he found parallels between his passion for tabletop role playing and his profession as a Guruer or teacher. In fact, he realized that just as the game master of the table tops crafted narratives for the Draemers, as a Guruer, he too sculpted learning experiences for his students. Both roles required creativity, adaptability, and a keen understanding of human interaction. In his vast tapestry of life, Arp's path had been woven with threads of gaming and teaching, revealing the potential for each to enrich the other in a harmonious symphony of creativity and discovery. Soon Arp would embark on a new quest of discovery, where he would carry with him the lessons learned from both worlds, ready to face whatever challenges laid ahead. His life's most important game was about to begin!]

Research Goals

As personified in the game narrative above, my experiences as a TRPG gamer and teacher fueled my curiosity regarding the phenomenon of how TRPGs can be seamlessly

connected to learning experiences and integrated comprehensively within curriculum in higher education. Inspired by my experiences, my dissertation aims to explore how TRPGs can be seamlessly connected to learning experiences and comprehensively integrated within curriculum frameworks. This research aims to contribute to the growing body of literature on game-based learning and curriculum integration by focusing specifically on the unique affordances of TRPGs as motivational tools. By exploring the narratives of both educators and players, this series of studies seek to provide insights into the potential benefits, challenges, and effective practices associated with incorporating TRPGs into educational settings. Ultimately, the findings of this dissertation may inform curriculum development, instructional strategies, and educational policy related to the integration of gaming experiences into formal learning environments.

Why Care About TRPGs? Problem Statement

As evidenced in the discussions below, TRPGs not only engage participants in captivating storytelling but also cultivate critical thinking, problem-solving, and collaboration skills. Through interactive role-play, students are empowered to inhabit diverse characters, navigate complex scenarios, and make impactful decisions, all while honing their creativity and empathy. A review of the literature indicates that most research pertaining to TRPGs were conducted by researchers who were also TRPG players and game masters, which facilitated their use of the full range of mechanisms and rules of TRPG for education (Clarke et al., 2018; Copeland et al., 2103; Fendt & Mache, 2014; Lopes, 2015; Zdravkova, 2014). However, there is a serious gap in the literature regarding the adaptation of TRPGs in classrooms by instructors who are not familiar with such games. This could be attributable to the complexity of the different elements within TRPG, which creates challenges of implementation for inexperienced researchers and instructors (Maike & Baranauskas, 2013). This is a problem, because we live in

an era where learner motivation is in increasing states of unraveling and deterioration (Hidi & Harackiewicz,2000; Martyniuk, 2022), including the demotivating and burnout factors of the rapid push towards digitized and individualized learning environments during and after the pandemic era (Bharwani & Mohammed, 2023; Khumalo, 2023; Shen et al, 2024; Siddiq et al, 2023). As such, we cannot afford to ignore a powerful motivational tool such as TRPG that offers options for social, creative and digital engagement.

Additionally, there is a lack of foundational frameworks of research regarding specific and repeatable processes by which TRPGs can be interspersed in a curriculum. Most studies discussed using existing TRPGs piecemeal, completely or with modifications, as interventions in learning environments, but there was a conspicuous absence of discussions regarding the 'how' or 'why' of these adaptations. Drawing from my experiences in the dual roles of an instructor and an avid TRPG player, I believe that there could be similarities between the processes of teaching and TRPG game playing that could be leveraged to offer an unexacting solution to address the problems associated with motivation amongst educators and learners in the educational process. While motivation is a key predictor of good teaching practices and student learning outcomes (Santana-Monagas et al, 2024; Thoonen et al, 2011; Zou et al, 2023), motivating educators can be seriously challenging, which is why there is a need for more innovative tools of professional development that align with motivational concepts and applications (Daniels, 2016; Dewey et al, 2023; Dressel, 2023; Han & Yin, 2016).

This is particularly true in the context of role-playing environments, such as TRPGs, which inspire motivation through engaging stakeholders in active learning processes (Aflah & Fajar, 2022; Hawkins, 2020; Yulita et al, 2023). While motivational strategies of active learning improve student outcomes, educators' perceptions of risk related to changing their practices and

their struggles to adapt new strategies are a significant hindrance to providing learners with such opportunities. Providing more professional development strategies and opportunities to educators may help secure better learning outcomes from active learning (Aga, 2023; 2024; Enberg et al, 2023). Thus, it is important to address how we could foster greater teacher buy-in, given the complex nature of TRPG, and the impact this has on the effectiveness of using them as motivating educational tools. The current dissertation is my passionate response to this call for motivation.

TRPG 101: Background

Multidisciplinary Compatibility

TRPGs have been examined in the realm of English education, particularly in gaming components such as composition which could be viewed as a pedagogy of gaming (Jean, 2013; McCollum, 2023; Woods 2017). Cook et al. (2017a) incorporated game mechanics with Richard Connell's short story "The Most Dangerous Game" within K-12 education to explore how learners could connect story knowledge with gameplay, leading to collaborative learning experiences. Through their analysis, Cook et al. (2017b) identified three main themes: students' decision-making influenced by the story, experiencing the narrative through their characters, and engagement in collaborative activities. These findings support the idea that learning is constructed through participant experiences (Charmaz, 2006). In other studies, TRPGs were used in English education to enhance fiction writing and improve learners' ability to craft fictional narratives (Arnaudo, 2023; Cantu, 2019; Girsen, 2021; Hergenrader, 2011). Otty (2017) implemented TRPGs in English language courses and found they aided learners in overcoming literacy and numeracy barriers while enhancing imagination, verbal communication, and self-

confidence. Other disciplines that have some use of TRPGs are Computer Sciences including game programming and data survivability (Lopes, 2015; Machado & Ishitani, 2024; Ntokos, 2020; Stachyra & Roughley, 2023), Engineering Ethics (Hafner et al, 2023; Zdravkova, 2014) and Library Sciences (Copeland et al., 2013; Zhou & Yang, 2023), and engage participants in science projects (Turner, 2018).

Ability To Facilitate Multiple Soft Skills Development

TRPGs can serve as valuable tools in soft skills development such as fostering critical perceptions and identity development, creativity and reflexivity amongst learners. In the context of critical perceptions, TRPGs have potential to act as comprehensive representations of critical issues such as gender, race, classism and social constructs by offering a platform for extrapolating between narrative and real-world versions. This makes such games a valuable tool for learners grappling with critical perceptions, particularly in multiculturalism-related courses (Garcia, 2017; Goodall, 2021; Prestiliano,2022). These games could also be effective tools to introduce and understand sensitive ideas pertaining to the LGBTQIA+ communities (Bayes, 2022; Morriss, 2022; Kawitzy, 2021). Moreover, TRPGs facilitate self and skill development, along with exploration and acceptance of gender and sexual identities beyond gaming contexts, fostering a shift from isolation to social engagement (Berge, 2023; Bosstick, 2021; Cohen, 2021; Godall, 2021; Pinkston, 2019).

In the context of creativity and reflexivity, TRPGs have also proven effective in enhancing creativity through quantitative analysis, revealing higher divergent thinking scores among TRPG players, indicating increased creativity (Chuing, 2013; Spinelli, 2021). The creative aspects of these games are an inspiration for players and game masters (Katifori et al, 2022; Tang et al, 2023). Dyson et al. (2016) examined TRPGs' role in enhancing gamers'

creative and emotional capacities using quantitative quasi-experimental methods. Their findings showed significantly higher creativity index scores among experimental groups engaged in weekly TRPG sessions. With regards to promoting learners' self-reflection, Clarke et al. (2018) investigated the use of TRPG environments to cultivate learners' self-reflection and foundational skills for lifelong learning. They adapted an existing TRPG game for student self-assessment and reflection, finding TRPGs beneficial for student self-reflection. Lean et al. (2018) perceive TRPGs as distinct from video games and as pedagogical tools offering opportunities for discussions and reflections.

Tools For Learning and Motivation

Several studies underscored the significance of motivation as a key ‘player’ in TRPGs. For instance, the narrative elements in these games could be harnessed to leverage learners’ involvement with their learning, even when decoupled from the other elements and game mechanics (Cantu, 2019; Cook et al., 2017b; Dyson et al., 2016; Garcia, 2017; Hergenrader, 2011; Otty, 2017). Additionally, the ability of the narratives to emulate life, but yet be couched in a fictional bubble, offers the motivation to engage with sensitive topics in a safe environment (Gutierrez, 2017; Sagstetter, 2022). Coe (2017) conducted a grounded theory inquiry to delineate the motivating elements of TRPGs, culminating in the concept of 'Becoming' as a motivational construct. 'Becoming' highlights players' adaptation of avatar roles and integration with game narratives, thereby fostering a plethora of choices and enhancing motivation. Kosa and Spronck (2019) conducted a quantitative study involving 867 participants to investigate how motivations vary based on players' prior experience, frequency of play, and geographical location. The study found that player motivations in tabletop role-playing games differ based on prior experience, frequency of play, and geographical location. Experienced and frequent players valued creativity,

storytelling, and immersion, while newer or less frequent players emphasized social interaction and learning rules, with cultural contexts also shaping motivational differences.

The Dissertation's Scope

The premise of this dissertation embraces the motivational power of Tabletop Role Playing Games as an emergent and potent support tool for educational purposes. Due to the wide scope and nature of the topic, this dissertation followed a long-term study approach, where data gathering and analysis was done in three tiers. The results from all the tiers were then used to finalize the grounded theory outcomes of the study. Tier one data gathering started in 2020. Tier two data gathering started in 2022. Data for tier 3 was completed in April 2025. Data from all tiers fit together to show us how these games can be used as powerful tools for learning.

Each tier focused on key characteristics of TRPGs in the context of motivation and learning, with the core purpose of wanting to understand how teachers feel about using these games and what challenges they might face. The final goal was to take the learning from all the tiers and help create a plan for teachers to use TRPGs to make learning more fun and engaging. Through this meticulous tiered approach, I constructed a theory firmly grounded in the lived realities of educators and players alike. By bridging the realms of gaming and education, this dissertation not only acknowledges the motivational potency of TRPGs but also endeavors to harness this power as a transformative force within educational landscapes.

Thesis Overview and Dissertation Structure

The overarching aims of this dissertation focus on finding viable and pragmatic approaches to harness the motivational power of TRPGs to serve the engagement needs of the learning process. To do so, the dissertation used a holistic approach to examine different facets

of TRPGs in the context of motivation and engagement in higher education settings, using the lens of key stakeholder perceptions. Specifically, the dissertation's structure identifies three core segments of examination and disseminates the findings through a three-study, three-paper construct. The breakdown of the dissertation structure is as follows:

Chapter 1: Introduction to the overarching premise and focus of the dissertation.

Chapter 2: First study that examined the perceptions of TRPG players in the context of motivating elements that drive sustained interest and participation in the games. The goal was to investigate which aspects of TRPGs were motivating and why. A journal specific version of this study was published in the International Journal of Game Based Learning (IJGBL).

Chapter 3: Second study that examined the perceptions of TRPG Game Masters and Faculty members through the lens of how teaching a classroom and running a TRPG game had common practices and processes that could help mitigate gaps between teaching and gameplay. The goal was to find elements that would allow faculty to adopt TRPGs in easier and well-facilitated ways. A journal specific version of the findings of this study is under review in the Journal of Research Initiatives.

Chapter 4: Third study that examined the perceptions of faculty members in the context of reviewing a TRPG adoption framework in terms of viability and adoption challenges. The goal was to develop a grounded theory of TRPG adoption in the curriculum.

Chapter 5: Conclusion with a focus on the connection between the three studies, as well as a description of future plans and focus of the core investigations in the post dissertation stage.

To conclude, using entertainment for education is not a new concept, but its application and implementation has progressively morphed across the decades. The value of TRPGs lies in their strong social constructs within which the nuanced drama of life and living are enacted and

crafted by players and game masters, who are also denizens of the world outside the game. As a result, TRPGs provide the intersection between fantasy and reality, where the latter can be examined and understood using the buffering salve of the former. By bridging the realms of gaming and education, this dissertation not only acknowledges the motivational potency of TRPGs but also endeavors to harness this power as a transformative force within educational landscapes. As Gary Gygax (nd), the founder of Dungeons and Dragons aptly summed up "Of course as children, we all, in all cultures and societies, learn behavior from observation, imitation, and encouragement of various kinds. So, by the suggestion made, we all 'pretend' most of the time". This dissertation aims to showcase that this 'pretend' is more than just pretense.

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CHAPTER TWO: THE QUEST FOR MOTIVATION

Introduction

Tabletop Role Playing Games (TRPGs) can be effective educational tools, given the high levels of motivation and increased performance amongst learners (Cook, et al., 2017; Hergenrader, 2011; Lopes, 2015). Despite this, there is lack of research that examines specific elements of TRPGs that contribute to motivation. There is a need for deeper dives into these elements if we are to harness TRPGs motivational potential as educational aids, given the strong relationship between high motivation, cognitive engagement, and performance outcomes (Burinsma, 2004; Juriševič & Černe, 2021). Knowing more about how and to what degree specific TRPG elements impact player motivation will be valuable to develop a foundation for researchers, educators, and designers to optimize the benefits of TRPG based learning tools. This knowledge may also help designers enrich other instructional methods such as roleplays and simulations. This study aimed to address this gap in the literature by examining elements of TRPGs in relation to motivation using the perceptions of players.

Ryan and Deci's (2017) Self Determination Theory (SDT) served as a frame for the study to examine TRPGs role in self-determination and social learning. TRPGs combine role play, narratives, character design, and robust social interaction amongst players. Some popular titles include Dungeons and Dragons, Star Wars, Pathfinder, Call of Cthulhu, and Shadowrun. Players use a predetermined set of rules to create personalized characters, with a variety of levels and attributes that facilitate interaction with other players. The characters are divided into two broad categories comprised of the players and the Game Master/s (GM). The players are the ones who navigate the narrative controlled by the GM. The GM's role is like that of an instructor in a course, both acting as guides. GMs guide player characters through narratives. introducing new

scenarios and modifying the narrative based on the player characters' actions, much like an instructor would modify lectures and feedback in a course (Coe, 2017; Youakim, 2019). The tabletop aspect relates to the setting where players are seated around a table when playing the game, much like a physical classroom setting. The focus is on intense interpersonal interactions between characters, where they use the game's narrative-based setting as the backdrop for such interactions.

These games, played as campaigns, allow the players to make critical decisions regarding what to do and how to do it. In turn, these decisions influence the outcomes of the problem scenarios the players encounter in the narrative, resulting in lasting changes made to the scenarios. An example could be a situation wherein some villagers (within the simulation) must deal with water shortage because the village's water well has been contaminated with pollutants. In this situation, the players will likely need to investigate options such as finding another water supply, finding a cure for the contamination, or finding the reason for the contamination. Players are given considerable freedom to select solutions, so each option may have its own complexity such as multiple ways to remove the contaminant from the well.

TRPGs may be valuable for education given their motivational potential reflected in customization of settings within which players enact their roles and engage in complex gameplay (Williams, 2019), gameplay mechanics that rewards creativity and complex problem solving within narratives (Chung, 2013; Coe, 2017). The option of using prior knowledge and critical thinking embedded in TRPGs are integral to adult learning, which is akin to Zone of Proximal Development where a learner can only acquire new knowledge by linking it with existing knowledge (Vygotsky,1978).

Literature Review

TRPGs and Educational Uses

Using 'City of Dred' to teach a Network and Systems Management course, Lopes (2015) designed a classroom as a TRPG where students were divided into groups of four with one student playing the role of the GM and found that GMs' motivation and other players' challenges allowed creative use of the game systems. The study highlighted the impact of communication and team decision making on motivation. Cook et al. (2017) explored the use of a TRPG in the context of English Language Learning, highlighting students' abilities to interact with and make meaning from a traditional classroom text when examining it from a gameplay lens. The study concluded that more research should be done regarding using TRPGs in classrooms. Hergenrader's (2011) study concluded that the students preferred to use TRPGs versus more traditional methods, because it helped improve their understanding of character and motivations. TRPGS have been studied in relation to sustainable learning game designing, increasing social and emotional learning competencies, learning foreign languages, and in relation to improving health behavior (Boogere et al, 2021; Epstein et al, 2021; Ergashevich, 2021; Ruff, 2021).

Theoretical Frame: Self-Determination Theory

Self Determination (Ryan & Deci, 2017) theory framed this study that focused on both the extrinsic and intrinsic parameters of player interactions and assessing their motivational worth, based on players' perceptions. The extrinsic parameters include players' perceptions of the game play setting as well as introjected behaviors, allowing the examination of players' ego satisfaction. The study examined how players perceive the value of TRPGs in the context of Self-Determination Theory's principles of competence, autonomy, and relatedness (Ryan &

Deci, 2017). Competence was examined through players' perceived accomplishments and skills acquired when playing TRPGS. Relatedness was examined through the players' attitudes towards collaborative and cooperative gameplay and the effects on their relationships with self and non-players. Autonomy was examined through players' attitudes towards the game mechanic choices and the effect on their motivations.

TRPGs' Value in the Context of Motivation

TRPGs have been linked to higher levels of intrinsic motivation and heightened elements of competence, relatedness, and autonomy (Byers & Crocco, 2019; Ryan et al., 2006). Regarding competence, games by nature have been known to increase comprehension, thereby increasing learners' ability to assimilate complex knowledge (Lopes, 2015). Regarding relatedness, TRPG's mechanics involve roleplaying, providing players with the opportunity to work collaboratively, engage in fantasy roles and relationships, experience new virtual moral realities, and solve problems that can resonate with real life, using prior knowledge, collaboration, and critical thinking (Cao et al, 2018). Engagement in roleplay also enhances motivation through the creation of collaborative fiction that is then reinforced and contested by groups of role-players gathered around a table (Torner, 2016). Autonomy in games has been shown to increase intrinsic motivation within players (Roemmich et al., 2012; Ryan et al., 2006), while hindering autonomy negatively impact player retention and enjoyment (Kim et al., 2016).

As the examination of the literature reveals, TRPGs can be effective tools for providing motivation to players and learners (Cao et al, 2018; Cook et al, 2017; Byers & Crocco, 2019; Hergenrader, 2011; Lopes, 2015; Torner, 2016). However, there is a gap in studies focusing on the motivational aspects of TRPG elements, which are needed to harness the potential of such games as educational tools and motivational props for the design and development of curriculum

(Coe, 2017; Elias et al, 2012; van Gerwen, 2019). As argued by Kosa and Sprocnk (2019), "The motivations for tabletop gaming are as yet unexplored in research, and no dedicated measurement tool exists to evaluate or survey the motivations of tabletop game players" (p. 3). As such, this study analyzed specific elements within TRPGs, through the perceptions of players by exploring the following questions:

- What are players' perceptions of generated self-worth and competence through playing TRPGs?
- What role does autonomy play in generating motivation within TRPG players?
- How does social interaction within a TRPG gaming group affect players' motivation?

Methodology

Study Design

Using Generic Qualitative Inquiry (GQI), the study explored what about TRPGs motivates players, using the lens of self-determination theory. GQI is a pragmatic approach to qualitative research used to investigate experiences, attitudes, beliefs, and subjective opinions of people (Auta & Hodge, 2017; Bawa et al, 2017; Percy et al, 2015; Merriam, 1985). It is appropriate for qualitative studies whose questions do not cleanly align with conventional approaches to qualitative inquiry (Auta & Hodge, 2017; Caeli et al, 2003). GQI recommends the use of interviews and document analysis (Bawa et al, 2017; Percy et al, 2015). As such, GQI aligns with the nature of this study and the research questions that focus on the perceptions of participants' experiences with TRPGs.

Participants

After receiving IRB approval, snowball and criteria sampling was used to find participants. Several individuals known to the author, who were experienced in playing or studying TRPGs, were contacted and asked to participate and refer others to the study. These included a friend, a member of the author's TRPG gaming group, and a game-based researcher. Including participants who have an established rapport with the research can lead to more openness from the participants and result in gathering rich data (Coe, 2017). The key criterion was that players should have at least one year of higher education experience and have played at least one session of a TRPG. Six participants agreed to participate, with specific backgrounds in relation to their TRPG experiences as displayed in Table 1.

Table 1.

Participant Information in relation to their TRPG experience

Pseudonyms for participants	**Average Number of Years Involved in TRPGs**	**Multiple TRPGs Played**	**Played as GM**	**Perceived Expertise as a Player**	**Forum Sites Participated In**
Rob	10 years	Yes	No	Journeyman	None
Susan	8 years	Yes	No	Novice	None
Ben	20 years	Yes	Yes	Journeyman	None
Allen	6 years	Yes	Yes	Journeyman	None
Steve	1 years	No	No	Novice	Reddit
Betty	15 years	Yes	Yes	Journeyman	Reddit

Data Collection

Interested parties were sent a recruitment email with an overview of the study, the researchers' background, and a request for consent to participate. Data was gathered using 120

minutes semi-structured interviews of participants and website documents. As the initial criteria, data received from the participants was used to select Reddit website from the r/DnD server with a total of 2.1 million members (Reddit, 2020), as this was the only site mentioned by the participants. Also, more than fifty threads under the topic of Dungeon and Dragons were searched, being the only common TRPG amongst all the participants. The thread content and its relation to the research questions was used as the second criteria to filter threads closely related to the study's purpose. Seven of these threads were selected to be the document data as they had the highest correlation with competence, autonomy, and/or social interaction. These strategies were inspired by the GQI pragmatic approach of utilizing multiple methods of inquiry incorporating interviewing, reviewing archival documents including online forum posts, and/or observing the participants in a naturalistic setting (Carter et al., 2014; Im & Chee, 2012; Jamison et al, 2018; Kennedy, 2016; Smith et al, 2017). Examining the data from the interviews and the forum sites helped data triangulation (Carter et al, 2014; Polit & Beck, 2012).

Data Analysis

Forum documents were analyzed using Denscombe's (2003) suggestion that information from documents must incorporate the maximum possible inclusive data to "bring things up to date" (p.10). Thematic codes were developed while perusing the documents and were continually codified as needed, using Saldana's (2012) suggestions, and these were matched with the codes from the interview transcripts. "…how you perceive and interpret what is happening in the data depends on what type of filter covers that lens" (Saldana, 2012, p.6). Keeping this in mind and using the study's research questions as the 'filters' for the interview, raw data was reviewed, and relevant sentences, phrases, or paragraphs were highlighted. Afterwards, the data was coded and clustered with similar or connected codes to develop patterns and identify themes. This was done

for each participant's data, which was then synthesized in the findings. For both document and interview text, Percy et al's (2015) Thematic Analysis with Constant Comparison steps were followed, wherein the data was analyzed as it was collected. The analysis began during the collection of data and then moved back and forth, until enough data had been collected, to draw tentative themes that matched the RQs. This process was repeated until the final codes, by the most relevant emergent themes and patterns, were found. The deidentified transcripts and codes were shared with an outside coder, to ensure integrity of the analysis. No modifications were made to the codes based on the outside coder's feedback.

Results

Research Question 1: Competence

The data revealed similar and divergent perspectives for each participant on their views of gaining competence and learning skills through TRPGs. Participants indicated a sense of satisfaction and accomplishment when they were able to successfully play out scenarios in the game through roleplaying and communicating with other group members. When asked about their longest running game, all participants indicated that they felt more accomplished being successful with characters they had more time developing and roleplaying. Both Ben, who had the most experience playing, and Steve who had the least experience, preferred longer running campaign/scenarios, because of how playing established campaigns differed from starting new ones, Ben stated "because you have time invested in that character right, it's something you have developed and done…that character maybe became a part of your life." Steve said, "I would prefer a longer running campaign, I think you can get more of a story aspect with that and you

can weave more an interesting storyline with that, as well as get the players and characters involved a lit bit more."

Rob identified self-competence in keeping gaming adventures separated from his normal daily life but also indicated that accomplishments he made in the game, especially with a character that he had invested a lot of time in, made him feel positive about himself and his game experience. For Susan, having to play out social scenarios in the game that she would never attempt in real life gave her some satisfaction, as she explains "I think I used the game in a lot of ways to play around with different [social] options and the ability to be more irrational [in a social setting]". This allowed her to experience new things, satisfy her curiosity, and make her feel competent to better handle real life situations, as she learned to be more patient, more efficient at event planning, and improved in her communication skills. Steve's sense of competence came from being successful with character actions in the game, while Allen was attracted to the roleplaying aspect of the game and felt competent when he was successful in being able to figure out how to play his characters. He felt happy when he was able to distinguish between actions he wanted to take, versus actions he felt his character would take, in a scenario. He also described feeling good when his sessions as a game master were liked by the other players and he would be asked to resume the game at the next session.

Betty described having difficulties with roleplaying character with different moral standings to herself, and she felt accomplished whenever she could successfully roleplay these characters. Successfully navigating through a game session as a game master and piquing the other players' interests was another source of accomplishment for her. She explained that participating in TRPGs also helped her to improve her writing skills, which had a positive impact in her profession. Ben had similar experiences to Betty, where his motivation to play the games

was to socialize with his friends, and he felt accomplished whenever he could successfully roleplay his character. The game became a source of connection between Ben and his friends, as he explained "[TRPGs] is the only thing that keeps us connected to each other". His experience as a game master offered opposing viewpoints. In one instance he preferred to play as a player because it took a lot of preparation and effort to be a game master. On the other hand, he felt competence through aiding children in coping with social issues as a dungeon master and teaching them how to be more socially active. He stated "every game I had with him, he just grew with the game and I would think became a better person because of it. Definitely raised his grade from Cs to As", describing one of the children who was diagnosed with a learning disability, he has played with as a game master. Ben also felt that TRPGs, helped him learn how to be a better leader, which helped him be more productive at his profession.

Data from the forum page had threads discussing successful game master sessions, and others talking about feeling accomplished by creating unique character concepts and game scenario designs. Killsagetalyor (2020), stated "[the players] would have gladly played until the crack of dawn if I'd let them. But I'm a DM, not a miracle worker. I've got encounters to build now" describing a successful session. Technicolor (2020) stated how the DM had provided an exhilarating session, describing it as "that moment was one of the most fist pumping ones I've had yet. This session had so much more heartache, high stress and satisfaction than we've experienced thus far. God damn I love this game" providing a new perspective on feeling accomplishment through hardship and challenge. As evident from the data participants' perceptions aligned with information received from the forum page.

Research Question 2: Autonomy

Rob's motivation for choosing TRPGs, in the first place, was related to the complexity and autonomy that these types of games offer. He commented, "Having a say in what your character is and their personality…it was fun getting to design these cool druids that I wanted to play as." When asked about whether choices and player autonomy helped with the enjoyment of the game Rob stated, "Yeah for sure cause I would probably in most cases choose playing a tabletop over an actual video game just because I like having the extra customization and having the choices matter." Allen stated, "In general choices help your enjoyment…I think for most DnD players somewhere in the middle between [directed gameplay] and [complete autonomy] is the best option". Rob, Ben, Betty, and Allen pointed out that autonomy was one of the main reasons for their preference for TRPGs over other games.

However, there were some differing accounts on the autonomy offered in the game's mechanical aspects, such as creating and developing their characters, and those relating to the actions that players can take within a game scenario, which include deciding on how to accomplish tasks using their characters. Betty explained "I would say mechanics is probably the harder thing for me, especially early on and remembering rules". Ben indicated that he did not bother with spending too much time learning mechanics before a game, and preferred to learn on the go, as he is playing. Susan preferred to play TRPGs that had limited mechanical rules, citing that her favorite game to date had only "one-page pdf for the whole rule set". Conversely, Rob and Steve found the aspects developing and creating characters to be a motivational factor for playing the game. Rob explained that being able to successfully carry out actions within the game after spending hours designing the character was something he liked experiencing. Similarly, Steve mentioned that one of his main attractions towards roleplaying games is being able to develop characters and watching them excel in the game environment.

The data in forums about autonomy related to the form of discussions regarding character creation, skills, and rule discussions. There were some unique perspectives that were shared in these threads, which enhanced the understanding of autonomy in the context of motivation, as discussed by the participants. PandaBund's (2020) discussed how having multiple choices was challenging in the context of roleplaying. They stated, "The role play is fun, but I suck at it, and whenever I say something, the party always seems to get mad at me because I have different ideas (all in character of course)". The subsequent responses led to a discussion on how to improve roleplaying by utilizing different character actions. Dilthehil's (2020) thread discussed using an in-game skill in a creative way during a scenario, leading their team safely through a challenging situation, showcasing the degree of autonomy provided.

Research Question 3: Social Interaction and Relatedness

Steve's interest in play was due to his preference for the genre of role-playing games. He had passing interest in the TRPGs but did not seek them out until they were introduced to him by a friend as a medium for connecting with each other. Allen stated that through playing he "learned to be more adaptive and be more perceptive and responsive to other people", which made it easier for him to pick up on social cues. Betty felt accomplished when she had a fun game session and connected with her friends. She states, "It is really nice to be able to get together with my friends and have a guided activity we can do together, and I feel like we learn about who we are as people also". All participants indicated that being able to interact socially with people was a major motivational factor. Ben, Betty, and Steve discussed that one of the prime motivators for playing was being able to connect with longtime friends through TRPGs. Rob, Steve, Susan, and Allen also expressed how interacting with other people in the game fostered real friendships with these people outside of the game.

This served to help the participants make new friends when they had to move their residence to a different state. Allen, Susan, and Rob also stated that they found interacting socially through the game was easier than interacting in other social environments such as workplace or parties. Allen noted that being in the game and roleplaying helped him to communicate more, as he is introverted and shy in other social settings. Ben noted that children who had problems communicating socially improved these skills through playing TRPGs. "[the child] quickly learned that he is able to talk to people through his character that made him feel comfortable…and he broke out of his shell, and I think his mom said he joined the speech or debate team".

The social element of TRPGs could also lead to some negative experiences. Susan and Betty discussed some experiences in which interaction with group members led to demotivation from playing the game. Susan cited that there were times when she felt the dungeon master was not prepared, which negatively affected her experience. She also did not like being told how to play the game or being thrust into problems in the game scenario that she could not solve. On the other hand, Betty cited that she had to intervene in one of her groups due to the actions and behavior of one group member. She ended up having to kick that member out of the group, which was not a pleasant experience. Similarly, Rob has had incidents where his group members would not participate seriously in the game and would spend most of the time bantering or "goofing around and chatting about random things". This behavior was detrimental to Rob, as he took enjoyment from playing his characters and advancing in the games scenario.

The focus of the conversation in the Reddit threads was slightly different from that of the participants who had primarily discussed only gameplay related social interactions. For example, Not_so_1337 (2020) asked for advice in explaining Dungeons and Dragons to someone who has

no concept of it, and received several response posts, one of which said “A board game mixed with a choose your own adventure book, cept its multiplayer”. Balognaonrye (2020) asked for advice from other players on learning dungeons and dragons for himself and his daughter. Grim7max (2020) shared a picture of a homemade puppet that was created based on a player’s character. They described the experience as “I had so much fun making my goblin puppet that I decided to make a new one based of one of my sister's drawings that she made for a DND character she did!”.

Discussion and Implications

This study examined why TRPGs are effective learning tools that provide increased motivation and performance to learners (Cook, et al., 2017; Hergenrader, 2011; Lopes, 2015). The goal was to provide evidence-based information to educators, designers, and researchers who wish to implement TRPG based motivational learning tools. The findings revealed intriguing insights into three elements of TRPGs that correspond with the three pillars of self-determination theory, which need to be addressed when considering TRPGs as a motivational learning tool. These elements include roleplaying competence, player autonomy, and collaborative gameplay. Roleplaying emerged as a critical element of motivation, since all participants viewed their success in roleplaying their characters as a major accomplishment. In relation to SDT, roleplay corresponds with the basic psychological need for competence (Ryan & Deci, 2017). Roleplaying can be viewed as the most impactful element in any TRPG for several reasons, starting with its inherent benefit as a pedagogical method that can lead to increased motivation and engagement in students (Agboola, 2004; Cobo et al., 2011). TRPG roleplay fuses gameplay concepts such as character creation, levels and skills, which are known to increase motivation in learners (Hoare et al., 2014; Prensky, 2002).

As participants indicated, continuous roleplay of the same character in longer run campaigns also leads to the development of connections between the participants and their characters, which amplifies their motivation. Roleplay gave the participants the ability to simulate being someone else to experiment with social cues they would never do in real life. Motivation gained from the ability to become another persona aligns with the conclusion of Coe's (2017) grounded theory research, in which he explored the reasons why players are motivated to keep playing TRPGs. The findings supported the pillar of autonomy concept (Ryan & Deci, 2017), as evident from the nature of the gameplay where players are given the freedom to choose how they want to personalize their characters, and how their character can interact with the game environment and narrative. Given the evidence in the literature regarding the correlation between autonomy and student engagement (Benson, 2013; Blidi, 2016; Fazey & Fazey, 2001), when using TRPGs for learning, designers must ensure ample autonomy options within the curriculum.

TRPGs foster collaborative gameplay and the ability for the players to create social connections through gameplay that aligns with the pillar of relatedness (Ryan & Deci, 2017) and the idea that collaboration equals better engagement (Barkley et al., 2014). The findings showed the positive impact collaboration had on the participants' experiences, with some of them being able to form new relationships and maintain current ones. This connection between collaboration and player motivation, indicates the necessity of designing TRPGs as a collaborative endeavor when using them as learning tools within curriculum. Based on the discussion above, the relationship between TRPG gameplay and motivation in learning environments is evident in each identified element.

When designing curriculum using TRPGs, it may be best to provide choices of characters or roles to learners and have them participate in different scenarios to make autonomous decisions based on their characters (Rao & Stupans, 2012; Nestel & Tierney, 2007). For example, when designing TRPGs for Business concepts, the roles that are given to students should be based on real world roles such as Managers, Executives, Salesperson and such, because when learners are provided with higher autonomy to select their roles and personalize their characters, it leads to greater motivation and engagement (Bontchev et al, 2021; Rodrigues et al, 2021; Wang, 2021). Additionally, practitioners should consider fusing TRPG roleplay with gameplay elements such as narrative modification and levelling, to provide enhanced motivational components for learners from start to finish. Narrative scenarios should provide problems that require a team of learners to solve, inducing collaboration.

Limitations and Conclusion

Regarding limitations**,** while using the SDT lens was germane to the research questions, given the broadness of TRPG topic, it will be useful to examine other aspects of the gameplay and their impact on players using a different theoretical lens. Another scope for future research is investigating the effects of a TRPG based curriculum on engagement and performance outcomes. It would also be beneficial to examine perspectives of learners embedded in different levels of educational settings. As evident from some of the data, the role of the GM within TRPGs can be likened to that of an instructor in a classroom setting, particularly in the context of providing guidance and constructive opportunities to the players or learners. Thus, it will be valuable to investigate more closely the correlation between the roles, responsibilities, and privileges of GMs and instructors to facilitate the design of entire courses based on a TRPG framework. In conclusion this study examined the perceptions of players of TRPGs relating to high levels of

motivation. The findings revealed three important highly motivational elements: roleplaying aspects of the game, the highly interactive nature of the game that leads to significant social interaction between the players, and the freedom of choice offered by the game, which also enhances the other elements. TRPGs are a great resource for learning, and more research needs to be done to optimize their use as a learning tool. This study was a small step in advancing research in this direction.

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CHAPTER THREE: CAMPAIGN FOR MOTIVATION

Introduction

This study offers a case study based, empirical comparison of the motivational processes of classroom teaching and running Tabletop Role Playing Games (TRPG). The goal of such a comparison is to identify if there may be any significant similarities between these processes. Having that knowledge may motivate and assist faculty, particularly those who are unfamiliar with such games, to adopt such games more easily in classrooms. TRPGs have significant motivational potential which makes them desirable educational assets. Motivation is a key component of successful student experiences and has been linked to satisfaction, endurance, higher performance outcomes, and best practices of teaching (Ferrer et al, 2020; Lepper & Malone, 2021; Martin, 2023; Valenzuela et al, 2024). Conversely, it is an equally key component of faculty experiences and linked to effective instructional practices and educational innovations that in turn can have positive impacts on student motivation (Dadakhonova, 2024; Daumiller, et al, 2020; Kottmann, 2024; Watt & Richardson,2020). Games continue to be used for motivation in a learning context in higher education, because of their ability to implement and enhance motivation and performance outcomes in classrooms (Bado, 2019; Dahalan et al, 2024; Hartt et al, 2020; Sabrowsky et al, 2024; Zhang & Yu, 2022). TRPGs offer multiple motivational stimuli including play and playfulness, as well as options for self-expressions and creative problem solving in an abundantly socialized setting (Boysen et al, 2023; Niarchos, 2023; Orr et al, 2020; Whitton, 2022). This is possible due to the core characteristics of TRPGs.

In the context of motivational gameplay, TRPGs combine unique game systems that offer opportunities for in-time thinking and adapting, real time narratives, character design, role play and robust social interaction between the players. It is a social game, where players usually

gather around a table, and each participant creates, controls, and acts as a fictional character in an evolving story or adventure. The games enhance logical reasoning, spatial reasoning, and decision-making skills through their structured and cooperative essence, and involve predictable rules but unpredictable outcomes (Coe, 2017; Ewalt, 2024; Youakim, 2019). Players interact in an open world with a Game Master or GM (also known as Dungeon Master or DM), and games are played via campaigns with multiple game sessions, where each session consists of at least one GM/DM who facilitates or 'runs' the game, helping players play through narrative and character manipulation. The GM is responsible for creating the narrative and guiding the players, often providing the other players with challenges and rewards as they progress through each session. GMs could also introduce new narrative scenarios and modify the current narrative based on the actions of the characters that the players are roleplaying as (Coe, 2017; Ewalt, 2024; Gabriel, 2024; Youakim, 2019). The various decisions and actions taken by the players influence the outcome of the campaign narrative, resulting in lasting changes to the narrative, which are then influenced by the feedback provided by the GM. For example, a campaign setting can consist of a scenario where players are asked to help deal with a food crisis as the current yield of crops are contaminated with pollutants and are unsafe for consumption. Here players have the freedom to choose their own actions such as investigating the reason for the contamination, finding a cure, or securing food from a different source. Players may choose to pick one or several different approaches to resolve the crisis and depending on their choice the GM can then provide feedback by changing the narrative such as allowing negotiations between the nearby farms or providing the players with a chance to recruit agricultural experts (Cover, 2014; Gabriel, 2024; McDermott, 2023).

In the context of global and demographic value, TRPGs are a robustly growing industry, gaining popularity worldwide, with an increasing number of players from widely divergent backgrounds. The 2022 global TRPG market size was USD 1539.52 million dollars, with an expectation that it would reach USD 3012.3 million dollars by 2028 (Business Research Insights, 2024). While 37% of Americans have played a tabletop game in the past year, with 10% playing at least once a month, interestingly, around 45% of females regularly play board games versus 37% males (Lindner, 2023). While popular TRPG titles such as Dungeons and Dragons, Pathfinder, Dune, and Shadowrun are played globally, the genre has a large inventory worldwide (Ewalt, 2024). In the context of motivational tools in education, TRPGs have emerged as potential assets due to their ability to enhance learning experiences, learner satisfaction and performance outcomes (Arnaudo, 2023; Cook, et al., 2017; Funk, 2021; McCollum, 2023; Poeller et al, 2023; Wee, 2024). The role-playing aspect of TRPGs, combined with the social dynamism of in-person gaming, creative critical thinking and problem solving involved in the game running and game playing also adds to their value as motivational tools for instruction (Bowman & Lieberoth, 2018; Hayse, 2018; Hill, 2023; Westborg, & Bowman, 2024; Woods, 2017; Woodley, 2024). Additionally, these games offer collaborative creation that allows players to foster and enhance individual, social, and societal growth (Daniau, 2016; Bowman & Lieberoth, 2018), that leads to character and skill development with measurable impact (Tariq & Abonamah, 2021). Petousi et al (2023) interviewed 7 educators to compare TRPG mechanics and history lessons in the context of promoting historical empathy. All participants of this study agreed that such games have proven potential for transformative learning.

Essentially, these statistics are a testament to the immense popularity and value of tabletop gaming, making it a motivational, game-based learning option worth adopting in

education. However, a review of the literature reveals two things. Firstly, TRPGs are not being utilized robustly in higher education, thereby denying faculty and learners of their potential benefits for education. According to Haarman (2023), “These games are an underutilized teaching and formation tool that is already present in many schools and an increasingly popular pastime (especially after COVID). Recognition and utilization of the games’ capacity would provide another resource for educators" (p. 3). Atamdede (2021) discusses how TRPGs are underestimated and why they deserve consideration as valid forms of composition and pedagogy, with practical and theoretical applications. Secondly, most research pertaining to TRPGs has been conducted by researchers who were also TRPG players and game masters. This indicates that being familiar with TRPG mechanics and knowing the gameplay facilitated such researchers' adopting of these games, allowing them to harness the full range of mechanisms and rules of TRPG for motivation within their educational settings (Boon, 2022; Brenner, 2019; Fendt & Mache, 2014; Francos, 2018; Henthorn, 2022; Higgins, 2023; Hill, 2023; Johnson, 2018; Liapis & Denisova, 2023; Niarchos et al, 2023; Poole et al, 2021; Katifori et al, 2023; Lasley, 2021; Liapis & Denisova, 2023; Lopes, 2015; Miller, 2023; Torres-Rodriguez & Martínez-Granada, 2022; Woods, 2017). The key takeaway from this is that the motivational value of TRPGs is being ignored by faculty who are not familiar with such games.

As discussed earlier, being familiar with the games offered leverage to their adoption as motivational tools in classrooms. However, for those faculty who have not played these games, the process of becoming proficient in running them before adopting them in the classrooms may be time consuming and cumbersome. This may lead to continued demotivation towards the adoption of TRPGs, unless we find a workaround for this issue and find ways where novice faculty can participate in an environment wherein TRPGs could serve as motivational learning

tools through playful learning (PL). Note that novice in this case relates to lack of knowledge regarding TRPG playing and game running processes. “To optimise the educational benefits of PL in general and TRPG in particular, further research is needed to develop didactic designs in which novices can engage in creative processes with high learning potential within a specific educational context” (Boysen et al, 2023, p. 10). One way of doing this is to identify the elements of teaching and game running that are similar, so that novice faculty may view TRPG processes as something familiar, which in turn will make their adoption of such games easier.

According to psychologists such as Zajonc (1968), familiarity can make a positive impact on attitudes towards new content, ideas, persons, or objects. This is termed as the Mere Exposure Effect, also known as the Familiarity Principle, and posits that as humans, we have the tendency to develop preferences for things when we are familiar with them. Using two field studies and one laboratory study, Greul et al (2023) displayed that familiarity with an idea could positively affect the evaluation of that idea and its outcome. Familiarity or mere exposure effect can be demonstrated through similarities of experiences due to the subjective validity and implicit preferences arising in people’s perceptions when interacting with similar ideas and objects (Bornstein & Craver-Lemley, 2022; Fiolka et al, 2024; Gordon & Holyoak, 1983; Kennedy & Willer, 2022; Nickerson, 2023; Shen et al, 2022; Weise et al, 2022; Zizak & Reber,2004).

The value of familiarity has also been studied in limited capacity in the context of education. A study that investigated the impact of prerequisites and content familiarity on students’ performance outcome found that the highest performance resulted from ‘VF’ or very familiar items, which indicated that in the context of educational content, for familiarity to work efficiently it is important to use a selective lens to identify items of similarity that are most relevant to the objects of comparison (Shaffer et al, 2016). Content, interlocutor, accent, and

audience familiarity has shown to positively impact learning and performance, particularly in language learning and communication (Barrett et al, 2023; Bui & Huang, 2016; Carey & Szocs, 2023; Namkung & King, 2024). Additionally, being familiar with a topic positively impacted processes and behaviors in the context of writing (Abdi Tabari & Wang, 2023; Li & Yu, 2023). As such, familiarizing faculty with the motivational processes of TRPGs may positively impact their response to adapting such games, thereby allowing learners to benefit from the stimulation that such games offer to the teaching and learning process (Dagnino et al, 2018; Khan et al, 2023; Monteiro et al, 2023; Shen et al, 2022; Zhang, 2019).

Thus, this study conducted a comparative analysis of the processes of teaching a classroom and running a TRPG to ascertain if any familiarity exists between these processes. John Keller's (1987) ARCS model was used as the examination lens, including the development of instruments and analysis of results. This was germane to the study's focus on the motivational aspects of the two processes. The goal was to leverage that information to facilitate easier adoption of TRPGs by instructors who are hitherto unfamiliar with such games. The Research Question examined in this study was: *How do the motivational process used by game masters when running a TRPG game compare and differ from the motivational processes of higher education faculty when teaching a class.*

Literature Review

Motivational Lens of ARCS

There is precedence in the literature of using ARCS as a lens for framing studies focused on motivation (Keller, 1984). Fang et al (2023) composed a literature synthesis in which out of the nine reviewed studies, six had used the theoretical framework of ARCS to analyze students'

motivation. Directly relevant to this study's frame, Roberts and Spangenberg (2020) used the four categories of the ARCS model as a lens to analyze interview data using theoretical thematic analysis. ARCS was used as the core methodology to examine student motivation using gamified teaching in a flipped classroom (Durrani & Kamal, 2021). Reynolds et al (2017) explored how three instruction librarians at different institutions integrated the ARCS framework into their teaching practices that improved student motivation during information literacy sessions. For this study, the data was examined using the lens of the four tenets and associated sub tenets of the model, which are Attention, Relevance, Confidence, and Satisfaction. See Table 1 for an overview of each principle.

Table 2.

ARCS Overview

Principle	**Description**
Attention	Seeks to capture learner interests and attention through inciting their senses and emotion
Relevance	Relates to the aspects of the learning process that should show the usefulness of the content, so that learners can bridge the gap between content and the real world
Confidence	Attained by helping students establish positive expectations for success
Satisfaction	Positive feelings about one's accomplishments and learning experiences

ARCS was a suitable choice for the study because of its grounding in processes that generate motivation, which aligns with the research question. Additionally, the ARCS model's focus on individuals makes it an ideal selection, given the case study methodology of this investigation. Case study methodology uses individuals as the centerfold of the research and analysis (Yin, 2018). There is evidence in the literature of utilizing case study and qualitative methods that seek deeper understandings of motivational problems, and the applications of the ARCS model in this context (Li & Keller, 2018). Like this study, such case studies engage in

detailed investigation of a phenomenon over a period and offer rich descriptions through data analysis from multiple data streams (Bhattacherjee, 2012). Finally, the model relies on intrinsic characteristics, as opposed to behavioral ones, which lends it to being used as a problem-solving, motivational model (Li & Keller, 2018). This study uses all four components of the model, which is a well-established practice in research studies using the model (Li & Keller, 2018).

TRPGs as Motivational Assets in Education

Although limited in scope, there is precedence in the literature regarding the use of TRPGs in education, including as a motivational asset. The absence of motivation impacts performance outcomes, persistence and student satisfaction (Ballesteros et al, 2023; Leenknecht et al, 2023; Shah, 2021; Tinto, 2022), and student outcomes are influenced by different types of motivation emanating from multiple factors such as external incentives, autonomy and deeper self- involvement, interest and entertainment (Howard et al, 2021; Kocsis & Molnár, 2024; Le & Nanjun, 2023; Liu et al, 2012). TRPGs can provide students access to such motivational factors. Hence their adoption in the classroom as motivational components is encouraged and supported (Coe, 2017; Henning et al, 2024; Higgins, 2023; Ruff, 2021). In a study Lopes (2015) integrated a TRPG into a Network and Systems Management course, where students were divided into groups of four, with 3 students assigned the role of players and one student was assigned the role of the game master (GM). The results indicated high motivation from students in both roles and an increase in creative use of the game systems to resolve challenges, which in turn highlighted the impact team decision making and communication has on motivation.

Similarly, in an English Language Learning classroom, Cook et al. (2017) found that TRPG assisted students in making meaning from traditional classroom texts by examining them through a gameplay lens. This study concluded that there is a need for more research on the topic

of using TRPGs in classrooms. Additionally, TRPGs have also been studied in relation to increasing social and emotional learning competencies, critical thinking, improving health behavior, sustainable learning game designing and learning foreign languages (Angelelli, et al, 2023; Giatroudakis, 2023; Mackey, 2023; Ruff, 2021). TRPGs have been used in some classes dealing with English language and narrative writing (Cantu, 2019; Cook et al, 2017; Farkaš, 2018, York et al, 2019). In a study that introduced L2 students to TRPG mechanics, the teacher-researcher found that the students feel better motivated using L2 when operating in a learning environment that offers opportunities for socializing, collaborating, and scaffolding in task-based exercises related to a fictional world game (Torres-Rodriguez & Martínez-Granada, 2022). Ntokos (2020) used a TRPG framework to teach software engineering for two computer games courses and concluded that it led to higher student satisfaction, attendance, and pass rates. Turner and Robinson (2023) presented the use of a TRPG as the "pedagogic delivery mechanism" for an extra-curricular employability skills session, in which players navigated their way through a series of puzzles that were designed to develop specific employability skills.

As is evident from the above, there is a benefit to education in equipping faculty with the knowledge and resources that allows them to harness the motivational potential of TRPGs in effective and unexacting ways. The inherent role-playing aspect, social interaction, and critical thinking in TRPGs make them highly attractive for motivation in educational contexts (Bowman & Lieberoth, 2018; Lasley, 2020; Woods, 2017; Miller, 2023). However, "While role-playing games have been used in the classrooms for many years, most analyses of the efficacy of these games have been subjective and therefore easily dismissed" (Brenner, 2019, p.8).

Game Masters (GMs)

Game Masters are integral to the TRPG framework and mechanics, as well as to this study's focus. Their role is to act as the main storyteller and facilitator while running the games. The literature offers some perspectives on this role and its accompanying characteristics (Tang et al, 2023). Being a GM means being creative and the creative aspects of the game can be a motivating factor to take on this role. The other motivator for leading these games is the dynamism of co-creation and group efforts (Katifori et al, 2022; Tang et al, 2023). GMs have a full range of responsibilities, such as controlling and creating the narrative flow, designing and enforcing game rules, arbitrating conflicts, providing fun and tension/challenges, and keeping the group dynamics functioning and entertaining. Additionally, they have the challenge of mediating between player desires and the possibilities of a fictional, yet mechanically rich game world (Kelly et al, 2023; Tang et al, 2023; Tychsen et al, 2005). Because the role of a GM can involve complex processes, researchers have examined the possibility of designing or utilizing computational assistants for GMs to help facilitate the gameplay, including the use of generative tools (Acharya et al, 2021; Kelly et al, 2023; Zhu et al, 2023).

When acting in this role, GMs face the unique challenge of balancing static authoring processes with dynamic practices. To meet such challenges many GMs "prepare multiple branches of a narrative or a possibility space for the narrative, allowing them to adapt to how players may change the story during play" (Tang et al, 2023, p. 1). While facilitating the games, GMs must ensure that players are motivated and engaged in the game and perceive tell-tale signs of when there is a waning interest in the game. Key decisions must be made by GMs regarding when to modify or adapt the game flow and narrative, based on cues from player actions such as players wandering aimlessly, or pursuing unrelated goals, or simply being too successful (Strugnell et al, 2018). Liapis and Denisova (2023) discuss evaluating players' experiences as an

essential data that GMs can use to improve on their future games. Campbell and Madsen (2021) examined the use of a TRPG called Fiasco as a serious game, and discussed how GMs act as facilitators, conjuring the setting and context of the adventure.

For example, GMs provide the narrative for the gameplay to guide and enhance the players' experience, as well as help guide the other players as they navigate the narrative (Alberto, 2021; Katifori et al, 2022; Oinonen, 2020). Similarly, instructors have the responsibility of developing learning materials and helping guide their learners through the learning contents and processes. Just as role-playing competence, player autonomy, and social interaction can drive engagement in TRPGs (Funk, 2021; Orr et al, 2020), similar motivational factors such as learner competence, autonomy and socialization can impact learners' attitudes toward classroom learning (Chin et al, 2024; Muth & Lüftenegger, 2024; Zolfaghari & Rashidi, 2023). Despite apparent parallels, there's a lack of literature examining tangible connections between game running and class teaching processes from a motivational context. This matters, because examining the connections between the TRPG game running and instructional processes in classrooms may provide valuable knowledge regarding how to help instructors familiarize themselves with TRPG games.

Methodology

Yin's Descriptive Case Study Method

The design of the study followed Yin's (2002; 2009; 2013; 2014; 2018) descriptive case study methodology. Yin (2002) identified cases as "a contemporary phenomenon within its real-life context, especially when the boundaries between a phenomenon and context are not clear and the researcher has little control over the phenomenon and context" (p. 13). This is well

applicable to this study, wherein the phenomenon is the similarities and differences between game-running and class-teaching, in the context of motivation, operation and inclusion in classrooms. The relationship between the phenomenon and the context remains unclear, and the study seeks to discover clearer connections between the phenomenon and contexts. Yin (2002; 2012) considers good research design as being sequentially logical, where the empirical data connects clearly to a study's initial research questions and conclusions and offers four distinct types of design. Single holistic and Multiple holistic designs require one unit of analysis. Single embedded and multiple embedded designs require multiple units of analysis. Based on Yin's (2002) advice to select the design which provides maximum instrumentality to answer their research questions, this study uses the multiple embedded design, using two groups (GMs and instructors) and six cases to optimize the outcomes of the research.

Participants

Given that the focus of the thesis is a comparative examination of the processes of teaching and classroom and running a TRPG, after receiving IRB approval, purposeful and criteria sampling was used to find 3 faculty members and 3 GMs. The researcher contacted known people from both groups and used exclusion criteria to select the final participants. The exclusion criteria for faculty was that they were not experienced in TRPG gameplay. The exclusion criteria for GM were that they do not have any prior teaching experience. This would help eliminate any cross contamination of ideas and perceptions between the two groups. The inclusion criteria for faculty were that they had at least two years of teaching experience and had taught more than one course topic. The inclusion criteria for GMs were that they had at least two years of game running experience and had played more than one type of TRPG game. The

sample size adhered to Yin's (2009) advocating that "As part of the same case study, you might have two or three literal representations and two or three deliberately contrasting cases" (p.260).

Additionally, Yin (2009) confirms that in a case study, "an individual person is the subject of study, and therefore the primary unit of analysis" (p. 237) but using multiple participants with varied backgrounds also ensures that the data "produce a more compelling and robust case study" (p. 260). According to Yin (2009; 2013), in multi-case studies, participants should be selected based on literal replication (predicting similar results) or theoretical replication (predicting contrasting results but due to anticipated reasons). The division of cases can be either one unit of analysis per case (holistic) or multiple units of analysis per case (embedded). (Baškarada, 2014; Yin, 2009; 2014).

With respect to this study, the same number of cases (3) per group was selected to provide multiple units of analysis. The two groups were formed to represent both literal and theoretical replication. The rationale was that within group units could yield literal replication due to the similar backgrounds of experience (instructors and game masters). Conversely, between group units could yield theoretical replication based on the anticipated reason that instructors and game masters would use differentiated elements, even when applying similar processes of instruction and guidance, because one group was focused on education while the other was focused on entertainment. Table 2 provides participants' background information.

Table 3.

Participant Background

Pseudonym	Details
George	Faculty, male. Mostly in person teaching. Age 50 years. Ph.D. in Global Leadership. In addition to being a faculty, Chief Financial Officer of a multimillion-dollar, alternative fuel construction company. Upbeat and action-oriented personality. Believes in experiential learning experiences.
Susan	Faculty, female. Fully online teaching. Age 44. Ph.D. in Organizational Management. In addition to being a faculty, Associate Dean in the School of Business. Intense, very hard-working leader, who believes in behaviorism and hands-on teaching.
Jon	Faculty male. Mixture of in person and online teaching. Age 62. Master's in business and Logistics. In addition to being faculty, Program Chair for Logistics. Keenly interested in innovative teaching. Believes in Constructivism.
Jane	GM, female. She has been playing TRPGs for over 10 years. She has played many different types of TRPG systems, such as Dungeons and Dragons, Star Wars, etc. She was also involved as a game master in several of them.
Bob	GM, male. He has been playing TRPGs for over 15 years. He has played several different types of TRPG systems such as Pathfinder, Shadowrun, etc. He was involved as a game master in several of these systems.
Joe	GM, male. He has been playing TRPGs for over 5 years. He has played several different types of TRPG systems such as dungeons and dragons, call of Cthulhu, etc. He has mostly been a game master in dungeons and dragons.

Data Collection

Interviews are recognized as a legitimate and preferred data gathering method for case study research (Yin, 2002; 2014). This study used data sets from two case groups, using the process of interviewing as data instruments. Participants were sent an invitation email informing them of what was required for their participation along with the researcher's background and a request for consent to participate. Data was gathered through 60-90 minutes of semi structured interviews that were recorded and later transcribed. Questions were framed using the ARCS tenets and focused on eliciting responses pertaining to if and how these tenets were factored into the participants' processes. See Appendix A for the interview questions.

Data Analysis

Yin (2002) defines analysis as a process "consists of examining, categorizing, tabulating, testing, or otherwise recombining … evidence to address the initial propositions" (p. 109). Yin's (2011) five phases of analysis and their interactions suggest compiling a database, disassembling data, reassembling data, interpreting data, and concluding the data. For this study, a database pertaining to each case was created by compiling raw data in the form of interview transcripts, as well as audio clips, which were organized according to each case in a Word folder format. Disassembling involves coding and sorting data in several ways to create new insights, while reassembling involves categorizing, tabulating, and recombining data such as using the cross-case analysis to discover patterns to answer the research questions (Yin, 2011). This study combined Yin's (2011) suggestions with Saldana's (2012) suggestions on analyzing thematic codes based on the research questions that were used to determine relevant data from the interview manuscripts. The researcher manually coded concepts and ideas from the sources of data to identify themes to ensure developing an in-depth view of the data, and to make sense of the data. The transcripts were de-identified and codes were shared with an outside coder to compare the results and ensure integrity. Modifications were made as needed based on the outside coder's feedback, which also ensured the reassembling process. Robustness was achieved through interpretations of the themes and patterns offered by the two case groups, using a within subjects and between subjects' examination of the transcripts. Data was compared between each of the three GMs and instructors, to look for similarities and dissimilarities in their versions of the processes. Then, data was compared between the GMs and instructors as a group.

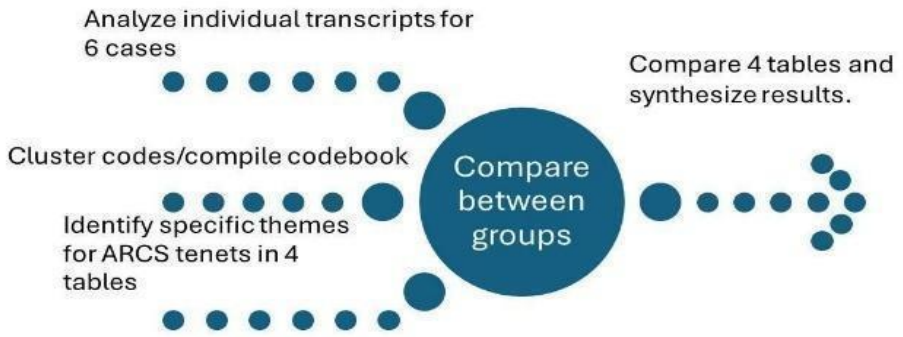
Specifically, first, interview transcripts pertaining to each participant were analyzed and coded. Similar codes were clustered to eliminate redundancies and identify tentative themes, and the process was repeated until no new codes could be found or themes formed. Then, codes and

excerpts pertaining to each participant within each group were compared to compile a codebook with a list of common processes for each group pertaining to each of the tenets of ARCS. Thereafter, specific themes for similarities and differences were identified from the codebook and compiled for each group. Following this, the common processes within each group for each of the 4 ARCS tenets were compared between the two groups for similarities and differences. Finally, the specific themes for similarities and differences between groups were identified and placed in 4 tables as a final codebook. To arrive at the final synthesized results, the 4 tables' contents were compared to find the most common themes of similarities.

Preference was given to themes that occurred across all tables. See Table 7 (in the Results section) for the final, coded synthesis table, and Figure 1 For Analysis Flow, based on Yin's (2011) suggestion of disassembling data, reassembling data, interpreting data, and concluding the data. The analysis follows Yin's (2003) directions to use all embedded units/cases within groups. In doing so, "the researcher is able to explore the case with the ability to analyse the data within the case analysis, between the case analyses and make a cross-case analysis. This gives the researcher the power of ability to look at subunits that are located within a larger case" (Gustafsson, 2017, p. 4).

Figure 1.

Analysis Flow



Results

The study investigated the question: *How do the motivational processes used by game masters when running a TRPG game compare and differ from the motivational processes of higher education faculty when teaching a class?* The results for each case group showcase the participants' perceptions regarding each ARCS component and their respective subcomponents (Keller, 2010). To optimize the results, they are shared using a tripartite structure: (a) Comparing within Group 1, (b) Comparing within Group 2, and (c) Comparing between Groups 1 and 2. The results and analysis for each core tenet of ARCS for the between groups are articulated in two segments to robustly display how the processes between groups compare. First, the items are described in terms of the universal approaches employed by each group to enhance engagement and maintain attention, relevance, confidence, and satisfaction among their respective audiences. Second, these findings are organized to demonstrate their alignment with the ARCS sub-tenets for each core tenet. Finally, a synthesis of the conclusions drawn was provided, based on the findings pertaining to each core tenet.

Attention: Comparison Within Group 1 (Instructors)

Perceptual Arousal

Perceptual arousal answers the question, “What can I do to capture their interest?” (Keller, 2000, p. 4). All participants emphasized the significance of providing engaging and relevant content and guidance for learners that would be relevant to student lives and goals, as well as valuable to their interests and future needs. However, the strategies mentioned are divergent such as leveraging current events, real-world examples, and trending topics to capture student attention and demonstrate the value and practical applications of the learning materials. George and Jon provided examples from their classes. George mentioned, “For example, one of the assignments was[…]to go find in a business a mission statement because we're talking about business mission and vision statements." Jon mentioned that, “So one of the best ways that you can hold their attention is, you know, teach them and give them content that they find valuable. If they come into the classroom thinking, it's not that valuable you need to show them the value of that. So they can, you know, find that, and move forward.” Essentially, participants suggested that in case students were unable to perceive the value of a learning content, it is important that instructors discuss/describe the connection between the course material to students' lives, experiences, and interests, making the content more relatable and captivating. It is necessary to demonstrate the practical applications and relevance of the material to capture students' attention.

Personalization was a key resource for attention and involved both personal connection between instructor and students as well as personal investment of learners in the learning process and contents. Building personal connections with students and creating an approachable atmosphere, including using humor, was identified as fundamental to effective guidance and teaching. Participants strove to establish rapport with learners both inside and outside of the

classroom, fostering a supportive learning environment where students felt comfortable in seeking help and engaging robustly in discussions. Key strategies included engaging students personally at the course's outset to foster connection, encouraging interaction among students and with the instructor to sustain interest, and strategically planning engagement throughout the course to adapt to evolving dynamics. Jon discussed the concept of "skin in the game", stating that , “ “...if they don't have any skin in the game. That's really kind of hard to keep them motivated. So skin in the game can be, as I mentioned earlier, achieving a goal, seeing the value, what they're learning`` This suggests that students are more motivated when they have a personal investment in their education, such as achieving a goal, seeing the value of what they're learning, or paying for their education themselves. Susan discussed the value of customizing examples based on student demographics, such as relating supply chain concepts to products like beer for younger students, to ensure relevance and sustained attention. "I had a younger student body, I knew they were interested in partying or beer, so we'd do a supply chain example starting with beer."

Inquiry Arousal

This answers the question, “How can I stimulate an attitude of inquiry?” (Keller, 2000, p. 4). Participants discussed creating challenges and presenting interesting topics that would allow students to come up with different ideas or solutions. Amongst the divergent strategies used for this, one was to focus more on critical thinking exercises over brainstorming activities. George mentioned “I would much rather use critical thinking exercises than brainstorming exercises." Instructors also discussed how ill-structured domains of learning can impact success. Creating learning experiences that allow students to exert themselves and pushing students out of their comfort zones is key. For instance, Jon expressed his belief in not altering teaching methods to

accommodate student learning styles. Instead, he concentrates on employing teaching strategies that align with students' learning needs and career objectives. “If you're going to be successful in life, you need to be pushed out of your comfort zone right?...No, I don't change my modality or my method of teaching to match what's best for a student. I bring the student around to learn in a manner that's going to be best for them in the environment that they're going to be going into”

Variability

This deals with, “How can I use a variety of tactics to maintain their attention?” (Keller, 2000, p. 4). Participants agreed that there should be variety and variability in instruction, with a touch of entertainment factors to sustain motivation. Some of the core strategies discussed were incorporating multimedia, visual and interactive elements, such as videos and real-life examples, as well as personalized approaches to learning to cater to different student needs and provide an entertaining way to learn. Participants also listed strategies that should be avoided, such as redundancy and repetition of content or activities. Instead, they agreed upon educators keeping educational content fresh and being engaging by constantly changing their guidance approach and implementing a variety of activities and exercises. Jon described using a variety of activities like quizzes and papers. Susan explained how helpful it was to tailor the instructional approach based on factors like age and background, to ensure content resonates with students’ interests. “"You have to understand who your student is. I had that student who just graduated high school or that 21-year-old might be a different approach."

Participants identified social intelligence or Social IQ as a key competency for effective teaching, enabling teachers to read student cues and adapt communication styles to manage classroom dynamics effectively. Jon mentioned that “I think that social IQ is probably one of the most important aspects of being a really good instructor and motivating students.” George

described how he employed multiple strategies to encourage active participation, such as team-based accountability for attendance and the option for students to leave class early based on their engagement. “I did literally have a little checkbox, and if you engage, then you get a checkmark, and then the next class period, you can leave if you choose to.” Susan discussed encouraging student interaction, both with the instructor and among themselves, to enhance engagement and sustain interest throughout the course. ““'Students like to listen to other students, so I'll bring in examples and say, 'Do you have experience with this?' It brings them in, and students like it when you're talking about something they know about."

In addition to being useful for perceptual arousal, humor played a role in variability as it sustained attention through use of surprise and contrast and could be implemented using varying methods to manage attention. While all participants recognized the value of humor, they were equally cautious of its usage and emphasized the need for caution when using humor to ensure appropriateness and inclusivity. All were of the consensus that maintaining a relaxed demeanor and encouraging informal interactions could also lead to a positive learning environment without having to resort to humor. As per Susan, one strategy to use humor judiciously was to make the instructor the target of the humor and make fun of oneself. “When I was in front of a big lecture hall or I had a big class, I think that most of the time when I would bring in humor is to make fun of myself.” Jon mentioned how humor can be misread, which is why creating a relaxed environment is a better alternative to help sustain attention. One way to accomplish this is to have a less formal mode of addressing the instructor. “Don’t try to be a funny guy. I do have a very dark and dry sense of humor, but apparently that's inappropriate and uncool these days. So I have to be careful how I use humor in the classroom. But I can be relaxed in the classroom, you

know. A good example would be, you know. Well, what do we call you? You know Professor -, that's like no, just call me -, I mean, that's my name".

Attention: Comparison Within Group 2

Perceptual Arousal

Participants agreed that the use of visual stimuli was important for improving the game experience. Each GM had a different strategy to accomplish this. Incorporating varied content, such as combat encounters, puzzles, and visual aids like maps and miniatures, contributed to keeping the gaming experience fresh and engaging. Bob explained how using miniatures helped in this regard. Similarly, Joe relied on using creative maps as a guidance and attention tool. "Use of miniatures, I think, is a huge benefit. Something maybe online, even with a fantasy grounds or something to that effect, just so that people can actually see what they're doing". Joe described how he "always create maps now, like a map making program to try to like visually have something like really engaging for them like really intricate maps." Visual appeals enhance comprehension, immersion, and enjoyment for players. GMs emphasized the importance of balancing narrative elements with combat encounters and providing visual representations to aid players in visualization and decision-making, thereby maintaining their attention and involvement.

Participants also discussed their reliance on player humor and generating familiarity, and there was consensus on the value of humor as a positive influence towards the game experience. All the GMs acknowledged their role in enhancing enjoyment and camaraderie among players. Creating opportunities for spontaneous humor and leveraging players' natural wit contributed to a lively and enjoyable gaming atmosphere. While there was a consensus regarding the value of

humor and it was regarded as a positive influence towards the game experience, participants' strategies to incorporate humor were varied. Bob used humor occasionally but mentioned that it was related to what the player group wanted, since some groups don't want to have conversations during the game. "Now, there are certain groups that I've had that were strictly no talking outside the game". However, he agreed that ".... most groups wanna have a little bit of conversation and enjoy some humor…. So, I tried to introduce some humor to the game, instead of just being narrative".

On the contrary, Joe did not emphasize humor. This GM did not give humor a priority, but was not averse to using it, if the opportunity presented itself. He relied more on the humor the players brought to the table naturally, rather than imposing a superficial humor layer on top of other things. "I don't feel like I plan out much of the humor. I feel like the players naturally bring a lot of the humor to the game and like me as well as when we're in the situation".

Inquiry Arousal

Surprises, challenges, and interconnected story elements fostered a sense of familiarity and continuity, keeping players invested and attentive. GMs strived to strike a balance between player agency and narrative coherence, ensuring that the game remains engaging and unpredictable. GMs considered this to be an effective attention garnering strategy that allows for an immersive and captivating gaming experience that stimulates curiosity, foster collaboration, and ultimately enhances player satisfaction and motivation. Narrative manipulation while running a game was discussed as a significant tool for creating curiosity and offering challenges, with different takes and techniques offered by different participants. The types of challenges used are different. Jane likes to use logic puzzles. "I like the surprise [such as puzzles and clues to solve a mystery], and that's something I'd like to do, for I really love to surprise". Bob likes to

challenge the players to think critically. Joe likes to add surprises and shock the players. “I like trying to add things that they are going to like. Surprise them in ways that keep them invested as well”.

Jane approaches TRPGs from a storytelling perspective, focusing on creating interesting plots and providing players with options. When running the game, clues, world-building elements, and personal character hooks are used to maintain the player’s interest and curiosity. Jane expressed a preference for horror and detective themes in their campaigns, citing a love for surprise and the opportunity to subvert expectations. On the other hand, Joe discusses the importance of flexibility and responsiveness to player choices when manipulating a narrative. Joe’s campaigns include surprises, reveals, and connections to past characters, ensuring that the story dynamically evolves based on the player’s actions. He recognizes that certain players may feel comfortable in specific situations. For instance, one player is more inclined to avoid one-on-one NPC conversations, and as the GM, he respects these preferences while attempting to challenge players occasionally. For Joe, challenges are relevant when narratives are contextualized and connected. However, adding items to the narrative based on players’ reactions creates the right amount of challenges. “I like to run things where everything feels connected”.

Variability

GMs consider adding multiple elements to the game session as a strong factor for increasing motivation through creative entertainment, using a variety of techniques to foster player creativity and engagement in role-playing games, emphasizing flexibility, visual immersion, and adaptability to keep the experience dynamic and enjoyable. Jane’s technique was to offer players numerous options and encourage them to explore different directions without

punishment. ““I try to give them a lot of options, and to not punish them if they go in a completely different direction.” Bob emphasized the importance of being flexible with the game plan, whilst incorporating spontaneous elements and taking notes for future reference to maintain player engagement. “You stick directly to a certain game plan, you can lose people so you've got to be versatile, and you've gotta be willing to add some things on the fly. Take some notes and see how you can add that back into the game later on.”

Joe had a different option, which was incorporating music and dropping links in Discord chat to maintain players' attention, while using figurines and grid maps as additional visual appeal to aid in understanding the game's mechanics. “I try to have music that I'll like put on, like I'll drop YouTube links in the discord chat… We always do our Video through Discord” To sum up, multiple strategies were discussed such as utilizing props (like letters sealed with wax to enhance the players' immersion in the game), visual aids (like map-making programs to create visually intricate and engaging maps, enhancing the players' experience), and adjusting difficulty, combat encounters and puzzles based on the players' capabilities. These would keep the game challenging yet enjoyable. Additionally, ongoing mystery campaigns added layers of complexity and surprises to maintain freshness and engagement.

Attention: Comparison Between Group 1 (Instructors) and Group 2 (Game Masters)

Drawing from the analysis and results from the within groups data pertaining to Attention and upon reassembling the themes and patterns to the lens of between groups, the following characteristics emerge pertaining to how instructors and GMs use Attention tenets in their respective processes.

Universal Approaches: Similarities and Differences Attention

See Table 4 for a display of similarity and differences in Attention.

Table 4.

Attention Similarities and Differences

ATTENTION			
Code/Keywords	**Similarities**	**Differences**	**Code/Keywords**
Entertaining contents and experiences	Instructors and GMs recognize the value of making learning/playing entertaining and striving to break the monotony	The context and purpose of teaching and gaming differ. While instructors work in formal educational settings to teach, GMs operate within the realms of leisure and entertainment to orchestrate immersive storytelling experiences for players in tabletop role-playing games (TRPGs).	Context and Purpose
Visual presentations (engagement)	Educators and GMs recognize the importance of incorporating varied content and visual aids to enhance engagement.	While instructors use a more structured approach to teaching that may hamper their attention strategies, GMs have a greater flexibility in game running, and can craft open-ended narratives and scenarios for TRPGs, allowing players the freedom to explore and shape the story through their actions and decisions. There is no fixed endpoint or predetermined outcome, with the narrative evolving dynamically based on player actions.	More Rigorous Structure versus Casual Structure

Table 4 continued

Visual presentations (entertainment)	Whether it's through multimedia presentations, real-life examples, or dynamic storytelling with maps and miniatures, both groups leverage visual and emotional appeals to capture and entertain, while sustaining the attention of their audience		
Autonomy through Relatability	Establishing a personal connection and creating an approachable atmosphere are priorities for both educators and GMs. This gives autonomy to learners or players to move through their paths without fear or hesitation.		
Flexibility and Adaptability	They strive to build rapport with their audience, fostering a sense of trust and comfort that encourages participation and engagement		
Humor and Entertainment	Both recognize the value of humor and relatability in creating and retaining attention. While instructors incorporate humor into lessons, GMs do the same through game narratives and player interactions		
Stimulating Curiosity/ Challenge	Both groups aim to challenge and create curiosity for their audience, while maintaining familiarity with the content and context.		

Table 4 continued

Surprise, Critical Thinking	Both groups introduce familiar elements to connect with their audience while also incorporating unexpected twists and challenges to keep them engaged and intrigued, while using critical thinking.		

Attention Tenets: Similarities and Differences

Data reveals that the tenets of Attention overlap when being applied to teaching or game running.

1. Both educators and GMs focused on entertainment and the use of varied content, visual appeals, relatability, personal connections, humor, and surprise to capture their audiences, ensuring perceptual arousal and variability. While some of the tools used for these differ, there are also remarkable similarities in the tools used.
2. Educators use multimedia presentations, real-life examples, and interactive discussions to stimulate perceptual arousal among students. GMs use dynamic storytelling, maps, miniatures, humor, surprise elements, and relatable narratives to keep players engaged in the game. However, both rely on incorporating unexpected twists and challenges to create intrigue and suspense.
3. Both enhance Inquiry Arousal by using multifaceted challenges to sustain interest factors. While there are some variations to the strategies used, both groups rely on creating opportunities for critical thinking and logical representations in their processes.

Attention Analysis Conclusion

Data reveals that instructors and GMs have greater similarities than differences between their groups. **While the participants, as instructors and GMs, used their individualized strategies to foster attention, the core tenets of attention were similarly adapted in both instances.** Based on the data and analysis, there were 8 similarities and 2 differences.

Relevance: Comparison Within Group 1 (Instructors)

Goal Orientation

This tenet relates to answering the question: "How can I best meet my learner's needs? (Do I know their needs?)" (Keller, 2000, p.4). The data revealed that while all instructors were deeply committed to working towards meeting their learners' interests, the key strategies they used were differentiated. Participants demonstrated a proactive approach to meeting their learners' needs by adapting their teaching methods, recognizing individual growth, making the material relevant and engaging, encouraging critical thinking, and fostering personal connections with students. These strategies reflect an understanding of the diverse needs and backgrounds of their learners and a commitment to supporting their learning journey effectively.
Instructors recognized the importance of understanding student demographics and backgrounds to tailor their teaching approach accordingly, even though they had varied perspectives on how to accomplish this.

Susan discussed her strategy of tailoring her instructional approach based on the demographics of the students, while considering factors like age and background, to ensure content resonates with their interests. George used student academic environments and age factors as clues to adapt learning to help meet learner needs. He distinguished between online

and face to face environments and traditional versus adult learners. ““I have this online student base now and they’re working adults […] I try to find something that would appeal to them to kind of keep them engaged.” Jon said that “Try to find things that are relevant to their experience […] learning has to be personal”. This indicated that participants emphasized the importance of personalization and creating connections between students and the subject matter. By relating course content to students' personal experiences, interests, and career goals, participants demonstrated an awareness of their learners' individual needs and interests. For example, Susan discussed her process of customizing examples based on student age-related experience factors, to ensure relevance and sustained attention. “You have to understand who your student is. I had that student who just graduated high school, or that 21-year-old might be a different approach. It is important to engage them with material, but in a way that they understand, so you have to understand who your student is.”

Motive Matching

This tenet answers the question, “How and when can I provide my learners with appropriate choices, responsibilities, and influences?” (Keller, 2000, p.4). As Keller (2000) pointed out, one way to do this is to relate instructional content to the learners’ future job or academic requirements. This allows instructors to guide students towards making appropriate selections of what they should want to achieve and, consequently, to determine which content for learning is relevant to that motive. Thus, motive matching provides students with knowledge that will help them today, as well as showing them how the knowledge they gain will help them in the future. The data revealed that for participants, this involved creating content and experiences that showed learners the perceived present value and future usefulness of the contents used for instruction.

Participants offered their perspectives on how their teaching processes showed the usefulness of the content so that learners could bridge the gap between content and the real world. A key strategy for this was finding appealing content to keep learners engaged and making it possible for them to understand the value of it. One way of doing this was to challenge students to consider the relevance of course material within the context of their career goals, thereby empowering them to make informed choices about their learning journey. Additionally, personalized approaches, such as relating legal concepts to entrepreneurial experiences or corporate dealings, created a sense of ownership and investment in the learning process, thereby enhancing motivation and engagement. George highlighted the importance of making the content relevant to current news and workplace situations. This involved relating theoretical concepts to real-world experiences and having discussions about it, especially in relation to students' workplaces to allow students to make connections to what jobs could be. “I think when you talk about how it relates to what's relevant in the news, it helps, or what's relevant in their workplaces.... helping them connect the dots.”

On the other hand, Susan discussed how she had conversations with learners regarding the significance of considering career perspectives, encouraging critical thinking, and questioning students about their thought processes. Asking students about their career perspectives and motivations underscores the relevance of the material to their personal and professional goals. “Sometimes we talk more about career perspectives. It's their motive, it's their motivation.”

Participants also revealed how they worked towards providing learners with appropriate choices and ownership of their learning. Several different strategies were used for this including offering choices in instructional methods, assignments, and engagement strategies. Choices in

teaching techniques involved short lectures, individual activities, group exercises, multimedia integration, and real-world applications. This offered learners different options of engaging with the content based on their preferences. George described how he utilized multimedia elements, including PowerPoint presentations and short video clips, to present varied content and enhance the learning experience. “When I'm talking to them, there's always either a pre-PowerPoint or something, so they have a visual way that they can see it."

Another strategy George used was to offer choices in assignments, such as discussions or written papers, allowing them to select tasks that align with their preferences or strengths. “So if in an online course, if I am going to have a discussion, you can do this one or you can do that […]”. Jon discussed how he used multiple assessments. “I have designed a mock project…but there are also your standard quizzes, and individual written papers that have to be in a specific format in business". Providing this type of flexibility in their instruction and engagement strategies and adapting their approach based on student feedback and preferences allowed students to choose how they wanted to engage with the material and participate in the learning process.

Familiarity

This tenet relates to the question, “How can I tie the instruction to the learners’ experiences?” (Keller, 2000, p.4). Keller (2000) suggested that providing content and examples pertaining to students' immediate and current interests and experiences could help accomplish this. The data revealed multiple applications of this tenet, where participants discussed different ways they accomplished this. Participants employed authentic and entertaining materials customized to students' experiences and existing knowledge, incorporating real-world applications and relevance. This approach aimed to demonstrate the significance and practicality

of the learning content, consequently enhancing learners' engagement and motivation. George highlighted the importance of making the content relevant to current news and workplace situations. This involved relating theoretical concepts to real-world experiences, especially in students' workplaces. Additionally, he elaborated on the importance of connecting course materials and theoretical concepts to students' prior experiences and backgrounds, since this connection served to bridge the gap between abstract concepts and real-world applicability.

For example, certain experiences like dining at McDonald's or Chick-fil-A, naturally came up in class discussions due to student engagement. By referencing students' work experiences, personal encounters with managerial styles, or interactions with corporate entities like McDonald's or Chick-fil-A, George inadvertently tapped into familiar territory for students. "...we're talking about motivating employees at work. Okay, well, how do you motivate them at McDonald's?...So, we do connect it, but it isn't like I specifically go, 'Hey, I'm going to talk about McDonald's because I know Chad is a manager at McDonald's...McDonald's is going to come up … You'll end up talking about the McDonald's or the Chick-fil-A or wherever they're working". This familiarity not only enhanced comprehension but also cultivated a sense of relevance by demonstrating how theoretical concepts manifest in everyday scenarios. Susan described her ways of connecting the course material to students' lives, experiences, and interests, making the content more relatable and captivating. This included encouraging critical thinking, providing context where students did not have experiences, and questioning students about their thought processes on familiar topics such as career goals. "If they have work experience, it's really easy to show relevance. But if they don't, I try to show them how it's important to them or how it was important to somebody that they know…It's their motive, it's

their motivation. Why are you here? What do you hope to learn? How will that help you in your career choice?".

Jon gave examples of trying to personalize content based on student experience and background such as asking students if they knew an entrepreneur when he was teaching business law. "For example, if you're teaching a business law class do you know an entrepreneur? Do you have an uncle or a family member who owns a small business? What have your experiences been, you know, in dealing with large companies like Verizon when you're trying to get, you know, a phone plan versus walking into a small brick and mortar".

Relevance: Comparison Within Group 2 (Game Masters)

Goal Orientation

Like instructors, GMs are engaged in learning about and satisfying player needs and preferences to sustain motivation in the gameplay. GMs used multiple strategies to understand players' preferences, engage them in the narrative, and adapt the game to ensure everyone felt involved. Jane elaborated on how, while attempting to keep consequences consistent for all players, she acknowledged the challenge when dealing with characters who exhibit different playstyles. The goal was to strike a balance between maintaining fairness and accounting for individual character actions. For example, there was a deliberate effort to encourage quieter or more introverted players to participate. "I try really, really hard to make sure that the more quiet players aren't left behind". GMs made efforts to know their players personally, understanding their playstyles, interests, and comfort level, by gathering information through pre-game discussions, surveys, or simply observing player interactions during sessions. Another strategy used by GMs was to actively seek feedback from players, both during and after sessions, to

gauge their enjoyment and identify areas for improvement. They communicated openly with players, addressing concerns, and adapting the game based on player preferences to enhance the overall experience.

GMs recognized that each player had unique needs and preferences, such as the desire for attention, engagement, or personal connection. They strived to give equal attention to all players, ensuring quieter individuals aren't left behind while also respecting players' comfort levels with attention. A key strategy discussed was the focus on combining fluid and specific objectives that would allow GMs to create and manage challenges that were tailored to each player's preferences. Remaining flexible and adaptable during sessions, responding to unexpected player actions and adjusting the narrative to accommodate different playstyles and choices, allowed GMs to tailor the game experience based on player feedback and observations, ensuring that everyone feels included and engaged throughout the game. Bob emphasized the value of feedback from players, both during and after sessions. Asking for input on game elements, addressing concerns, and adapting the game based on player preferences contribute to a more need-based experience. "At the end of the game…I used to try to sit there and ask, you know, hey, how did everything go? Did you have some questions on how things went in items that you didn't think work the way it should, you know real questions, things like that...But by asking everybody you know how things are going, and I think, especially when you have new players asking them what they want out of today's session".

Motive Matching

As with instructors, game masters are engaged in providing players with appropriate choices, responsibilities, and influences. Each participant in this group described different ways in which they accomplished these. Jane and Joe believed in connecting the game content with

real world events or locations and emphasized giving players options and making their characters feel embedded in the world. This suggests that players are given an agency to shape their characters' actions and decisions within the game world. Another strategy used was to encourage player involvement in decision-making and offer them control over the narrative by introducing NPCs or Non-Playing Characters that can influence the game's direction based on players' interactions. Bob mentioned that “Well, I usually try to get the group involved in talking to each other at the very beginning to go through what in the world went on before...Starting out with a narrative of a recap kinda like watching a movie, what happened before? Where are you at? And this is supposedly what you're going after.”

Bob liked to involve the players in a pre-game conversation to give them directions regarding where the game could go in the future, thereby allowing players to take on the responsibility of deciding how and what shape their game play would take. Another strategy used by Bob is to provide detailed descriptions in the game, giving personality to creatures, and making the players verbalize things. “You have to give personality to the creatures that are dying, make them verbalize things, just not just fight, fight, fight, you know.” The idea was to create an engaging and relevant narrative beyond mere combat. Bob stressed the significance of breathing life into non-player characters (NPCs), providing them with unique personalities, and making players remember even minor characters. “I think introducing NPCs sometimes can be a very good, beneficial way of pushing the game without the GM”. This contributes to a more relevant gaming experience. Jane emphasized the importance of giving players the freedom to make choices and shape the narrative.

The players' decisions have a significant impact on the story, and she strives to be flexible in adapting to unexpected choices. Jane maintained a light hand in guiding players'

choices, allowing them the freedom to explore different paths. While acknowledging some limitations to maintain a cohesive narrative, she encouraged player agency and creativity. “Well, I mean, I definitely tend to be.. pretty light hand on it, I mean, like they can go do whatever they want, and I'll do my best to catch up”. Joe mentioned an ongoing shared world with past campaigns, connecting narratives and mysteries across different campaigns. This creates a sense of relevance and continuity, tying the current story to the history of the shared world. “I think that all keeps them invested knowing that there's this ongoing story from other campaigns that have happened in the world. that we're in this same shared world”.

Familiarity

Akin to instructors, GMs are also engaged in connecting TRPG game playing experiences to players’ experiences by making efforts to keep the game relevant to players. Like instructors, GMs also relied on entertainment values and content, such as using movies and backstories. These were accomplished in several ways such as by incorporating player backstories, goals, prior knowledge and experiences into the narrative. GMs may draw inspiration from players' real-world experiences or interests, ensuring that the game resonates with all players on a personal level. Bob highlighted the importance of understanding players' characters and their backgrounds and recommended customizing aspects of the game to align with players' preferences and interests. This included drawing inspiration from movies or characters the players admire during character creation to enhance their engagement.

Additionally, Bob discusses how necessary it is to understand and remind players of their character backgrounds and motivations to enhance relevance within the game. “Now, it doesn't mean that you get to structure what their motivations are. Everybody has a mind. Everybody can do whatever they want, but you pose the question to them...Getting them to relate to a movie that

maybe they said, Well, I really liked that character. I would love to play that usually kind of gets people engaged". As the GM, Jane encouraged players to provide character backstories and personal goals. This information was then incorporated into the game, providing players with a sense of relevance and connection to their own experiences and the world. "And really, I think the most important thing is showing how much they can change what happens... giving them kind of personal hooks, either. There's like the party hooks. There's what makes the party interested". Jane aimed to create opportunities for characters to pursue their goals within the narrative. Additionally, Jane preferred the incorporation of real-world themes in the game setting.

Jane describes how, in one of the campaigns, she played the Call of Cthulhu game (a horror fiction role-playing game based on H. P. Lovecraft's story that is primarily set in the 1920s) with the setting being 1938, which allowed using real-world elements such as the threat of World War II. This added a layer of relevance by connecting the game world to historical events and creating a unique twist on the expected narrative. Joe's campaign setting, involving a magical university with elements of higher education, was chosen to resonate with the players' real-world experiences. As a GM, Joe liked to tailor the campaign setting to resonate with the players' real-world experiences, such as incorporating elements of higher education and administrative bureaucracy, which the players were familiar with. "The setting is like a magical university with higher ed… and like all the kinds of tropes, you know, administrative, bureaucracy that goes with that. I think that's something that they can all relate to because they've all worked at a university or some of them have been graduate students and got degrees as well".

Relevance: Comparison Between Group 1 (Instructors) and Group 2 (Game Masters)

Drawing from the analysis and results from the within groups data pertaining to Relevance and upon reassembling the themes and patterns to the lens of between groups, the following characteristics emerge pertaining to how instructors and GMs use Relevance tenets in their respective processes.

Universal Approaches: Similarities and Dissimilarities for Relevance

See Table 5 for a table display of similarity and differences for Relevance.

Table 5.

Table for Relevance

RELEVANCE			
Code/Keywords	Similarities	Differences	Code/Keywords
Customization of Content (autonomy)	Both instructors and GMs customize their content or narrative to align with the interests and learning or playing preferences of their audience (learners or players).	The respective groups operate within different contexts and domains. While both instructors and game masters aim to make their content or gameplay relevant to their audience, they do so within the context of their respective domain (education and gaming). The contextual and domain differences lead to instructors and GMs utilizing different tools to achieve relevance and engagement.	Context and Domains
Entertaining for engagement	Both strive to keep their audience entertained and engaged by making course material or gameplay content connected to the audience's experiences or prior knowledge.	GMs are not usually concerned with career goals and work experiences of players, whereas instructors relate content to challenging students to consider the relevance of course material within the context of their career goals and empowering them to make informed choices about their learning journey.	Career versus personal focus

Table 5 continued

Autonomy and Choices	Instructors and game masters offer choices and opportunities for their audience to make decisions, whether in instructional methods, assignments, engagement strategies, or game direction, empowering them to have a sense of ownership in their learning or gameplay experience.		
Adaptation and Reliance on Feedback (autonomy, engaging)	Both adapt their approaches based on the input from learners or players whether it's through student feedback in teaching or player feedback in gaming, to enhance the relevance and effectiveness of their content or narrative		
Connectedness and Inclusiveness	Both aim to foster connections with their audience, and create inclusive environments		
Real -world relatability	Both seek to bridge the gap between abstract concepts or fictional narratives and real-world experiences by incorporating elements from the real world into their content or gameplay, making it more relatable and applicable to their audience's lives.		

Table 5 continued

Critical thinking through conversations	Both rely on conversations and discussions to stimulate critical thinking, problem solving and engagement to make the learning or gaming process more relevant and worth the audiences' time and efforts.		

Relevance Tenets: Similarities and Differences

1. Goal orientation is achieved by both groups, but by using different tools. Instructors focus on understanding learners' backgrounds, interests, and learning styles to tailor instruction accordingly. They emphasize personalization, recognizing individual growth, and fostering connections between students and the subject matter. GMs strive to understand players' preferences, playstyles, and comfort levels to ensure everyone feels involved and engaged in the gameplay. They balance maintaining fairness with accommodating individual character actions and encourage quieter or more introverted players to participate.
2. Motive matching is accomplished by both groups using different ways and tools. Instructors rely on providing choices, responsibilities, and influences on learners by relating instructional content to their future job or academic requirements. They empower learners to make informed choices about their learning journey and offer flexibility in instructional methods and assignments. GMs give their players agency in shaping the narrative and making decisions within the game world. They involve players in pre-game discussions, encourage player involvement in decision-making,

and offer control over the game's direction through choices and interactions with NPCs.

3. Familiarity is a key focus of both instructors and GMs. Instructors connect instruction to learners' experiences by personalizing examples and contexts, making the content more relatable and captivating. They incorporate real-world applications and relevance to help learners see the value and applicability of what they are learning. GMs incorporate player backstories, goals, and real-world themes into the game narrative to enhance relevance and connection to players' experiences. They customize aspects of the game to align with players' preferences and interests, drawing inspiration from their backgrounds and motivations.

Relevance Analysis Conclusion

Data reveals that instructors and GMs have greater similarities than differences between their groups. While there are differences in the specific contexts and tools/methods used by instructors and GMs, both groups shared significant similarities in working towards a common goal of creating meaningful learning/game experiences by understanding their audience, providing choices and personalization, and making the content/game relevant to their lives and interests.

Confidence: Comparison Within Group 1 (Instructors)

Success Expectations (Learning Requirements)

This sub tenet begins with the question, “How can I assist in building a positive expectation for success?” (Keller, 2000, p.4). Keller (2000, 20210) believes that this could be accomplished via setting learning objectives that are clear and easily comprehended by learners.

In this study, all three participant instructors described how they worked to provide learning objectives, even though the strategies for delivering this information to the learners varied. George and Susan liked to set their own expectations from the learners at the start of the course, while Jon focused on pushing students throughout the semester to help them accomplish course objectives. All three had slightly different approaches to setting expectations. Geroge relied on leadership skills to connect with the learners. Susan relied on strictly following the syllabus guidelines. Jon relied on guiding and forcing students outside of their comfort zone to fulfill the course objectives.

One strategy used by instructors was to set clear expectations for students at an early stage. This involved outlining what students should know or achieve by the end of the course and providing guidance on how they will be assessed. By setting expectations early on, instructors helped students understand the goals they are working towards. Susan described how she explained course expectations clearly at the start of the semester. “I tell the students from the beginning of the class, always, I'm not going to read the syllabus to you but I do want to let you know this is what you should know by the time we end the course." Similarly, George talked of setting clear expectations for students early on and maintaining consistency in consequences for success and failure contributed to learner satisfaction.

George also discussed the use of assessment criteria to guide learners. Clear assessment criteria helped set expectations and contributed to a sense of achievement and satisfaction. He mentioned using grading rubrics to set expectations for written assignments. Rubrics provided clear criteria for assessment, ensuring that students knew what was expected of them and how their work would be evaluated. “I think part of it is setting clear expectations. So if they know what to expect from the course, if they know what's expected of them, and if they know how

they're going to be assessed, that can contribute to their satisfaction… rubric kind of sets the expectation". Additionally, Susan mentioned the importance of aligning learning outcomes with assessments to ensure that there is a clear connection between what students are expected to learn and how their understanding will be measured. "...every class I have I map my outcomes to my assessments so that is something that um I pay very close attention to that because what's the use of having, you know, learning outcomes, if there's nothing in the class to measure that um so definitely we do that". Such approaches guided students through their learning journey and helped them recognize their progress.

Success Opportunities (Learning Activities)

This sub tenet of Confidence deals with the question, "How will the learning experience support or enhance the students' beliefs in their competence? (Keller, 2000, p4). To modulate the learning experiences to bolster student confidence, instructors utilized different techniques such as providing pre and post assessments, choices in assessments, adapting an approachable attitude and providing entertaining dynamics in the classroom. Susan mentioned the use of pre-tests and post-tests to assess students' understanding before and after the course, providing a measure of their learning outcomes. "...maybe they'll do some sort of pretest because I think it's good for them to see where they're at now and then see where, how far they've come and then we'll do like a post test at the end".

Overall, the focus on outcomes is integral to the instructional approach, with a keen awareness of providing students with a sense of assessing and measuring their achievements.

Offering students choices in assignments and discussions allowed them to feel satisfied with their learning experiences. This sense of control over their learning process enhanced students' beliefs in their competence. George discussed choice in the context of online learning.

“If on an online course if I am going to have a discussion you can do this one or you can do that […] give them a choice on an assignment[…] so that the student will be satisfied with their experience.” Similarly, Susan attributed choice to creating a more satisfied and successful learner. Susan submitted that she was using more and more choices in her online courses also. She also explained how she emphasized her approachability and supportiveness to her students, encouraging learners to seek assistance when needed. This accessibility reinforced the idea that success is achievable through their own efforts, with guidance and support available along the way. “...if you give them choices they're going to prefer one over the other, they get to choose their preference. I think they'll do a better job and they will actually learn more”.

Contrary to Susan and George, Jon subscribed to the view that choices, though useful, should be restricted. According to Jon, a balanced approach to choice was needed. “...we can actually more effectively get through the content and I'll actually do that in a very deliberate way. For example, the business law class. If we've got a discussion that we're going to be having…. I'll assign it, you know I won't let them choose”.

Jon also offered a contrary, but interesting perspective on creating entertaining, but pragmatic learning experiences that allow students to exert themselves and push them out of their comfort zones. Jon used examples from public speaking in a classroom to drive home his point that to instill confidence in learners, rather than modifying teaching to suit student learning, instructors should teach in a way that is most suitable for learners’ learning and career goals. “If you're going to be successful in life, you need to be pushed out of your comfort zone right? If you don't want to speak publicly in the classroom, you don't want to open your mouth, it says you're so painfully shy you can't have a conversation in front of 15 people. Then you need to fail my class, and you do something other than business and go be an accountant and sit in the box”.

Success Attributions (Personal Responsibility)

This sub tenet deals with the concern of "How will the learners clearly know their success is based upon their efforts and abilities?" (Keller, 2000, p. 4). Participants used different strategies to ensure that learners were self-aware regarding the reasons for their successes and were given opportunities to own their learning efforts. The core strategies used were robust feedback that included recognizing student growth and celebrating their achievements. Participants discussed several ways in which they provided specific feedback highlighting students' achievements and areas of improvement. By pointing out what students have done well and areas where they can grow, learners could see the direct correlation between their efforts and the feedback they received. A critical part of the feedback process was using entertaining ways to celebrate students' progress and improvement, such as having class parties and communal celebrations. This was crucial for fostering a positive outlook on their competence. Participants emphasized individual growth by celebrating students' progress over time. By acknowledging their improvement compared to previous performance, learners could better understand that their success is a result of their ongoing efforts and development. By celebrating their growth and improvement over time, participants helped students feel good about their results and abilities.

There were differences in the participants' philosophical outlooks that informed what they focused on and how they delivered their feedback**.** George saw feedback as a means to help students improve and, indirectly, build confidence. "Even though they may see some marks and points off I also point out those things that are awesome … I try to make sure that I recognize them, their growth….The intent is not to tear someone down; it's to build them up and help them... It's helping to build their confidence." Jon engaged in something similar by giving one-on-one feedback to learners. "I'll pull them aside and say, 'Hey, man, you did a great job on that.' This is an improvement and I'll give them very specific feedback[…] Point out what they've done

well.” Susan, though somewhat aligned with George’s and Jon’s perspectives, believed that while individualized feedback played a crucial role, the focus on communal celebration of successes and providing constructive feedback was more critical to an estimation of probability of the success to learners. Thus, she practiced providing growth feedback in a chronological way to the entire class, in addition to individual feedback. “when I have a smaller class I try to make sure that I recognize them, their growth, this is so much better than last week, you are doing great”. Additionally, she had slightly different techniques when addressing larger classes. “...larger class it's a lot more difficult unless we do like big teams and then I'll recognize team performance”. She discussed having party-like celebrations with Pizza and cookies after some good efforts from the students. “When I was teaching at the community college we would have a celebration, have like a pizza after we all did our presentations… we're going to celebrate our success and we're gonna have cookies”.

Confidence: Comparison Within Group 2 (Game Masters)

Success Expectations (Learning Requirements)

Like instructors, Game Masters engaged in setting the stage up for a successful gaming experience by providing clear gaming goals and objectives for players. However, unlike a well-structured classroom environment, a game environment was described as having greater flexibility, where the core objective was to give all players a good, entertaining time. Nonetheless, and despite this divergence, the data indicated that GMs establish clear objectives or goals for the players at the beginning of a session or campaign. This could involve outlining overarching storylines, quests, or missions that the players' characters are tasked with accomplishing. Additionally, GMs offer context and background information to help players

understand the significance of their objectives within the game world. This might include explaining the stakes involved, the potential consequences of success or failure, and any relevant lore or backstory.

The techniques used by GMs for this varied. Joe described how he clearly laid out the goals of a game using the narrative and used his Lich King campaign as an example. “Basically, in my game it's like you know, there's this cult. And this cult is run by a Lich King who is trying to return to the material world. So they know that they are trying to stop this from happening. They've been given the objective to go to these different domains of dread and every time they go, they have to kind of figure out how to close the portal that has opened up”. The players were given specific objectives within the game that allowed them to achieve the expected results and be/feel successful in the campaign. On the other hand, Jane adopted a more flexible approach. The conversation touched upon aligning the game narrative with individual player goals. “I tend to be more fluid in like I don't necessarily have like this is what we're gonna do… and if we achieve this goal, then it's a successful session…. If a character doesn't seem to have a major goal, then I may not drive as much towards that. But if it's clear to me that the character has some sort of goal like that, then I'll do my best to give them that opportunity.”

When players expressed character objectives or goals, Jane attempted to incorporate these elements into the overarching story, providing players with a sense of accomplishment, as well as standards and evaluation criteria so that they could establish positive expectations, and achieve success. Joe also discussed some flexibility in deciding and outlining game goals, using player preferences as a guiding tool. Flexibility to change the narrative and match current player desires was an important motivational factor. The key objectives were high player engagement and fun.

Success Opportunities (Learning Activities)

Overall, GMs ensured that the gaming experience enhanced players' beliefs in their competence by fostering a flexible, autonomous, and supportive environment that aided in empowering players to make meaningful choices. These strategies helped players develop a sense of mastery and confidence as they navigated the challenges of the game world. One way that players were given autonomy was to encourage them to provide their creative solutions and interesting ways of dealing with problems. By recognizing players' ingenuity and competence, GMs boosted players' confidence in their abilities within the game. Jane described how she treated players lightly when it came to players using their own ideas. “Well, I mean, I definitely tend to be pretty light-handed, like they can go do whatever they want, and I'll do my best to catch up with you.”

Joe generally encouraged players’ independence and allowed the group to drive the story, but nudges were sometimes necessary to keep the narrative on track. He also emphasized the importance of engaging players by giving them agency and options. Joe discussed concepts such as balancing player freedom with providing enough direction for the group's cohesion. He believed that face-to-face interactions were more immersive, allowing for more dynamic engagement compared to online sessions. “At the scene, give them some options, try to give them some time to talk on their own…. allow them to have some agency in their own choices. I feel like everyone has their own thing, that I'm trying to engage them all evenly... I try to build the story around that." Joe encouraged players to take the lead in certain areas, allowing them to make decisions and face challenges. In-game consequences deployed via NPCs or non-playing characters acted as a form of self-control, where players' actions have repercussions. Joe emphasized the importance of treating players fairly and respecting individual preferences, even at times when he had to stop an action or redirect the game that was being held up due to a

player's actions. "Or if they're taking too much time in role-playing or something and then it's just like 'the NPC is gonna move on'…or if they're taking too much time debating then I'm gonna be like 'okay well now the thing just happened because…" These strategies added an element of player agency. It suggests that their decisions and actions have an impact on the game world.

Bob referred to building suspense and uncertainty for the players, as a means for keeping players guessing and introducing elements of suspense in the game. This uncertainty contributed to the players' sense of control and kept them invested in the storyline. Bob believed in guiding the players' motivation, versus controlling them. "Everybody has a mind. Everybody can do whatever they want, but you pose the question to them, you know you're here because you feel that you're a champion of good and evil is obviously afoot…. therefore you should probably be engaged a little bit more than just trying to get your personal belongings back. Build more of a suspense within the game". Offering players choices in shaping the narrative and outcomes allowed them to feel satisfied with their gaming experiences. This sense of control over their gaming process enhanced their beliefs in their competence.

Success Attributions (Personal Responsibility)

Akin to instructors, GMs also made efforts to provide timely and meaningful feedback that allowed players to acknowledge their own contributions to the game. Also, like instructors, GMs tend to offer praise and use entertaining ways to celebrate successes when players did something worth praising. Multiple strategies were used to give feedback and celebrate player contributions. Joe describes using an 'inspiration system' to reward players for good role-playing or accomplishments. "Use like an inspiration system. Where it's like if I think somebody did a good job with something, or other players think they did a good job, they can nominate them for

inspiration. And like if someone nominates someone else for inspiration, I always like to say yes. And then they just get like a re-roll." By providing feedback that acknowledged and celebrated players' achievements, Joe bolstered players' confidence in their abilities and effectiveness within the game.

Jane used somewhat different techniques than Joe. She mentioned the significance of acknowledging and recognizing players' creative inputs. "I tend to be more fluid in like I don't necessarily have like this is what we're gonna do… and if we achieve this goal, then it's a successful session…. If a character doesn't seem to have a major goal, then I may not drive as much towards that. But if it's clear to me that the character has some sort of goal like that, then I'll do my best to give them that opportunity." The approach involved giving equal time and valuing each player's ideas, even if some may seem unconventional or humorous, as well as aligning the game narrative with individual player goals. Bob encouraged involving players in decision-making and letting them shape the direction of the game. The idea was to provide players with a sense of control and influence over the narrative. Bob suggested using NPCs to offer greater control over the game to the players. "So let's just move on. You're in the middle of a cave, and they were just in a tavern. What the hell! Just happened, you know. You don't want stuff like that. But at the same instance you can introduce an NPC that starts to engage the group and maybe sways them towards a certain direction, just to keep it going." These strategies helped players develop a sense of mastery and confidence as they navigated the challenges of the game world.

Confidence: Comparison Between Group 1 (Instructors) and Group 2 (Game Masters)

Drawing from the analysis and results from the within groups data pertaining to Confidence, and upon reassembling the themes and patterns using the lens of between groups,

the following characteristics emerge pertaining to how instructors and GMs use Confidence tenets in their respective processes.

Universal Approaches: Similarities and Differences Confidence

See Table 6 for similarities and differences for Confidence.

Table 6.

Table for Confidence

CONFIDENCE			
Code/Keywords	**Similarities**	**Differences**	**Code/Keywords**
Importance of Goal Orientation (critical thinking and autonomy)	Both groups emphasized the importance of establishing clear goals and objectives and preferred to do this at the outset of their interactions (courses or gaming sessions).	While both instructors and GMs aim to foster confidence in their respective audiences, they do so within different contexts and with different goals in mind. Instructors focus on academic achievement and subject mastery within structured learning environments, while GMs prioritize entertainment and player engagement within dynamic gaming environments.	Context and Goals
Clear Expectations (autonomy)	They aimed to help their audience understand what is expected of them and what they need to work towards. This helped maintain autonomy over learning path.	The techniques used for some of the confidence elements may differ, even though the commitments to learner or player motivation are the same.	Confidence Techniques
Autonomy and Choices	Both instructors and GMs use similar techniques in their endeavor to create environments where their learners or players have opportunities to succeed. These include offering choices, providing feedback and celebrating achievements.	Instructors offer choices in assignments and discussions to enhance satisfaction with the learning experience, while GMs encourage player autonomy and creativity in shaping the game narrative.	Autonomy Techniques
Entertaining celebration of achievements	Both groups focus on entertaining ways of attributing success to learners' or players' personal efforts and abilities.		

Table 6 continued

Feedback (critical thinking)	Both groups rely significantly on robust and constructive feedback that acknowledges and celebrates achievement, reinforcing the connection between efforts and success. Instructors give feedback on assignments, while GMs offer praise and regards to players, in addition to guidance on how to play the game. Feedback also assists in critical thinking.		
Flexibility and Adaptability	Both instructors and GMs are high believers of flexible approaches for fostering confidence. While they may have overarching strategies, they are willing to adapt to the needs and preferences of their learners or players.		
Support for Critical Thinking and Problem Solving	Both subscribe to an approachable, safe and supportive environment building where learners and players can indulge in critical thinking and problem solving without feeling pressures of taking risks and making mistakes.		

Confidence Tenets: Similarities and Differences

1. Both instructors and GMs are committed to making success expectations clear and strive to make sure their learners or players understand what is expected of them. Instructors achieve this by outlining learning objectives, providing guidance on assessments, and using grading rubrics to set expectations for academic achievement. Similarly, GMs establish clear gaming goals and objectives at the beginning of sessions or campaigns. They outline overarching storylines, quests, or missions for

players, providing context and background information to help them understand their objectives within the game world.

2. Both instructors and GMs create opportunities for success or learning activities that support and enhance learners' or players' beliefs in their competence. Both strive to create environments where learners/players feel entertained and empowered to take risks, make decisions, and engage actively in the eLearning or gaming processes. Instructors offer choices in assignments and discussions, provide feedback on student performance, and celebrate achievements and progress to boost learners' confidence. Similarly, GMs encourage player autonomy and creativity within the game world, allowing them to make meaningful choices, provide feedback through in-game consequences, and recognize players' contributions and creativity to enhance their confidence.
3. Both instructors and GMs believe in attributing success to personal efforts and abilities and encouraging learners and players to take responsibility for their achievements. Both groups believe in helping learners and players recognize the direct correlation between their efforts and outcomes through feedback. Instructors highlight students' achievements and areas of improvement, celebrate students' progress and improvement over time, and foster a supportive environment where students feel comfortable seeking assistance and taking ownership of their learning efforts. Similarly, GMs provide feedback through in-game consequences, rewards, and narrative developments that acknowledge and celebrate players' achievements, encourage players to take the lead in decision-making and problem-solving, and

create a supportive and collaborative environment where players feel empowered to shape the game narrative and take ownership of their actions.

Confidence Analysis Conclusion

Data reveals that instructors and GMs have greater similarities than differences between their groups. While there are differences in the specific contexts and tools/methods used by instructors and GMs, both groups shared a common passion for instilling confidence in their learners and players using some similar and some variant techniques pertaining to success expectations, opportunities, and attributions.

Satisfaction: Comparison Within Group 1 (Instructors)

Intrinsic Satisfaction (Self-Reinforcement)

This sub tenet deals with the question, "How can I provide meaningful opportunities for learners to use their newly acquired knowledge/skill?" (Keller, 2000, p.4). Data revealed that participants engaged actively in enhancing learners' intrinsic satisfaction by providing praise and positive feedback, as well as using entertaining ways to support and recognize personal growth. The deployment tactics for these strategies varied between participants. Instructors provide specific feedback highlighting students' achievements and areas of improvement. By pointing out what students have done well and areas where they can grow, learners can see the direct correlation between their efforts and the feedback they receive. George believed in staying in sync with the student experiences in the class and providing guidance as needed to keep students intrinsically motivated. Additionally, he used praise of student work as an intrinsic tool. "I try to make sure that it's something they're in that they stay interested[…] I'm very in tune with the student experience in the class".

Similarly, Jon used praise of good work as a tool. While Susan also believed in focusing on students' learning experiences in the class, her tools of choice were entertainment and humor to make student life interesting, particularly for longer classes, even though that may not be the sole purpose of the course. “I'm very in tune with the student experience in the class and not that we should be all about making our students happy, but they are not going to learn if they are not having a good experience…I try to keep them somewhat entertained, you know, some jokes and laughs sometimes, but entertain. You've got to somewhat entertain them, especially in a very lengthy class.”

Rewarding Outcomes (Extrinsic Rewards)

This sub tenet deals with, “What will provide reinforcement to the learners’ successes?” (Keller, 2000, p.4). Participants had different views of what should be used as extrinsic motivators. Jon used a deeply personalized approach where he fostered communication and supportive relationships with students inside and outside of class. “Satisfaction comes from personal growth, seeing that you're being successful in a course understanding the material, small successes with each class period, with each graded assignment. I mean, that's where satisfaction comes from building a relationship with me outside of the classroom, inside of the classroom.” Susan had a different view and used a rewards system such as providing food as a reward for successful presentations. She talked of having Pizza and Cookie celebrations during her Community College teaching. “We're going to celebrate our success and we're gonna have cookies”. Interestingly, George considered grades to be an extrinsic motivation tool.

Fair Treatment (Equity)

In the context of Equity, the question Keller (2000) posed was, “How can I assist the students in anchoring a positive feeling about their accomplishments?” (p. 4). This is related to providing students with an inclusive and fair learning environment. Instructors discussed multiple means to do this, including using rubrics, consistency in grading, fairness in dealing with assessments, and anonymous grading. George stressed the importance of not only using rubrics, but also maintaining consistency in consequences for both success and failure. This involved adhering to an assessment style and allowing all students to benefit from accommodations made to ensure fairness and authenticity in the learning environment. “In the grading, I use a grading rubric so you know that’s a good way to do that…As far as being fair, right? My whole thing is I'm going to be fair. If I allow one student to do it, I'm going to allow every student to do it." Susan and Jon also used rubrics. However, Jon believed in making rubrics less specific, to allow students to think and critically analyze the expectations. “I am careful to limit the detail in rubrics because then what happens is students stop thinking.” Following these practices of transparency and fairness allowed learners to see how their work was evaluated based on predetermined criteria, reinforcing the notion that their success was determined by their own performance.

Satisfaction: Comparison Within Group 2 (Game Masters)

Intrinsic Satisfaction (Self-Reinforcement)

Like the instructors, GMs also used positive feedback, entertainment, and praise as intrinsic motivators. Additionally, GMs used surprises, challenges, and interconnected story elements to keep players invested and attentive and enhance their opportunities for critical

thinking and problem solving. By striking a balance between player agency and narrative coherence, GMs ensured that the players were intrinsically motivated to remain engaged in the game. Jane shared that rather than relying heavily on external rewards, her focus was on intrinsic motivation—creating a compelling and engaging narrative that captivates players and makes them active participants in the storytelling process. “I tend to be more like, you know. Were they engaged? Did they enjoy themselves? Did they find out some more stuff about that plot? Even if it wasn't the stuff I anticipated they would find out about…”

Success in a session was not solely determined by achieving specific goals but was instead measured by factors like player engagement, enjoyment, and the pursuit of character-driven objectives. The focus was on the internal satisfaction derived from the gaming experience. She viewed the game as a collaborative and group storytelling experience. By fostering a sense of shared narrative control and creative input, the intrinsic motivation of players was enhanced as they actively contributed to shaping the evolving story. Additionally, Jane incorporated horror components and unexpected twists into the narrative as a key element in creating memorable experiences by introducing surprise and incongruity.

The act of recognizing and acknowledging players' contributions is highlighted as an intrinsic reward. As a GM, Jane found value in praising players for their creativity and unique approaches, fostering a positive and internally rewarding gaming experience. “ If they come up with a really interesting way of dealing with a problem then I will tell them that I was really impressed by that, and that I thought they did a great job." Joe used techniques such as encouraging player autonomy and providing feedback on how players handle situations and incorporating consequences for their actions. “Congratulating them on getting through a session is a huge thing, and then telling them some really cool stuff that they did that kind of embraces

the game just to keep them engaged right." Bob also used praising as a tool for motivation. Bob talked about the need to focus on goals, but not insist on achieving them. The main goal of the game was enjoyment and entertainment and playing it to the best of their ability. "I don't have real goals for them, because to me, even if you know the end game is to kill Tmn and they choose to go to hell and fight some demons and devils. So be it, that's just part of the game that's part of life, right? You don't always go for the job that you wanted to when you graduated, you don't always get the job you wanted when you graduated. And because of that I don't have too many close-ended goals for the group…To me. The goal is to keep it entertaining".

Rewarding Outcomes (Extrinsic Rewards)

Like instructors, GMs used different tokens and rewards to ensure extrinsic motivation. Jane mentions occasional use of extrinsic rewards, such as creating pixel art magnets for players at the end of a campaign. As a GM, Jane had future plans for encouraging players to take notes and then extrinsically rewarding them for doing it. As a note taker herself, she valued the availability of reference materials for multiple campaigns. "I actually made little pixel art magnets for everybody of their character. One thing I think I would do again if I run another campaign. I think I would reward them for taking notes, because I mean personally, that's part of the reason that I'm such an engaged player is because I take notes, and you know I like having that record." Joe used in-game rewards as extrinsic tools. On the contrary, Bob was not a big believer in extrinsic rewards. He discussed how he had occasionally provided rewards like free dice to players, but this was not something he actively engaged in. "I try to give them like a lot of like fun gear that's gonna like keep them invested as well…So like if they beat something in game, they're gonna get an in-game reward". The reward was more for keeping players in the game since he thought they might quit, as opposed to believing in the benefits of rewards. "I

bought dice on one occasion for everybody, because they were rolling so bad. I bought everybody some new dice, and let them try to re-engage into the game, because I think a lot of people are wanting to quit. Yeah, I've done that a few times, but I'm not one to sit there and go. Hey? Play my game, …Here's a bunch of beer and some pizza every time you come by, and here's a real cool t-shirt for playing and all that. Now I don't do that."

Fair Treatment (Equity)

Just like the instructors, GMs expressed the importance of ensuring all players, including quieter ones, were engaged, and not left behind. They believed that it was important to distribute attention amongst players and adapt to different playstyles, so that all players could have equity in playing. Strategies such as rotating the spotlight, encouraging group discussions and being mindful of individual player preferences contribute to supporting an inclusive and supportive gaming environment. Jane explained how she consciously avoided any one player from monopolizing the game and allowing quieter players participation time. "But I found that probably one of the main things is just to make sure that one person isn't monopolizing all the time like try your best to... make sure that the more quiet players aren't left behind". Equity was also maintained via personal connection and approachability. Bob described how getting everyone involved in dialogues would help establish connections. " Well, I usually try to get the group involved in talking to each other at the very beginning to go through what in the world went on before…" Similarly, Joe discussed how he treated everyone the way they wished to be treated.

Bob provided a more philosophical take on equity, by acknowledging the challenge of maintaining equity, while encouraging consistency in consequences and rewards. Bob likened gaming to doing a job, and his belief that fairness in decision-making contributes to a positive

gaming experience for all players but wanted to take a practical approach to it. “Gaming is a job, and you're getting critiqued at the end of it, and you're gonna find out if you do something right or wrong, you're fallible. If there's somebody that's constantly doing stuff against your game just to do it, then you're not gonna reward them and you're gonna remind them that they're being destructive”. Joe maintained equity by addressing the diverse preferences of players and tailored the game to accommodate individual strengths and interests of different players such as role-playing, puzzles, or combat scenarios. “I think I focus probably more on, rather than treating them the same, trying to treat them the way each player personally wants to be treated.” Joe ensured an inclusive and engaging experience for everyone by understanding and incorporating these preferences. “I think that it is important to, you know, be treating the players the same…I think with the rewards I do try to make everything very equitable. I’m gonna try to, you know, make sure that everyone kind of has their share of what they're wanting.” Additionally, Joe used NPCs and in-game consequences to provide feedback, avoiding negative language, while allowing actions to have meaningful and fair repercussions. “If somebody did something dumb, I'm not gonna say that was stupid. But I am going to have NPCs react in-game to show that it was a stupid move..So, I try to have it where there's in-game consequences for anything. ...Really strong ground rules laid out. I would say my ground rules typically would be like you know, don't talk over other people, don't interrupt people, don't stop their action from happening.”

Satisfaction: Comparison Between Group 1 (Instructors) and Group 2 (Game Masters)

Universal Approaches: Similarities and Differences for Satisfaction

See Table 7 for similarities and differences in Satisfaction.

Table 7.

Table for Satisfaction

SATISFACTION			
Code/Keywords	**Similarities**	**Differences**	**Code/Keywords**
Entertaining and Engaging Experiences	Both instructors and GMs prioritized creating engaging and entertaining experiences for their learners/players. This involved similar strategies such as incorporating elements of humor, entertainment, surprises, and challenges to maintain interest and keep participants invested in the learning/game environment.	Instructors primarily operate within educational settings, while GMs operate within recreational settings.	Settings
Acknowledging Contributions (engaging)	Both groups emphasized the importance of recognizing and acknowledging the contributions and efforts of learners/players to foster continued participation and motivation	Their motivation strategies may vary, with instructors focusing more on academic performance and tangible rewards, while GMs focus more on immersive storytelling and in-game rewards.	Varying Strategies
Flexibility, Adaptability, Equity	Both instructors and GMs stress the importance of fair treatment and equity among learners/players, ensuring that everyone is engaged, included, and treated fairly regardless of their participation level or preferences.	Feedback provided by instructors may be more focused on academic progress, while GMs offer feedback on gameplay strategies and enjoyment of the gaming experience.	Varying Feedback
Rewarding (entertaining)	Both groups believed in using rewards to enhance motivation. The rewards could be entertaining.		
Flexibility, Adaptability	Both groups demonstrated abilities to be flexible and adaptable, tailoring their methods and strategies to meet the evolving needs and preferences of their learners/players.		
Inclusivity, Equity	Both groups subscribed to making efforts that allows for a more responsive and effective facilitation of learning/game experiences		

Table 7 continued

Critical Thinking	Both groups highlighted the power of sharing and collaboration in fostering critical thinking, problem solving and a positive learning/gaming experience.		
Autonomy: Personalization	Both groups used personalization and empathy as tools for intrinsic incentives.		
Autonomy: Consequences	Both groups focused on consequences, positive and negative, as determinants of learner and player motivation.		
Feedback (critical thinking and autonomy)	Both groups engage in feedback that is framed constructively to encourage learning and growth, without discouraging participation.		

Satisfaction Tenets: Similarities and Differences

1. Both groups are robustly engaged in entertaining strategies for intrinsic motivation, and even though some techniques for this are different, many are also similar such as praise, positive feedback, personal growth recognition, and creating engaging experiences. Instructors highlight achievements and areas of improvement, while GMs focus on player engagement, enjoyment, and contribution to the narrative.
2. Extrinsic motivation steps and reward practices are undertaken by both groups. Instructors may use rewards like food or personalized feedback, whereas GMs may provide in-game rewards or physical rewards like magnets.
3. Both groups value equity and work towards ensuring fair treatment of learners or players. Providing feedback consistently is a common thread between the two groups. While instructors provide specific feedback on achievements and areas for improvement, GMs incorporate in-game consequences for player actions. However, in both groups, feedback is framed constructively to encourage learning and growth, without discouraging participation.

Satisfaction Analysis Conclusion

Data reveals that instructors and GMs have greater similarities than differences between their groups. While there are differences in the contexts and some of the tools/methods used by instructors and GMs, **both groups shared the singular goal of providing learners or players with meaningful learning/gaming experiences, emphasizing intrinsic motivation, fair treatment, personalized approaches, and constructive feedback**. These similarities highlight the importance of understanding and catering to the needs and preferences of learners/players to foster engagement and growth.

Synthesis of Results

The results indicate that when compared, the motivational processes used by instructors and GMs have significantly more similarities than differences, as displayed in Figure 2. See Table 8 for a synthesis table.

Table 8.

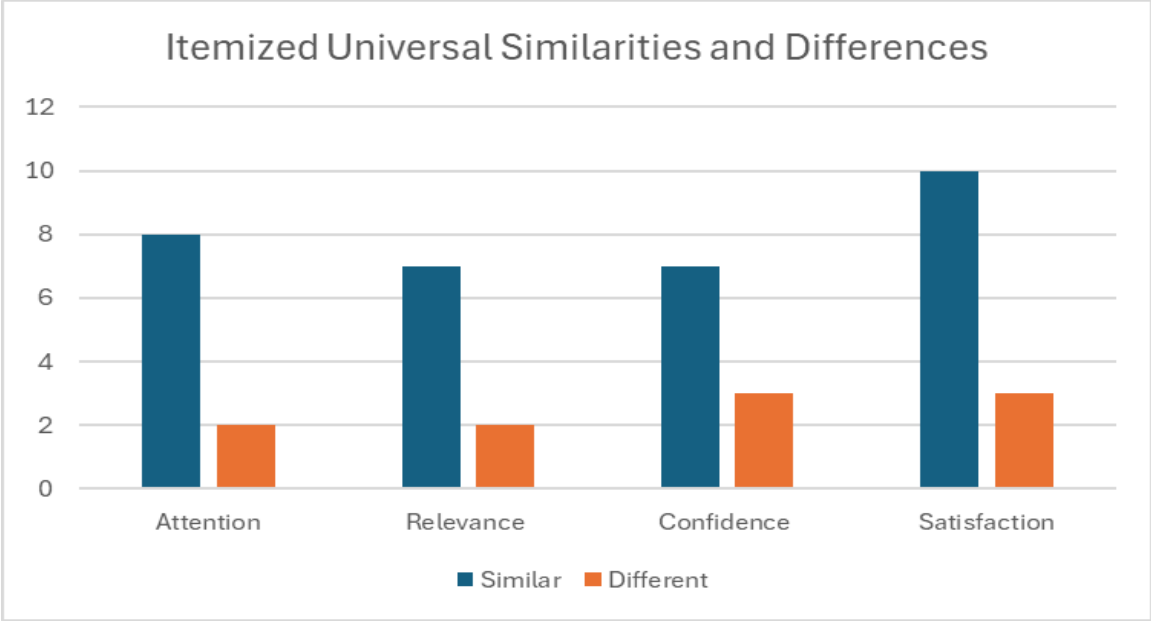
Consolidated Similarity Table for Synthesis.

Autonomy 10 Critical Thinking 8 Flexibility, Adaptability, Equity 6 Entertainment and Engagement 10

Attention	**Relevance**	**Confidence**	**Satisfaction**
Entertaining contents and experiences	Customization of Content (autonomy)	Importance of Goal Orientation (autonomy and critical thinking)	Entertaining and Engaging Experiences
Visual presentations (engagement)	Entertaining for engagement	Clear Expectations (autonomy)	Acknowledging Contributions (engaging)
Visual presentations (entertainment)	Autonomy and Choices	Autonomy and Choices	Flexibility, Adaptability, Equity
Autonomy through Relatability	Adaptation and Reliance on Feedback (autonomy and engaging)	Entertaining celebration of achievements	Rewarding (entertaining)
Flexibility and Adaptability	Connectedness and Inclusiveness	Feedback (critical thinking)	Flexibility, Adaptability
Humor and Entertainment	Real -world relatability	Flexibility and Adaptability	Inclusivity, Equity
Stimulating Curiosity/ Challenge	Critical thinking through conversations	Support for Critical Thinking and Problem Solving	Critical Thinking
Surprise, Critical Thinking			Autonomy: Personalization
			Autonomy: Consequences
			Feedback (critical thinking and autonomy)

Figure 2.

A graphical view of the synthesized results for each ARCS tenet.

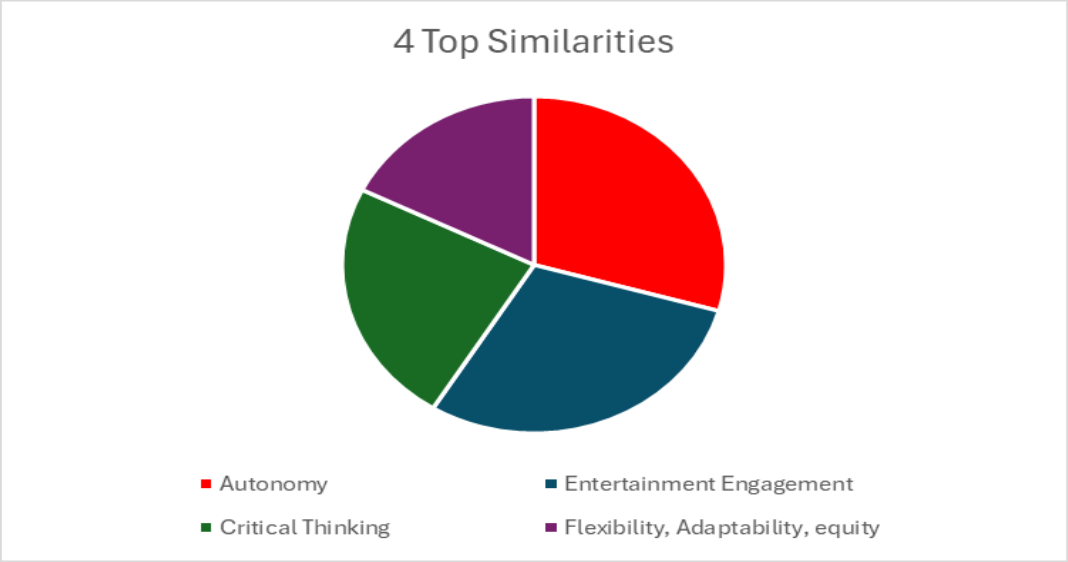


Legend: Attention: 8 similarities, 2 differences. Relevance:7 similarities, 2 differences. Confidence: 7 similarities, 3 differences. Satisfaction: 10 similarities, 3 differences.

A list of the top 4 similarities that were evident across multiple tenets of ARCS are given below. There were 10 instances of Entertainment Engagement, 10 instances of Autonomy, 8 instances of Critical Thinking and 6 instances of Flexibility, Adaptability and Equity in the thematic codes across the 4 tenets. See Figure 3 for a graphical representation and Table 7 for color coded table.

Figure 3.

4 Top Similarities



Engagement and Entertainment Strategies: Both instructors and GMs prioritize creating engaging and entertaining experiences for their learners/players. This involves incorporating humor, surprises, challenges, narratives, and discussions as elements of entertainment to maintain interest and investment in the learning/game environment. Both groups believe in using rewards to enhance motivation among learners/players. Additionally, they use multiple visual and auditory stimulations like movies and music that both entertain and engage.

Flexibility, Adaptability, Equity: Both instructors and GMs demonstrate the ability to be flexible and adaptable, tailoring their methods and strategies to meet the evolving needs and preferences of their audience. Both instructors and GMs stress the importance of fair treatment and equity among learners/players, ensuring that everyone is engaged, included, and treated fairly, regardless of their participation level or preferences. Both groups emphasize the importance of recognizing and acknowledging the contributions and efforts of their audience to foster continued participation and motivation. Both groups subscribe to making efforts that allow

for a more responsive and effective facilitation of learning/game experiences. Both groups utilize personalization and empathy as tools for intrinsic incentives.

Critical Thinking: Both instructors and GMs used motivational processes that gave learners and players the opportunities for critical thinking and problem solving. This involved using strategies such as drawing inspiration from real life examples and perceived goals of learners/players, creating challenges, inciting curiosity, and engaging in collaborative actions.

Autonomy: Both groups focused on giving learners or players ownership of their learning or gaming processes via multiple strategies. These included using inputs from personal and professional experiences, allowing multiple opportunities to participate, offering choices, and providing constructive feedback framed in a way that encouraged learning and growth without discouraging participation.

The key differences pertained to the tools used by each group due to the contextual variations of the processes. However, the commitment and involvement to engage with the core tenets of motivation were identical in both groups.

Discussion

Overview

Based on the data analysis, it's evident that participant instructors and game masters (GMs) shared several universal approaches in their respective domains, albeit with some differences due to the contexts in which they operate. In terms of differences, while both groups aimed to foster confidence and relevance, they do so within different contexts and with varying tools and techniques. Instructors primarily focus on academic achievement and subject mastery within educational settings, whereas GMs prioritize entertainment and player engagement within

recreational settings. Feedback provided by instructors may be more focused on academic progress, while GMs offer feedback on gameplay strategies and enjoyment of the gaming experience. **Despite these differences, the overarching goal of both groups remains consistent: providing meaningful and *entertaining* learning/gaming experiences by understanding and catering to the needs and preferences of their audience**.

The findings suggest several solutions to the integration of TRPGs in the curriculum. A key finding emanating from this study is the value of entertainment as a motivational tool in instruction across all ARCS elements. This result speaks to the central philosophical and practical elements of a curricular design that seeks to use TRPGs, because the need and value of entertainment in instruction juxtaposes with the entertainment value offered by TRPGs, as compelling motivational factors. Additionally, this study's results offer significant insights into dealing with some fundamental challenges of TRPG adaptation as expressed in the current literature.

A Pedagogy of Entertainment: Instructors as Game Masters?

Recurring discussions in this study's data related to incorporating multimedia elements, authentic content/news, fun, interactive activities and narratives/storytelling as tools to enhance the motivational value of various content types, all of which fall under the overarching umbrella of motivational entertainment tools that can be used to teach rigorous content (Eigenraam et al, 2021; Francis, 2013; Hedayat, 2023; Karat et al, 2002; Singhal & Rogers, 2012). As evidenced in the literature, TRPGs are uniquely qualified to fit multiple motivational and instructional spectrums, due to their unique ability to leverage entertainment elements such as the power of storytelling, compelling character modding, engaging narratives, as well as critical and creative

thinking and application opportunities to deliver educational messages in a social, accessible, and enjoyable manner.

A key pedagogical construct that this study contributes to and expands is Ludic Pedagogy (LP) by highlighting how the key tenets/principles of instruction using LP align seamlessly with the key principles of gaming in TRPG, thus creating a compelling argument in favor of easier infusion of such games in the curriculum. LP views 'Fun' as the primary intrinsic motivator that is complemented and implemented via three elements: (a) Play (relates to an activity or problem solving that students and teachers do in the classroom that are aligned with course concepts), (b) Playfulness (relates to an attitude depicting the participants' dispositions and behavioral intentions towards the course), and (c) Positivity (affective influence on how instructors and learners approach their processes to get the most out of the learning experience) (Lauricella & Edmunds, 2023). Notably, fun is not used as a synonym for 'easy'. Instead, it is seen as a motivator, based on student actions (what they do) and reactions (how they feel about what they do) in the class. "These 'dos' and 'feels' create the fun that keeps students wanting to come back and learn more" (Lauricella & Edmunds, 2023, p. 3).

In the context of this study, the results strongly indicate how the three 'fun' elements are germane to a TRPG environment. As participants indicated, using play and playfulness to achieve positive gaming experiences was the fundamental purpose of their TRPGs campaigns, where players were engaged in multiple fun and creative activities that not only enhanced enjoyment but also offered windows of critical thinking and problem solving. The LP construct views play as part of problem solving and primarily utilizes Eberle's (2014) views on characteristics of play that include having fun and using rules, all of which were identified in different ways by the group 2 participants. Eberle's description of rules also aligns with the

entertainment philosophy that is fundamental to TRPGs. “Rules are not just for organizing games and making them fair, they keep games interesting and keep games going” (Eberle, 2014, p. 216). Similarly, fun elements are also discussed by group 1 instructors. With regards to education, the LP construct posits a deep interconnection and interplay between fun, play, and learning. “Play is the activity inspired by the intrinsic motivation of fun, all in the service of learning” (Lauricella & Edmunds, 2022, p. 8). Playfulness is “Engaging with a sense of humor” (Lauricella & Edmunds, 2022, p. 9). Positivity is closely related to instructors modeling a positive attitude. “For example, an instructor can be enthusiastic, welcoming, and/or engaging” (Lauricella & Edmunds, 2022, p. 6). All these characteristics were discussed by the instructors as key aspects of their teaching processes. Another characteristic that emanates from this study’s results in the context of entertainment is the need for a socially dynamic environment.

As the results indicate, in this regard also TRPGs offer a suitable and viable medium for entertainment and fun in education.

Socializing is a fundamental aspect of TRPGs, serving as both a need and a requirement for a fulfilling gaming experience. That is because these games are highly collaborative endeavors, and socializing is required for all aspects of gaming including brainstorming, developing characters and intricate plotlines. Individuals come together to play games, but more importantly to develop a sense of belonging and to build communities of practice with other like-minded game players (Bennett, 2023; Boon, 2022; Henning et al, 2024; Parks & Parks, 2021; Orr et al, 2020). Boon (2022) labeled TRPGs as an 'ethnography of friendship’, describing how role playing as a member of a community, by engaging via in-person communities and friendships made such games especially appealing in a digitized world, where despite online forces, many people crave in-person interaction. The study’s result clearly indicated that TRPGs

often require players to work together as a team to overcome challenges and achieve objectives. Effective communication and social interaction are essential for strategizing, coordinating actions, and supporting one another in-game. Beyond the game world, TRPGs provide a platform for building friendships and fostering social connections. Shared experiences, inside jokes, and memorable moments created during gameplay often strengthen bonds between players. All these may be leveraged as entertainment factors within a curriculum.

Using Familiarity to Leverage Buy In

As mentioned in the Introduction, most research on TRPGs has been conducted by those who have the dual role of instructors and GMs. This led to propositions by Woods (2017), Frankos (2018) and Miller (2023), who likened the role of instructors to GMs. All rely on Constructivist pedagogical principles, which is a popular theoretical frame used in multiple game and play related techniques in higher education, including the use of TRPGs (Bennett, 2023; Guan et al, 2022; Polin, 2018). Woods (2017) conducted an investigation in which he used a TRPG called 'The Quiet Year' as a structural example for a First-Year Writing course activity. The Quiet Year is a role-playing game, wherein players define the struggles of a post-apocalyptic community and attempt to build something good within their quiet year, making decisions based on dwindling time and resources (Avery, 2022; Bellamy, 2022). The goal of this study was to identify ways in which TRPGs benefit compositional learning in the case of the First-Year Writing and genre-based composition courses in higher education, Woods (2017) uses his own experiences as a game master to present a model for introducing TRPGs into the composition classroom, and offers discussions that demonstrate the pedagogical value of TRPGs, demonstrating how TRPGs can extend beyond being just games and entertainment, to being harbingers of learning and pedagogy.

Woods (2017) based this on the key correlations between the roles of instructors and game masters and concludes that these roles can be practically interchangeable. "The ability of the players to utilize game mechanics, as well as the underlying interpersonal and social dynamics of the game, in order to grab and direct the narrative reins is a fundamental part of what makes TRPGs unique as games….The Game Master's job becomes something closer to that of a director than an author , but in fact the most appropriate analogy…is that of an educator, specifically the teacher as 'facilitator' of a learning/narrative space"(Woods, 2017, p. viii-ix).

Similarly, Frankos (2018) discussed the use of game pedagogy for English teaching, while drawing an analogy between teaching and game running. In the context of describing how Dungeon Masters (DM) or Game Masters operate, Frankos (2018) states, "the image of a DM working together with many different players to participate in an activity comprised of rules, input, and feedback should seem reminiscent of a classroom informed by modern pedagogical theory, wherein an educator works together with many different students to participate in a knowledge generating environment comprised of classroom rules, student participation, and instructor feedback." (p. ?)

It is the DM's job to manage gameplay among many players, just as it is the instructor's job to manage a classroom of many students" (Frankos, 2018, p. 3). Miller (2023) posits a similar perspective when likening the different functions of a GM such as planning, directing a game, and teaching other players how to play to the functions of teaching wherein teachers plan, orate, and direct a lesson. These scholars were able to use their familiar experiences as GMs and Instructors to inform their study, propositions, practices, and findings. However, when it comes to regular instructors who do not have GM experience, this familiarity is not discernible. Having a clear view of how the two processes relate could allow for a familiarity effect, which in turn

could facilitate instructor adoption of TRPGs as motivational tools. This study created the groundwork for displaying the similarities and differences to enable the affective impact of instructors towards TRPGs.

Designing With Critical Thinking and Creativity in Mind

Participants offered a rich description of how instruction or game running was made more motivating when they used strategies and activities to enhance learners or players critical thinking, which enhanced personal growth. Additionally, they shared how providing creative freedom and opportunities to learners and players helped with motivation. These discussions offered insights into what to focus on concerning these core elements, when designing curriculum using TRPGs. While critical thinking and creativity are integral components of any well-rounded curriculum (Ayçiçek, 2021; Boso et al, 2023; Ellerton & Kelly, 2021), TRPG games are particularly conducive to their integration due to their inherently creative and interactive nature.

Within TRPGs, players are often required to solve complex problems, strategize, make decisions on incomplete information, and think critically to navigate the various challenges presented in the game. They must also think creatively when developing their stories, crafting their characters, and improvising solutions when faced with unexpected situations in the game (Bennet, 2023; Hill, 2023; Katifori et al, 2022). Woodley (2024) suggests that TRPGs offer a distinctive environment for reflective scholarly investigation and possible individual development, allowing participants to delve into and test various personas and responsibilities within a cooperative narrative structure or storytelling.

Combating Challenges with Flexibility and Autonomy

Flexibility (including adaptability and ability to change content) and autonomy were recurring themes in the study's data, with strong indications that both instructors and GMs considered being flexible and offering autonomy to learners and players as essential to their success in motivating their classroom or game arena. The data revealed multiple ways and tools used to accomplish this. These results offer a solution to circumventing some of the key challenges associated with TRPG inclusion in the curriculum. As suggested in the literature, time constraints, logistical issues, curriculum alignment, assessment difficulties, student engagement, managing group dynamics, inclusivity, and teacher training are some of the challenges that may impede TRPG adaptation in the curriculum (Prager, 2019; Turner& Robinson, 2023; Woods, 2017; Zalka, 2012).

Flexibility and autonomy can be crucial assets in addressing the challenges associated with integrating TRPGs into educational curricula. For example, breaking longer gameplay sessions into shorter segments or adjusting the frequency of gameplay sessions based on the needs of the curriculum can help ensure that TRPGs fit into the available class time. Flexibility and autonomy can be used to tailor TRPG scenarios and gameplay mechanics to align with specific learning objectives and student interests. Participants discussed using multivariate assessment strategies to evaluate learners, which can be adapted for a TRPG curriculum. Allowing students to demonstrate their skills and knowledge in diverse ways, instructors can accommodate different learning styles and abilities while still evaluating student progress effectively. Participants discussed using learner or player backgrounds and experiences and incorporating changes in content or teaching/game running approaches based on real-time feedback and observations of student engagement and progress to inform flexibility in content and behavior. Jorgensen (2021) discusses the value of adjusting rules of TRPG mechanics as a

supportive and educational tool. Making such adjustments offers players autonomy to practice skills in a safe environment and offers a unique method for teaching and practicing skills of creativity, critical thinking, communication, and collaboration.

Thus, the results are indicative that modifying game mechanics, providing alternative communication methods, or incorporating diverse cultural perspectives into gameplay scenarios can be successful ways to handle challenges of assessment difficulties, student engagement, managing group dynamics, responsiveness, and inclusivity. Instructors can enhance engagement by offering learners choices in character creation, allowing students to contribute to the development of game scenarios, or providing opportunities for creative expression within the game world.

Limitations, Future Implications, Conclusion

The study offered significant insights into how teaching and game running processes concur and differ and allowed a deeper look into seamless and easy integration of TRPGs as motivational tools in curriculum. However, the study does have some limitations. Due to the constraints of time and budget, the study was limited to participants within the United States. Given that TRPGs are played around the world and instruction is a global phenomenon, the study must expand its future scope of investigation to countries outside the USA to allow readers a more globalized look at the challenges and solutions to integrating TRPGs as motivational items in education. Before proceeding to the results, it is prudent to offer clarification regarding generalization, in the context of limitations. Case study research designs have different views on the concept of "generalization" and the extent to which the data can explain phenomena or situations outside and beyond the specific scope of a particular study. To deal with such issues, Yin (2014) suggests "analytical generalization" whereby the researcher compares (or

“generalizes”) case study data to existing principles, as well as conceptual or theoretical frames. Analytic generalization differs from statistical generalization. “…case studies, like experiments, are generalizable to theoretical propositions and not to populations or universes.

In this sense, case study, like the experiment, does not represent a "sample," and in doing a case study, your goal will be to expand and generalize theories (analytic generalization) and not to enumerate frequencies (statistical generalization)." (Yin, 2009, p.15). The process of analytic generalization occurs in two steps. First, a conceptual claim is made by researchers, and then the data analysis is applied to implicate situations in which similar events might occur (Yin, 2013). In the context of this study, the researcher’s conceptual frame, likening teaching processes to game running processes, was used to imply how a transference of knowledge regarding the two processes could facilitate faculty buy-in for TRPG implementation in classrooms.

The study compared the processes of TRPG game masters (GMs) and faculty members (instructors) in running games and teaching classes to explore similarities and differences in motivational components, to determine if TRPG game running mirrors teaching processes, and if so, to identify potential ways to integrate TRPG learning mechanisms into classrooms. The goal for such identification is to empower instructors to devise strategies for an easier and more seamless integration of TRPGs than what has been attempted thus far. The premise is that because both GMs and instructors act as guides that help navigate content development and sharing, there is the possibility that there will be common motivational and operational elements within the two processes. If that is true, then the knowledge of that commonality and the areas of intersection could allow instructors to come up with better and viable strategies of TRPG inclusion in their curriculum.

Through this study the researcher attempted to uncover foundational characteristics of instruction and game running to determine the magnitude of parallelism that could exist between the two. The future implications of research are to apply the information garnered in this study to investigate training needs and instrument designing that may assist faculty in adapting TRPG more readily in their classes. Additionally, the study offers a segue into expanding investigation of Mere Exposure or Familiarity Principles. While the premise of comparing the motivational processes of classroom teaching and TRPG game running relied on familiarity as a catalyst for adoption, this study was limited to the examination of the similarities and differences between the processes. Now that the results indicate that the two processes are significantly similar, further research is needed to ascertain what possible impacts the presentation of the results of this study to faculty will have on their adoption of TRPGs.

To conclude, TRPGs fuse entertainment with social networking and role mongering in situ, which makes them an impactful game form for learning. Entertainment is a compelling factor in making instruction motivating, which indicates that there could be an easy segue into fusing TRPG with learning components to make them engaging. The ability to roleplay a character's knowledge, skills, and creatively handle a situation is critical to the development of problem-solving skills. Despite expected initial challenges, educators have a strong foundation to integrate tabletop games into the curriculum, leveraging shared motivational processes with game masters. With the appropriate support, resources, and professional development opportunities, educators can successfully integrate tabletop games into their curriculum to enhance student motivation.

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Appendix A: Interview Questions

Demographic questions:

- How many years have you been in this field?
- How would you rate your experience level as (novice, journeyman, expert)?
- Can you provide some examples of specific work experience?
- What different courses have you taught?
- What different TRPG games have you run?

Main questions:

Attention

- What process(es) do you use to hold the stakeholders interest?
- How do you get them to be curious or attentive towards your content?
- What process(es) do you use to encourage active participation with the content? Provide examples
- What about having stakeholders engage in brainstorming or critical thinking?
- What process(es) do you use to present the stakeholders with varied content or challenges? Provide examples

Relevance

- What process(es) do you use to show relevance of your content to the stakeholders?
- What process(es) do you use to identify stakeholders' motives for participating?
- What process(es) do you use to make stakeholders familiar with your content?

Confidence

- What process(es) do you use to instill confidence in stakeholders, as in how do you help them recognize success?
- What process(es) do you use to give success opportunities to the stakeholders?
- What process(es) do you use to give stakeholders a level of personal control?

Satisfaction

- What process(es) do you use to ensure stakeholder satisfaction?
- What process(es) do you use to give out extrinsic rewards to stakeholders?
- What process(es) do you use to maintain equity for the stakeholders?

CHAPTER FOUR: MANA FOR MOTIVATION: A GROUNDED THEORY OF INSTRUCTORS AS GAME MASTERS 'RUNNING' THE HIGHER EDUCATION CLASSROOM

Introduction

The Problem

Tabletop Role Playing Games (TRPG) are a socially driven game form, using collaborative storytelling experiences where players assume the role of characters within a fictional world, guided by a Game Master (GM) or Dungeon Master (DM) who orchestrates the narrative. Players interact with the story through dialogues, decision making, and dice rolls to resolve actions, creating immersive, collaborative and dynamic adventures (Ewalt, 2024). TRPGs are known to have heightened motivation for players, which is why they have already entered into the world of education as motivational assets (Lin et al, 2023; Martinho & Sousa, 2023; Yang et al, 2023). Motivation is a key factor of teaching and learning effectiveness, which is why robust motivational tools like TRPGs should be harnessed for higher education curriculum (Filgona et al, 2020; Hajiyeva, 2024; Zajda, 2018). However, a review of the literature reveals that while TRPGs have several educational benefits such as fostering critical thinking, collaboration, and literacy skills, their integration into higher education curriculum remains limited due to multiple factors, including faculty resistance on account of challenges of adoption (Ruiz-Ezquerro, 2021; Cook, et al., 2017; Deterding & Zagal, 2018; Lopes, 2015; McCollum, 2021). A crucial adoption challenge is that faculty who are not trained in running or playing TRPGs are likely to resist due to the complexity of TRPGs and lack of structured support for implementation.

A review of the literature indicates that many studies on TRPGs are indeed conducted by game players themselves, a trend that reflects the participatory and experiential nature of the medium. As insider researchers, these scholars possess deep contextual knowledge and embodied experiences, allowing them to adapt the games for education with relatively low stress (Bowman, 2010; Garcia, 2017; Yuliawati et al, 2024). While the prevalence of gamer-scholars in TRPG research brings valuable insider perspectives, it can also unintentionally create a barrier to adoption by faculty unfamiliar with these games. Existing scholarships often presume foundational knowledge of TRPG mechanics, jargon, and facilitation techniques, which may alienate faculty without prior exposure to game-based learning who may find it challenging to envision how these games can be integrated into their curriculum (Lasley, 2021; Ruiz-Ezquerro, 2021).

Additionally, non-gaming faculty may also find the perceived learning curves a deterrent to the TRPG adoption, without guidance or structured training. As such, research is needed that offers insights and a practitioners' approach to playful learning through TRPGs in which both novices and experienced players can participate (Boysen et al, 2023; Stubbs & Sorensen, 2025). “To optimize the educational benefits of PL in general and TRPG in particular, further research is needed to develop didactic designs in which novices can engage in creative processes with high learning potential within a specific educational context. It is especially critical to investigate how immersion, flow and collaborative creativity can be achieved despite the limited timeframe and the diversity of student teachers with varying levels of TRPG expertise” (Boysen et al, 2023, p. 11). In response to the challenges outlined in the literature and the lack of accessible frameworks for faculty unfamiliar with TRPGs, this study is centered on the development of a grounded theory to support the adoption of TRPGs in higher education.

Grounded theory is particularly suited to this context as it enables the generation of theory from the lived experiences and interpretations of faculty encountering TRPG-based instruction for the first time. The primary focus of this paper is to present the development of a grounded theory titled MASTER (Maneuvering Adventure Systems to Teach, Engage, and Reflect) that offers a conceptual and practical approach to help non-gamer faculty integrate TRPGs into their curriculum with greater confidence and clarity.

The development of a grounded theory for adoption of TRPG is also justified by the current lack of systematic models that explain how faculty can effectively adopt or adapt TRPGs for their curriculum. The study's goal was to unravel the challenges and solutions pertaining to the phenomenon of integrating the motivational essence of TRPGs in education and to generate a theory that is grounded in the lived realities of those being studied. "Data does not provide a window on reality. Rather, the 'discovered' reality arises from the interactive process and its temporal, cultural, and structural contexts" (Charmaz, 2000, p. 524). While the existing literature highlights the motivational aspects of TRPGs (Ewalt, 2024; Martinho & Sousa, 2023), there is limited theoretical guidance that maps the process of translating these benefits into structured educational practices (McCollum, 2021). The MASTER grounded theory offers a methodological approach to derive theory from real-world faculty experiences, capturing the interplay between motivation, pedagogy and game-based strategies (Lopes, 2015; Prager, 2019; Ruiz-Ezquerro, 2021)

The Research Design Rationale

While TRPGs have demonstrated strong motivational and collaborative benefits (Lin et al., 2023; Martinho & Sousa, 2023; Yang et al., 2023), their complexity and unfamiliarity often deter faculty from implementation (Cook et al, 2017; Deterding & Zagal, 2018). To build this

grounded theory, the research design intentionally engaged novice faculty participants in reviewing and responding to a scaffolded TRPG instructional framework, which served as both an entry point and a lens for data collection. This grounded theory titled MASTER (Maneuvering Adventure Systems to Teach, Engage, and Reflect) could facilitate higher education, non-gamer faculty adoption of TRPGs. To accomplish this effectively, the first author used a two-pronged approach by first developing a virtual (online) instructional framework for adopting TRPGs titled MASTER Instructional Framework or MIF that provided support mechanisms for non-gamer faculty exploring TRPG integration. MIF acted as a scaffold by providing structured guidance and actionable tools focused on how and why faculty could integrate TRPGs in their curriculum with relative ease. This framework was then offered to selected novice (not familiar with TRPG) faculty participants for review, and they then shared their perceptions on the potential value of adopting TRPGs for their curriculum and perceived challenges, which helped with the development of the grounded theory. This approach to data gathering has been prevalent in the literature (Gross et al, 2020; Speer et al, 2022; Van Raalte & Boulay, 2013; Wenrich & Brown, 2007).

MIF specifically supported participant non-TRPG faculty in conceptualizing and evaluating the potential integration of TRPGs into their curriculum. This approach allowed the researchers to understand faculty interpretations for adoption, surface concerns and assess the motivational resonance of TRPG principles with instructional practices (Filgona et al, 2020; Zajda, 2018). Reviewing the framework was a critical first step in promoting faculty readiness and confidence, particularly in the context of experimentation with unfamiliar pedagogies that require buy-in and cognitive alignment. The study's research questions focused on how faculty members interpreted and made meaning from MIF, as well as the implementation challenges

they foresaw during this reflective evaluation. Using faculty who are unfamiliar with TRPGs was essential to understand the broader challenges of integrating such games into the curriculum and crucial to the development of the MASTER theory to assist with this integration (Hajiyeva, 2024; Kirkwood & Price, 2014; Lawrence & Tar, 2018; Ruff, 2021). Novice faculty perspectives provided insights into usability, clarity and perceived barriers of an instructional design framework intended to support TRPG integration. Additionally, including non-TRPG users ensured that findings are not limited to already-motivated or experienced game-based educators, thereby increasing the generalizability and practical relevance of the grounded theory (Sánchez-Prieto et al, 2019; Veletsianos & Moe, 2017).

Research Questions

This study examines the following questions:

1. What are the perceptions of higher education, non-TRPG gamer faculty members on the process of integrating TRPGs into the curriculum?

2. What are the perceptions of higher education, non-TRPG gamer faculty members on the challenges and recommendations of integrating TRPGs into the curriculum?

Literature Review

Use of TRPGs in Instructional Settings

TRPGs can provide significant motivation and increase engagement in students by providing a fun and engaging way to interact with educational content. Studies have shown that students engaging with TRPGs show increased motivation, retention, and improved attitude towards their subject matter (Bruns, 2018; Stubbs & Sorensen, 2025). TRPGs support motivation

for students by providing an avenue for application and practice of learned knowledge. Studies in both science and history showcased how using TRPGs helped improve learners' understanding and application of the content knowledge (Gibson & Brem, 2018; Miller, 2017). TRPGs can foster creativity and critical thinking through gameplay as students make decisions based on their character's motivations, abilities and goals. TRPGs have been shown to improve critical thinking and problem-solving skills while also stimulating creativity (Clark, 2016; DeLyser & Olick, 2018).

Recent studies have suggested TRPGs are effective tools for interaction and knowledge construction in a variety of contexts and settings, including mental health (Arenas et al, 2022; Baker et al, 2022), teacher training and wellness, and training administrators (Segoni, 2022; Wehlan & Reinke, 2022). In a study conducted by Abbott et al (2021), the TRPG, Dungeons and Dragons, was shown to aid mental and social wellness when used in a therapeutic setting due to the socially connected elements of the games. Similarly, such games were shown to enhance the experience of second language (L2) learners due to the opportunities for social interaction, collaboration, and scaffolding (Torres-Rodriguez & Martínez-Granada, 2022). TRPGs have shown greater efficacy when learners are immersed in a more personalized role-playing game environment. In such situations there is enhancement of performance outcomes and reduction of extraneous load, while promoting germane load (Zhong, 2022).

Theoretical Frames

Given the nature of this study, multiple theoretical constructs were applied to frame the research design, including Self-Determination Theory (SDT), ARCS Model of instructional design and Constructivist Grounded Theory.

SDT and ARCS

SDT was defined by Ryan and Deci (2017), where the key principles of extrinsic and intrinsic motivation are woven into self-determination principles of competence, autonomy, and relatedness. In the context of this study, the data gathering was focused both on the extrinsic and intrinsic dynamics of motivation of the faculty participants. ARCS was established by Keller (1987) as a tool for problem solving in instructional design situations to develop highly engaging learning activities. The four pillars of motivation as suggested in ARCS are attention, relevance, confidence, and satisfaction as a "four category synthesis of variables that encompasses most of the areas of research on human motivation, and a motivational design process that is compatible with typical instructional design models" (Keller, 1987, Abstract). The ARCS model has been applied in a variety of educational settings, spanning K-12 to higher education, as well as multidisciplinary and interdisciplinary technical schools across the globe (Li & Keller, 2018).

Constructivist Grounded Theory (CGT)

This study used selected principles of the Constructivist Grounded Theory and the associated research design framework suggested in the literature (Charmaz, 2001; Chun Tie et al, 2019). Constructivist grounded theory (CGT) is a qualitative research methodology that seeks to understand and explore a social process where no adequate prior theory or framework exists. According to Mohajan and Mohajan (2022) CGT aims to develop a detailed understanding of the underlying social or psychological processes within a certain context by exploring in more detail social interactions and social structures, and locates the research process and product in historical, social, and situational conditions. Grounded theory methods consist of a systematic, yet flexible way to collect and analyze data to construct theories or frameworks grounded in the data itself (Charmaz, 2006).

Constructivist GT (CGT) is a valid selection for this study since this is a methodology that focuses on how participants construct meaning in relation to the area of inquiry and how the designer or researcher co-constructs experience and meanings with participants (Charmaz & Bryant, 2011; Chun Tie et al., 2019). CGT approaches place greater reliance on the researchers' subjectivity, and studies using this approach work on the belief that there are multiple realities, including that of the researcher and the participants that warrant a self-conscious rendition of findings (Charmaz, 2017; Mohajan & Mohajan, 2022). There is extensive literature regarding the use of CGT in teaching and learning, and it has been studied in the context of various disciplines such as mental health nursing (Gardner et al., 2012; Lauridsen & Higginbottom, 2014), engineering (Groen et al., 2017) and technology (Deepa et al., 2022). However, there is a marked gap in the literature regarding CGT and studies pertaining to the instructional design field (Lindqvist & Forsberg, 2022)

Methodology

Constructivist Grounded Theory

Following a Constructivist Grounded Theory (CGT) approach (Charmaz, 2006; 2009), this study used data collected sequentially to develop a grounded theory on the integration of TRPGs in the curriculum. In CGT the researcher's role in the research process is that of an active participant not a passive observer, shaping data collection, analysis, and theory formation. Researchers are integral to understanding the participants' perspectives and co-constructing knowledge (Clarke et al, 2023). CGT involves systematically analyzing qualitative data to construct theories that explain the phenomena under study. In this study, the research questions

helped generate the empirical basis for the MASTER (Maneuvering Adventure Systems to Teach, Engage, and Reflect) Theory.

In Constructivist Grounded Theory (CGT), research questions serve as entry points to systematically explore a phenomenon or process. In the case of this paper that phenomenon is the adoption of TRPGs into the curriculum by non-gamer faculty. The participants' responses to MIF (as documented through the RQs) revealed their perceptions, hesitations, and conceptual understandings, which were iteratively coded, categorized, and synthesized to construct the MASTER theory. This structure allowed the researchers to intentionally lead the readers from the practical application (how participants interpret the TRPG framework) through the analytical process (coding, meaning-making) to the theoretical outcome (MASTER). This integrative approach is consistent with Charmaz's (2006) principles of CGT, where the researcher begins with sensitizing concepts and questions, uses data to explore them deeply, and builds theory iteratively from participants' voices. This structure balances the need for methodological clarity with the epistemological flexibility inherent in CGT.

Theoretical Sampling

Charmaz (2006) advocates the use of theoretical sampling, which means "seeking and collecting pertinent data to elaborate and refine categories in your emerging theory" (p. 96). Such sampling and data need to be collected repeatedly (Charmaz, 2006). To do this effectively, comparisons between repeatedly collected data and results are necessary (Bluff, 2005; Charmaz, 2006; Chun Tie et al, 2019; Cunningham & Carmichael, 2017). In the context of this study, three tiers of sampling were used to ensure a rich, iterative and comparative data set. Each tier was designed to build progressively toward theory development by engaging different stakeholder groups in TRPG facilitation and instruction. Participants were selected using purposive and

theoretical sampling methods to refine emerging categories and address gaps identified during analysis. Some of the participants were involved in multiple tiers. A description of this structured approach is given below. Figure 1 provides a visual of the structured approach to developing grounded theory. Additionally, Table 1 provides a comprehensive view of participant backgrounds for all three tiers. Table 3 highlights the sources and time frame of data collection.

Tier 1: TRPG Player Perspectives

Purpose: Use participant feedback to identify the key motivational elements of TRPGs.

Participant Recruitment: After IRB approval, participants were recruited using snowball and criteria sampling, beginning with individuals known to the author who had experience with TRPGs. Interested participants received a recruitment email outlining the study, the researcher's background, and a request for informed consent.

Participant Profile: Six participants (identified by pseudonyms) with experience playing TRPGs, including a range of novice and journeyman-level players. Inclusion criteria required at least one full TRPG session played.

Outcome: These participants offered early insights into player-driven motivational dynamics and helped generate preliminary hypotheses related to engagement strategies and facilitation styles.

Tier 2: Dual Role Informants (Game Masters and Instructors)

Purpose: To examine the intersections between game mastery and teaching practices.

Participant Recruitment: After IRB approval, purposeful and criteria sampling was used to find 3 faculty members and 3 GMs. The researcher contacted known people from both groups and used exclusion criteria to select the final participants. The exclusion criteria for

faculty was that they were not experienced in TRPG gameplay. The exclusion criteria for GM were that they do not have any prior teaching experience.

Participant Profile and Data: Six participants who had dual experiences as either Game Masters (GMs) or educators. Inclusion criteria included a minimum of two years' teaching experience or one full campaign as a GM, with exposure to multiple TRPG systems.

Outcome: These participants contributed to refining theoretical categories by helping the researcher understand the transferability of facilitation skills from gaming to teaching and vice versa.

Tier 3: Development of TRPG Instructional Framework for Faculty Review and Grounded Theory

Purpose: Use data from earlier tiers to develop a TRPG instruction framework and have non-gamer faculty review it. Use perceptions and meaning-making responses from non-gamer faculty when reviewing the MIF framework to develop a grounded theory of TRPG adoption.

Participant Recruitment: After IRB approval, purposeful and criteria sampling was used to find 6 higher education faculty. The inclusion criterion to select the six faculty was at least 3 years of teaching experience in higher education. The exclusion criteria were TRPG prior gameplay experience. Faculty members who had gaming experience with TRPGs were excluded.

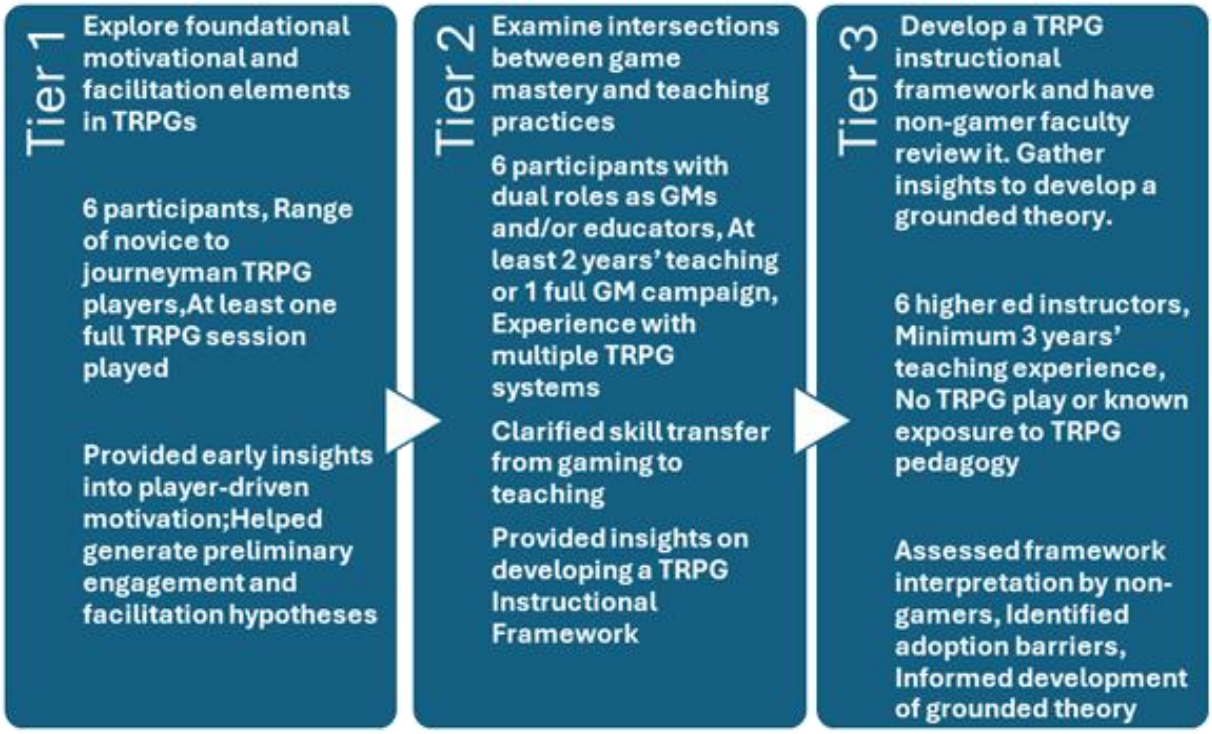
Participant Profile: Six higher education instructors (deidentified) with a minimum of three years of teaching experience, no prior TRPG gameplay experience, and no known exposure to TRPG-based pedagogy.

Outcome: These participants were chosen to assess how non-gamer faculty interpret and evaluate the instructional design framework. Each faculty participant was provided with the link to the TRPG integration framework and given 6 weeks to review and familiarize with the

website content. Thereafter, semi structured interviews were conducted via Zoom for the final data collection. Interviews were approximately 30-60 minutes. The video for Zoom was deactivated to protect participant privacy and for the code book, pseudonyms were used instead of real names to protect confidentiality. Their insights helped reveal success elements and adoption barriers that, in turn, informed the final MASTER theory.

Figure 4.

3 Tiers of Developing the MASTER Grounded Theory



The data results from each tier were compiled and compared simultaneously, while continued data was gathered to fulfill the requirements of CGT, allowing for relevant and meaningful data inclusion in the analysis (Charmaz, 2006; 2019).

Table 9.

Consolidated Details of Data Sources for 3 Tiers

TIER 1					
Pseudonyms for participants	*Average Number of Years Involved in TRPGs*	*Multiple TRPGs Played*	*Played as GM*	*Perceived Expertise as a Player*	*Forum Sites Participated In*
Rob	10 years	Yes	No	Journeyman	None
Susan	8 years	Yes	No	Novice	None
Bob	20 years	Yes	Yes	Journeyman	None
Joe	6 years	Yes	Yes	Journeyman	None
Steve	1 years	No	No	Novice	Reddit
Alice	15 years	Yes	Yes	Journeyman	Reddit
TIER 2					
Pseudonyms for participants	*Group*	*Multiple courses taught*	*Played as GM/*	*Have any game-based learning/teaching experience*	*Have any experience in Higher Education*
Steven	Instructor	Yes	No	No	Yes
Wanda	Instructor	Yes	No	No	Yes
Donna	Instructor	Yes	No	Some	Yes
Alice	Game Master	No	Yes	No	As a student
Bob	Game Master	No	Yes	No	As a student
Joe	Game Master	No	Yes	No	As a student
TIER 3					
Deidentified labels for participants	*Group*	*Multiple courses taught*	*Played as GM/*	*Have any game-based learning/teaching experience*	*Have any experience in Higher Education*
Jane	Instructor	Yes	No	No	Yes
Donna	Instructor	Yes	No	No	Yes
Thomas	Instructor	Yes	No	No	Yes
Steven	Instructor	Yes	No	No	Yes
Wanda	Instructor	Yes	No	No	Yes
Rose	Instructor	Yes	No	Yes, but not TRPGs	Yes

Data Instrument and Collection

For the purposes of this study multiple data streams were used, keeping in mind the protocols and suggestions of a Constructivist Grounded Theory where data is collected using multiple tools including interviews and documents (Charmaz, 2006). For the proposed study, the three-tiered data streams informed the development of the MASTER theory. A key part of the final data gathering process in Tier 3 was the development of the MIF by the first author that was used as a review material for participant faculty to help facilitate their reflection on the value and challenges of integrating TRPGs in the curriculum. The details of the development of this framework are given below. Additionally, the multiple tiers used data streams from the literature reviews, extant texts, interviews and memoing, based on recommendations by CGT theorists (Charmaz, 2006; 2001).

The MIF Framework

This was developed to act as a strategic tool within the CGT methodology to elicit reflective insights and faculty perceptions on TRPG adoption readiness. In CGT, the design and deployment of instruments that provoke participant meaning-making is considered a valid component of the research process (Bobbink et al, 2024; Charmaz, 2006, 2001). The framework was essential because the literature underscores the motivational, cognitive, and social benefits of TRPGs (Bowman, 2010; Martinho & Sousa, 2023; Yang et al., 2023) but also displays the complexity and perceived inaccessibility of these tools by non-gamer educators as a persistent barrier to TRPG adoption (Deterding & Zagal, 2018; Lopes, 2015). Existing scholarship often presumes foundational knowledge of TRPG mechanics, jargon, and facilitation techniques that may alienate faculty without prior exposure to game-based learning (Lasley, 2021; Ruiz-Ezquerro, 2021). The framework was designed to act as both a pedagogical scaffold and a

research stimulus, offering participants a concrete model for reflection while simultaneously generating rich data about their perceptions, challenges, and motivations regarding TRPG adoption.

Similar approaches where participants were asked to review informational material prior to interviews and surveys for data collection have been used in the literature (Gross et al, 2020; Speer et al, 2022; Van Raalte & Boulay, 2013; Wenrich & Brown, 2007). The framework design started with a review of the data from Tiers 1 and 2 that identified key motivational factors and similarities between faculty teaching and game running processes. Using these findings, a modular instructional framework was developed and deployed via a dedicated website to provide participants with a user-friendly, asynchronous option for review. The framework was organized into six key foci, each designed to facilitate non-gamer faculties' understanding of TRPG mechanics in easily consumable chunks. Table 2 provides a high-level description of each focus.

Table 10.

TRPG Instructional Framework Focus

Focus	Details
Introduction to TRPGs in Education	Brief, jargon-free explanation of TRPGs and their relevance to pedagogy.
Motivational Foundations	Alignment of TRPG features with SDT and ARCS principles to highlight educational value.
Adoption Pathways	Multiple entry points (light, medium, deep integration) to accommodate faculty with varying comfort levels.
Sample Scenario Template	Customizable lesson scaffolds that connect TRPG scenarios to course objectives.
Facilitation Strategies	Suggestions for adapting classroom facilitation skills to TRPG environments.
Debriefing and Assessment	Guidance on aligning in-game outcomes with learning objectives and evaluating student learning.

Literature Review

Charmaz (2001) advocates starting data collection with a literature review to determine what has already transpired. Ideally, the expectation is for a three-step literature review: initial, ongoing, and final, which was followed in this study, using the 3 tiers (Charmaz, 2001; Dunn et al, 2023).

Interviews

A key element of CGT methodology is to establish a symbiosis between the researcher and subject, which can be accomplished through the process of a narrative interaction (Mills et al., 2006). Keeping this in mind, one method for data gathering for this study was semi-structured interviews, which was the tool to construct knowledge by a collaboration between the interviewer and the interviewee (DeJonckheere & Vaughn, 2019). This is a recommended

method for CGT data gathering by foundational scholars of CGT (Bluff, 2005; Foley et al., 2021; Strauss & Corbin, 1998).

Memoing

This is germane to theoretical sampling and saturation, involving a simultaneous data collection and analysis process (Charmaz, 2006, 2001; Dunn et al., 2023; Mills et al., 2006; Sebeelo, 2023). While the memos will help identify, develop, and keep track of theoretical ideas, where relevant, they will also be recalled and reworked to produce new documents and papers (Haig, 2010).

Table 11.

Data collection type, tier and time

Tier/Case Name	**Data Type**	**Time**
Tier 1		
Rob	Interview	2020
Susan	Interview	2020
Bob	Interview	2020
Joe	Interview	2020
Steve	Interview	2021
Alice	Interview	2021
Literature Review	Initial	2020-2021
Researcher memo	Memo/notes	2020-2021
Tier 2		
Steven	Interview	2022
Wanda	Interview	2022
Donna	Interview	2023
Alice	Interview	2023
Bob	Interview	2023
Joe	Interview	2023
Literature Review	Ongoing	2023
Researcher memo	Memo/notes	2022-2023

Table 11 continued

Tier 3		
Jane	Interview	2025
Donna	Interview	2025
Thomas	Interview	2025
Steven	Interview	2025
Wanda	Interview	2025
Rose	Interview	2025
Literature Review (some collected, but will collect more)	Final	2024
Researcher memo	Memo/notes	2025

Data Analysis: Coding Strategies and Processes

The study used the process of Action Codes to "keep our coding closer to the participants' experiences, creating an analysis more redolent of their language" (Mills et al, 2006, p.10). "Using gerunds... can help the analyst stick closely to the data and to begin to develop conceptual categories that reflect participants' concerns and actions" (Charmaz, 2014, p. 121). Action codes can better reflect participants' behaviors, intentions, and responses in the (Charmaz, 2014; Corbin & Strauss, 2015). While the strategy of action code was adopted to support CGT recommendations, the process of coding was derived from traditional GT coding recommendations that involves breaking down, comparing, and conceptualizing data to develop theoretical categories. The coding process for this study unfolded in four interconnected phases: open coding, axial coding, selective coding, and a final integrative step that resulted in the

generation of a substantive or formal theory (Lindqvist & Forsberg, 2022; Saldana, 2021; Vollstedt, & Rezat, 2019). Table 12 below offers a brief overview of the process:

Table 12.

Coding Process

Open Coding	The researcher reviewed raw interview transcripts and broke it down into discrete parts to identify concepts and categories. A line-by-line reading was used for this examination, and codes were assigned as the reviewing progressed. Codes were a combination of 'conceptual' (interpreted by the researcher), supported by 'in vivo' (using participants' own words).
Axial Coding	This involved reassembling data from the first stage by identifying relationships between categories and subcategories. During this process the researcher refined and related categories more systematically by discovering causal relationships.
Selective Coding	Selective coding was done by identifying a core category or central phenomenon, to be able to systematically relate it to other categories developed during axial coding. This allowed the researcher to refine the theory.
Action Coding	With respect to open coding, action codes helped the researcher to name and conceptualize actions that participants describe. During the Axial coding stage, action codes helped guide the identification of a core category that reflected the main process or experience in the data and ensured that the resulting theory was grounded in how people act and respond, not just in abstract themes.
Final Theme	In this culminating stage, the researcher finalized the integration of categories into a coherent set of final themes, leading to the development of a formal theory supported by empirical evidence that was **grounded** in the data.

The coding was validated through inter-coder agreement, with a second coder independently analyzing the deidentified raw data. Care was taken to compare words, sentences, categories, and codes to identify similarities and dissimilarities in the coding. No major adjustments were needed for the final codes (Bluff, 2005; Charmaz, 2001, 2017; Lauridsen & Higginbottom, 2014). This double coding led to the final findings to answer the research questions as well as the emergent theoretical ideas.

Results

Details of the full coding process are also available, as Appendix A. Below is a summary of the key findings regarding the research questions.

Research Question 1: ***What are the perceptions of higher education, non-TRPG gamer faculty members on the process of integrating TRPGs into the curriculum?***

Faculty Perceptions of TRPGs in Curriculum Design

The faculty broadly agreed that TRPGs could significantly enhance student motivation and participation. The interactive and narrative-driven nature of role-play was seen as aligning closely with Self-Determination Theory (SDT), particularly by fostering autonomy, competence, and relatedness. Faculty emphasized that this strategy could especially resonate with students inclined toward immersive and participatory learning. Some were enthusiastic, describing the framework as "creative" and "engaging," particularly valuing its potential to foster student motivation and collaboration. Others were cautious or uncertain due to a lack of familiarity with TRPGs or doubts about feasibility in content-heavy courses. For those with experience in experiential or constructivist teaching, the TRPG framework aligned well with their pedagogical values.

They interpreted the use of role-play and narrative as enhancing student agency and critical thinking, often drawing parallels to problem-based learning or simulations. This resonates with the literature. Tabletop role-playing games (TRPGs) share similarities with problem-based learning (PBL) and case-study methods in that all three approaches place learners in active, participatory roles where they must solve problems, make decisions, and reflect on consequences (Hmelo-Silver, 2004; Popil, 2011). Like PBL and case studies, TRPGs scaffold

domain knowledge while simultaneously teaching reasoning strategies and teamwork—TRPG narratives simply provide a more continuous, situated storyworld in which those processes occur (Yuliawati et al., 2024).

What makes TRPGs distinct is the centrality of narrative and sustained role-play. Their ongoing storylines and open-ended structures promote student agency, creativity, and perspective-taking in ways that case studies or structured PBL scenarios may not fully emphasize (Lindgren et al., 2012; Winardy, 2023). PBL problems and case studies are usually designed with specific scaffolds and clearly defined outcomes, whereas TRPGs allow learners to co-construct outcomes collaboratively, offering greater autonomy but also requiring more skilled facilitation to maintain curricular alignment (Hmelo-Silver, 2004; Winardy, 2023). In addition, TRPGs emphasize role embodiment and situated decision-making, which more closely resemble immersive simulations but with a stronger focus on narrative meaning-making than on procedural fidelity (Lavanya et al., 2024; Yuliawati et al., 2024).

Assessment presents another contrast: while case studies and PBL assignments can be more easily tied to standardized assessments, TRPG outcomes are emergent and co-created, making learning gains harder to capture without complementary tools. Researchers recommend blending TRPG sessions with reflective assignments or targeted assessments to better demonstrate content mastery (Yuliawati et al., 2024). For adopters, this suggests that TRPGs are especially well-suited when goals include long-term engagement, empathy, and ethical reasoning, while PBL and case studies may be preferable when tighter control over specific knowledge or skill outcomes is needed (Popil, 2011; Hmelo-Silver, 2004).

Some faculty also focused on instructional design elements rather than game-specific mechanics. Jane affirmed, "For those students who gravitate toward that kind of learning

activity, it would be engaging and motivating," while Steven noted, "I think it's more engaging and interactive for the students when you have something like this." Some were also appreciative of the theoretical underpinnings, as Jane expressed: "I love that you're using self-determination theory as well as a consideration." Additionally, Rose agreed that “I thought some of the games that you provided by way of example can fit very well in my business teaching classes because students can learn how to negotiate, how to analyze.”

Perceived Value and Impact of the TRPG Integration

Many faculty members expressed approval of clearly articulated student autonomy and collaboration, echoing principles from Self-Determination Theory (SDT). They appreciated how character creation and role assumption could allow students to explore identities and make personalized choices, thereby deepening learning. The experiential nature of TRPGs was frequently highlighted as a core strength. Faculty interpreted TRPGs as a vehicle for discovery-based and applied learning, promoting active engagement and critical thinking through realistic scenarios. Wanda commented, "Here's something to better engage with the content to get you in those real-world business situations," and Jane echoed that sentiment, describing the model as "a freer practice approach to teaching and learning." TRPGs were seen as an effective method for prompting students to transfer theoretical knowledge into action through simulated practice. The theme of relatedness emerged strongly, with several participants emphasizing the potential of TRPGs to build classroom community and peer connection. Wanda mentioned how "Another way I think is the teamwork and the collaboration that the students would be exposed to." The framework’s structure was seen as supportive of creating a social, immersive environment conducive to learning.

When discussing competence, faculty appreciated how scaffolded challenges within the TRPG could allow students to demonstrate mastery of course concepts in ways that felt more authentic and applied. Several saw this as a means to assess learning that goes beyond traditional exams or papers. Donna stated, "I think the things that would be the most useful for students and that is teaching them to problem solve and follow decisions that would allow them to come to a successful conclusion." Faculty consistently highlighted the potential of TRPGs to cultivate student collaboration, teamwork, and problem-solving. The group-based and scenario-driven format of TRPGs was seen as especially conducive to peer-to-peer interaction and the development of soft skills. Wanda remarked, "The teamwork and the collaboration that the students would be exposed to," while Donna noted, "Teaching them to problem solve and follow decisions that would allow them to come to a successful conclusion." Donna also commented, "This tabletop game model [is] a great way to build interaction between the students in the classroom and between the students and the faculty."

Reflections on TRPG Usability and Adaptability

Most participants appreciated a clearly structured framework and modular design as support options for TRPG adaptation. However, several noted the need for additional support materials, such as sample lesson plans, rubrics, and role templates, especially for those new to TRPGs. Faculty valued TRPGs flexibility, highlighting how it allowed for both light and deep integration depending on instructional goals and constraints. This adaptability was key for faculty considering trying the approach in different disciplines or delivery formats (e.g., online, hybrid). Jane asked, "How does that fit into a rubric and what evidence would I identify of those outcomes?" She continued, "…so that I could design learning activities where they're more focused on the game…so that they could be immersed." Rose saw disciplinary potential: "Some

of the games that you provided…can fit very well in my business teaching classes because students can learn how to negotiate, how to analyze." Donna noted the model could "build interaction between the students in the classroom and between the students and the faculty.

Faculty emphasized the need for clear alignment between TRPGs and academic objectives and assessments. Thomas suggested that “But you could also have one that's like on a screen and that would allow people to like, you know, interact with it more easily. That would be very, I think helpful for me.” Likewise Steven stated, "You know, publishers, they don't have this incorporated into their textbooks. But what would be cool though, if it was incorporated."

Research Question 2: ***What are the perceptions of higher education, non-TRPG gamer faculty members on the challenges and recommendations of integrating TRPGs into the curriculum?***

Challenges

Despite the positive interpretations, faculty identified several practical barriers. The most consistent concerns included time investment, the perceived complexity of game design, and faculty and student unfamiliarity with TRPGs. Time was the most frequently cited issue—both in terms of preparing the TRPG-based experience and allocating class time for play. Rose shared, "The idea of including TRPs [TRPGs] may be a little scary in the beginning," while Wanda raised questions about feasibility: "I started getting a little bit scared, skeptical about, you know, what kind of time does this take students?" Donna echoed the concern, "There's a learning curve for the faculty too. That I would see as a little bit of a barrier."

Assessment posed another concern, particularly regarding how to evaluate participation, creativity, and learning outcomes fairly. Some participants anticipated potential resistance from students unfamiliar with or uninterested in gaming. Donna mentioned, “I could see a lot of

students struggling with it. I could see having to eat up a good deal of class time getting everybody comfortable and trained with it." However, others saw this as an opportunity to challenge stereotypes and expand student engagement. Concerns about faculty readiness also emerged. All participants emphasized the need for training and mentorship to help instructors understand game mechanics, narrative facilitation, and debriefing techniques, making this the most prevalent theme. As Rose summed up, "Yeah, the more in-depth knowledge I have about the game itself and the concept used in the game, it will help me."

Adopting TRPGs would require a shift in faculty identity—from content deliverers to facilitators or game masters. While some faculty found this change intriguing, others acknowledged feeling underprepared or overwhelmed by the responsibility of managing open-ended gameplay. Thomas reflected, "Creating an immersive experience…can be daunting as an instructor," while Donna noted, "There's a learning curve for the faculty too. That I would see as a little bit of a barrier." This expanded role introduced new demands in classroom management, improvisation, and narrative control.

Recommendations

As a possible recommendation to address the barriers, and a nearly universal theme among participants, was the need for structured training, resources, and ongoing support to implement TRPGs effectively. Faculty requested example modules, rubrics, video demonstrations, and even hands-on training opportunities to build their confidence. Steven observed, "I would be uncomfortable…until I got some more experience or some type of training." Wanda agreed: "I really needed those other resources to support…Most definitely I would need to learn more because I can't support something that I don't fully understand." Rose emphasized, "The more in-depth knowledge I have about the game…the more it will help me."

Donna reinforced this: "Faculty have to have all the tools at their disposal…then they need to be told how the game will benefit their students before they'll consider it."

Meaning-Making and Conceptual Integration

Overall, participants interpreted TRPGs as a meaningful pedagogical innovation that resonated with their desire to create more human-centered, interactive learning environments. For some, it reawakened interest in more creative forms of teaching and inspired them to consider new approaches beyond lecture-based instruction. The act of reviewing the framework appeared to provoke critical reflection on their own teaching practices. Several described a shift in perspective as they perceived play to be not as a frivolous pastime, but as a serious pedagogical strategy that can foster transformative learning. Faculty emphasized the need for clear alignment between TRPGs and academic objectives and assessments. Many valued the TRPG's flexibility but sought more specific strategies for ensuring rigorous evaluation of learning outcomes.

Jane asked, "How does that fit into a rubric and what evidence would I identify of those outcomes?" She continued, "…so that I could design learning activities where they're more focused on the game…so that they could be immersed." Rose saw disciplinary potential: "Some of the games that you provided…can fit very well in my business teaching classes because students can learn how to negotiate, how to analyze." Donna noted the model could "build interaction between the students in the classroom and between the students and the faculty." As Rose explained, "The idea of including TRPGs may be a little scary in the beginning, but it may result in more effective teaching." This was also reflected by Jane, "So that I could design learning activities where they're more focused on the game rather than sort of other more traditional activities so that they could be immersed."

Summary of Results

Faculty interpretations of the TRPG instructional framework reflected a dynamic interplay between their pedagogical identities, practical teaching realities, and aspirations for student engagement. While initial comfort with TRPGs varied, most participants recognized the framework's potential to support meaningful, student-centered learning. Their meaning-making processes were grounded in both emotional resonance and pedagogical analysis, positioning TRPGs as not just an instructional novelty, but also as a viable design strategy with deep educational value.

Discussion: Maneuvering Adventure Systems to Teach, Engage, and Reflect (Master): A Grounded Theory

Theory Narrative Summary

The analysis reveals that while faculty perceive tabletop role-playing games (TRPGs) as rich tools for promoting engagement, experiential learning, and collaboration, their adoption hinges on overcoming substantial implementation barriers. These include the need to shift instructor identity from lecturer to facilitator, lack of prior experience, and concerns around assessment and curricular alignment. Faculty called for structured training, pre-built scenarios, and example materials to bridge the gap between TRPG theory and practice. Theoretical frameworks like Self-Determination Theory support the motivational potential of TRPGs, but successful implementation depends on reflective practices, role balance, and clear evaluative methods. A grounded understanding of faculty needs and student learning conditions is essential for scaling TRPGs in education.

The MASTER Approach: Principles of the Theory

The Maneuvering Adventure Systems to Teach, Engage, and Reflect (MASTER) theory emerges from a growing body of evidence, including this three-tiered study, highlighting the educational potential of tabletop role-playing games (TRPGs) in higher education. MASTER positions TRPGs as "adventure systems", narrative-driven frameworks that prioritize storytelling, exploration, and player agency through simplified mechanics and immersive experiences. Rooted in self-determination theory, MASTER emphasizes how TRPGs can support autonomy, competence-building, and social relatedness, all of which are critical drivers of student motivation and deeper learning. By embodying characters and making meaningful decisions within structured story worlds, students become emotionally invested in course content, transforming passive learning into active, reflective engagement. However, the MASTER theory also acknowledges practical challenges, such as aligning TRPG mechanics with academic assessments and the need for faculty development. As such, MASTER provides a conceptual and practical framework to help educators navigate the integration of TRPGs into their curriculum in ways that promote teaching, engagement, and reflective learning.

Principle 1: Using Instructional and Game Mastery Processes Interchangeably

The familiarity between running a TRPG game and teaching a classroom will allow a more seamless application of game mastery processes during teaching using TRPGs. Faculty do not need to engage in long term training since they only need to align their skills as a class facilitator to their role as game masters in the classroom.

For TRPGs to be effective, faculty must transition from traditional instructors to facilitators or Game Masters, guiding students through interactive learning while balancing control and student-driven exploration. To do so, they must rely on their skills as teachers that

align well with skills game masters use to run games. In the third tier interviews some faculty expressed concern about their ability to lead immersive experiences, emphasizing the need for structured support. However, tier 2 participants highlighted the familiarity between game running and teaching. As such, training programs even though training programs could be useful, faculty must be reminded that instructional and game mastery processes are interchangeable.

Engagement and Entertainment Strategies: Both instructors and GMs prioritize creating engaging and entertaining experiences for their learners/players. This involves incorporating humor, surprises, challenges, narratives, and discussions as elements of entertainment to maintain interest and investment in the learning/game environment. Both groups believe in using rewards to enhance motivation among learners/players. Additionally, they use multiple visual and auditory stimulations like movies and music that both entertain and engage.

Flexibility, Adaptability, Equity: Both instructors and GMs demonstrate the ability to be flexible and adaptable, tailoring their methods and strategies to meet the evolving needs and preferences of their audience. Both instructors and GMs stress the importance of fair treatment and equity among learners/players, ensuring that everyone is engaged, included, and treated fairly, regardless of their participation level or preferences. Both groups emphasize the importance of recognizing and acknowledging the contributions and efforts of their audience to foster continued participation and motivation. Both groups subscribe to making efforts that allow for a more responsive and effective facilitation of learning/game experiences. Both groups utilize personalization and empathy as tools for intrinsic incentives.

Critical Thinking: Both instructors and GMs used motivational processes that gave learners and players the opportunities for critical thinking and problem solving. This involved

using strategies such as drawing inspiration from real life examples and perceived goals of learners/players, creating challenges, inciting curiosity, and engaging in collaborative actions.

Autonomy: Both groups focused on giving learners or players ownership of their learning or gaming processes via multiple strategies. These included using inputs from personal and professional experiences, allowing multiple opportunities to participate, offering choices, and providing constructive feedback framed in a way that encouraged learning and growth without discouraging participation.

The key differences pertained to the tools used by each group due to the contextual variations of the processes. However, the commitment and involvement to engage with the core tenets of motivation were identical in both groups.

Principle 2: Augmented Engagement through Autonomy and Role-Play

Students engage more deeply when they have autonomy in their character choices and decision-making within TRPGs. Role-play elements provide intrinsic motivation and foster meaningful learning experiences. The faculty noted that the ability to explore fantasy settings and embody different roles increased student excitement and participation. For example, a literature course could allow students to role-play as characters from a novel, enhancing textual analysis through experiential engagement.

Principle 3: Experiential Learning through Narrative-Driven Scenarios

TRPGs facilitate experiential learning by immersing students in structured, narrative-driven scenarios that promote problem-solving, critical thinking, and application of course content in a simulated environment. Faculty participants described TRPGs as a form of discovery-based learning, with students engaging in complex, real-world decision-making. In a

political science course, students could navigate a fictional diplomatic crisis, applying theoretical knowledge in a dynamic, interactive way.

Principle 4: Structured Integration and Assessment Alignment

TRPGs must be aligned with course objectives and assessment strategies. Reflection activities, debriefing sessions, and clear grading mechanisms should be implemented to connect gameplay to measurable learning outcomes. Faculty raised concerns about assessment, noting that while TRPGs encourage engagement, ensuring learning transfer requires structured reflection. For instance, in a psychology course, students role-playing as therapists could be required to analyze their interactions using psychological frameworks in a post-game report.

Alignment With Existing Concepts

Additionally, MASTER adds to the conceptual frameworks of TRPG propounded by Bowman (2010), Stubb and Sorensen (2025) and MacKay (2017), and offers a pragmatic option for practitioners. The comparative analysis of these frameworks and the principles of MASTER are given below.

Bowman's (2010) Theory on TRPGs and Identity Exploration

Bowman's (2010) theory posits that TRPGs provide opportunities for identity exploration, allowing players to engage with different personas, enhancing their emotional and social development. While both theories acknowledge the motivational aspects of TRPGs and how they can foster engagement and empathy, MASTER builds upon this by linking the psychological foundations of TRPGs to the framework of Self-Determination Theory (SDT), which explains how TRPGs nurture autonomy, competence, and relatedness. Bowman's (2010)

work is centered around the role of TRPGs in personal identity development, while this study's grounded theory emphasizes structured learning outcomes that support academic goals, including problem-solving and critical thinking. This difference can be further elaborated with a simulated case study example.

Case Study Example: Identity Exploration: In a psychology course, students could play characters in a TRPG exploring mental health scenarios, allowing them to reflect on different perspectives and identities. Through the role-play, they explore empathy and self-awareness by embodying characters with diverse mental health experiences.

MASTER Application: While students engage with their characters, faculty would incorporate post-game reflections and discussion prompts that tie these identity explorations back to the course's theoretical framework. Assessment might include reflective essays where students connect their emotional growth with course content on psychological theory.

Stubb and Sorensen's (2025) Theory on TRPGs and Social and Emotional Learning

Stubb and Sorensen (2025) posit that TRPGs can be integrated into school-based social and emotional learning (SEL) programs to offer structured, engaging environments where students can practice and develop essential SEL competencies, including self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. Both Stubb and Sorensen's (2025) frame and MASTER emphasize the value of active, participatory learning and see tabletop role-playing games (TRPGs) as powerful tools for developing real-world skills through immersive scenarios. They prioritize student agency, whether through social interaction and emotional exploration (SEL) or through autonomy and role-play in academic settings (MASTER Approach). Each approach positions the instructor as a facilitator or guide, rather than a traditional lecturer, fostering environments where learners build knowledge

collaboratively. Ultimately, both recognize that engagement and meaningful learning emerge from authentic, role-driven experiences.

However, while the SEL-based theory focuses on developing emotional intelligence and interpersonal skills in K–12 settings, using TRPGs as tools for social modeling and behavioral growth, the MASTER Approach targets academic engagement and content mastery in higher education, emphasizing autonomy, experiential learning, and structured assessment aligned with course objectives. This difference can be further elaborated with a simulated case study example.

Case Study Example: Diplomacy at Two Levels: In a bustling 7th-grade classroom, students gather around clustered desks transformed into "council chambers" of a fictional land. As part of their weekly social-emotional learning (SEL) block, they're participating in a TRPG scenario where rival villages must negotiate the use of shared water resources. Sam, a typically quiet student, steps into the role of an ambassador and carefully listens to his classmates' arguments. With support from the teacher who gently coaches students on respectful disagreement and compromise Sam expresses his concerns calmly and suggests a rotating water schedule. After the session, the class reflects on what emotions surfaced, how they managed disagreements, and what they learned about empathy and collaboration.

Undergraduate Political Science Scenario (MASTER Approach): Across town in a university political science seminar, students are seated in a mock UN-style simulation. Each student represents a nation embroiled in a resource crisis (a TRPG scenario designed to explore theories of international relations). As the Game Master, the professor narrates unfolding events while guiding interactions with room for student strategy. Maya, playing the leader of a small island nation, draws from course texts to justify her diplomatic proposals, skillfully weaving in concepts like soft power and alliance-building. After the session, students complete a structured

reflection analyzing their tactics and linking decisions to political theories. Maya writes about the tension between idealism and realism in her choices, deepening her understanding through role-based experiential learning.

Mackay's (2017) Theory on Role-Playing as Social Performance

Mackay's (2017) research highlights TRPGs as a form of social performance where players construct narratives together, emphasizing interaction and improvisation. He underscores the role of role-play as a medium for storytelling and socialization. While both theories acknowledge the importance of social interaction in TRPGs, MASTER also views TRPGs as a collaborative, interactive experience, where communication and teamwork are central to learning. Mackay's (2017) focus is on narrative co-creation and improvisation as the core elements, whereas this study's theory expands the scope to include pedagogical outcomes such as motivation, experiential learning, and the alignment of TRPGs with course assessments. This difference can be further elaborated with a simulated case study example.

Case Study Example: Social Performance: In an anthropology course, students might engage in a TRPG where they role-play different cultures, using improvisation to enact social customs and conflict resolution strategies. This would align with Mackay's focus on improvisation and narrative building.

MASTER Application: In the same course, faculty would guide students through the TRPG, ensuring that specific cultural theories are addressed through structured gameplay, followed by a debrief session that links the game experience to the learning objectives. Faculty would also assess students' understanding through reflective journals and structured rubrics.

Key Contributions of MASTER

Narrative-Based Experiential Learning

MASTER frames TRPGs as immersive, story-based simulations, allowing discovery learning through dynamic scenarios. The narrative isn't just a wrapper; it's the learning environment itself. Compared to standard experiential learning like Kolb's (2015) model, which might involve real-world tasks or simulations, the MASTER Approach prioritizes fictionalized, role-driven narratives as the engine of problem-solving and critical thinking. It's heavily scenario-based rather than task-based.

Extension of Self-Determination Theory (SDT)

The MASTER theory not only integrates SDT but also extends the scope of its application by adding depth to the understanding of motivation in TRPGs. For example, TRPGs' ability to foster autonomy through character creation or decision-making aligns with intrinsic motivation, supporting students' engagement in self-directed learning. Faculty members noted how students who were allowed to design their own characters were more motivated to engage with course content.

Autonomy + Role-Play as the Core Drivers of Engagement

The approach prioritizes student autonomy in role and narrative choice as a foundational mechanism for engagement. It doesn't just allow for freedom; instead, it makes that autonomy central to how motivation is activated. The underlying idea is that identity exploration and agency through character roles promote deeper personal investment. Most traditional engagement models may emphasize relevance, interest, or interactivity, but MASTER adds identity-play and agency through character as essential, not just supportive, components. This

intersects with Self-Determination Theory (SDT) but adds a narrative and identity-formation layer.

Intentional Structure and Assessment Integration

Prior research largely emphasizes the open-ended nature of TRPGs and their role in enhancing engagement or identity exploration. However, this theory introduces structured assessment models that help faculty align gameplay outcomes with academic rubrics. For example, one faculty member highlighted the need to connect in-game achievements with traditional grading systems, proposing reflective journals and rubrics for game-related assessments. While encouraging open exploration, the model strongly emphasizes alignment with learning outcomes, reflection, and assessment. It doesn't view TRPGs as "just for engagement"; it stresses measurable transfer of learning via structured wrap-around activities. Gamification or play-based learning models often struggle with assessment rigor. MASTER deliberately addresses this by highlighting post-game analysis, debriefs, and rubrics, thus treating reflection as a bridge between play and cognition. It’s playful, but not unstructured.

Modulating Faculty Facilitation Roles

This theory provides guidance on modulating traditional faculty roles as facilitators. *Faculty are not simply guides or support, but instead they are also narrative architects, responsible for designing and managing the complexity of a game-based world*. This requires a shift in instructional identity—from lecturer to interactive storyteller. Many active learning models keep the instructor role static or minimally altered. MASTER explicitly reframes the instructor as a Game Master (GM), which is a role that demands creativity, adaptive thinking,

and storytelling skills. *It elevates the instructor's narrative facilitation to a central pedagogical strategy.*

Bridging Faculty and Student Perspectives

While previous theories often focus on student experiences, MASTER theory uniquely highlights faculty perspectives on the challenges and benefits of using TRPGs in the classroom. For instance, many faculty express a desire to transition from lecturer to facilitator but feel unprepared, emphasizing the need for structured training.

Limitations, Implications and Future Research

The findings of this study provide several important implications for integrating tabletop role-playing games (TRPGs) into higher education curricula, particularly in promoting student motivation, collaboration, and applied learning. One key implication is the potential of TRPGs to transform passive learning environments into dynamic, student-centered experiences. Faculty consistently observed that TRPGs could foster autonomy, relatedness and competence (Deci & Ryan, 2000). The opportunity for students to make choices, embody characters, and solve contextual problems allows for deeper engagement and personal investment in the learning process (Ryan & Deci, 2017). Educators seeking to cultivate intrinsic motivation should consider TRPGs as a viable tool to do so, especially for students who thrive in interactive and participatory learning environments. Faculty interpretations suggest that TRPGs align well with constructive pedagogy and experiential learning, where concrete experiences and reflective observation are critical to the learning process. Recent studies support this alignment, indicating that autonomy-supportive teaching practices enhance students' need for satisfaction, intrinsic motivation, and engagement (Reeve & Cheon, 2024; King et al., 2024). As participants

emphasized, TRPG team-based storytelling and role negotiation support both social bonding and collaborative learning.

This has broader and deeper implications beyond content mastery, particularly for disciplines that require soft skills such as communication, teamwork and critical thinking, as well as socio-emotional learning and support as well as interpersonal development. The study's data supports the literature in suggesting that when players engage with identity and social dynamics in TRPGs, this game setting allows for role negotiation, empathy building, and emotional intelligence development (Garcia, 2017; Lasley, 2020). A recent report published in April 2025 examined the impact of in-person social play versus online gaming and found that when video game players had anxiety issues and they were exposed to real-life social interactions while playing an offline TRPG, they were able to reduce social anxiety and gaming disorder symptoms (Billieux et al, 2025).

In addition to highlighting the benefits of TRPG use in education, the study also provided valuable information regarding faculty perceived challenges and recommendations for buy-ins. Despite the clear pedagogical potential, the study also highlights the implementation barriers, which are notably, faculty uncertainty, time constraints, and assessment challenges. A major implication is that systematic faculty development is essential for successful adoption. Institutions should invest in professional learning programs that demystify game mechanics, offer exemplar resources (e.g., lesson plans, rubrics), and create communities of practice around game-based learning. Faculty comments underscored the value of mentorship, practical examples, and hands-on workshops to build instructional confidence when adopting a game-based approach, which are sentiments supported in the literature (Fernández-Raga et l, 2023; Villa et al, 2023).

Finally, the study implies a gradual but necessary pedagogical shift. Faculty may need to transition from content deliverers to facilitators or game masters. This supports emerging trends. In many institutions, the shift toward active learning is well underway, despite the challenges faculty face in using active learning (Li, 2025). In healthcare education across 17 Middle Eastern countries, 87% of faculty reported using at least one active learning method, demonstrating widespread uptake in a discipline often seen as more traditional (AlFadda et al., 2019). Also, a mixed-methods study of postgraduate nephrology faculty found that while only about 55% used active learning when teaching difficult topics, the attitudes and intentions toward active learning were very positive, suggesting adoption is constrained more by competence, resources, and identity than by unwillingness (Renaud et al., 2019).

The MASTER theory's first principle that instructional and Game Mastery (GM) processes are interchangeable has practical implications for faculty development. This principle suggests that instructors already possess many of the facilitation and motivational strategies necessary for running TRPG-based learning experiences. Rather than needing intensive retraining, faculty can leverage existing skills in flexibility, engagement, and equity to assume the role of a game facilitator. The alignment between teaching and game running presents an accessible entry point for educators to adopt TRPGs, with lesser disruption to their existing pedagogical practices.

This approach is echoed in current scholarship on role-based teaching, which highlights the value of narrative, co-creation, and humor in enhancing cognitive and social outcomes. While this identity shift may be daunting, it aligns with 21st-century educational trends emphasizing student agency, collaborative learning, and adaptive teaching. Brown et al (2023) draws parallels between medical educators and game masters in role-playing games like Dungeons & Dragons.

Their study suggests that educators adopting a facilitative role can enhance small group learning by fostering collaborative imagination and adaptive problem-solving. Ahmed and Law (2021) explored how educators can adopt the role of gamemasters in designing and facilitating role-playing games and emphasized the importance of educators guiding students through immersive narratives, allowing learners to engage deeply with content and develop critical thinking skills. Institutional support should therefore not only focus on technical skill-building but also address faculty identity transformation, providing encouragement, time, and reflection space to experiment and grow in this new role (Lane, 2022; Stubbs & Sorensen, 2025).

While the study offered valuable insights, there were several limitations due to the constraints of time and budget. While the study focuses on faculty and player perceptions, it did not offer perspectives of students who are a key stakeholder in any curricular reform initiatives. Additionally, the study did not focus on data related to specific disciplines to see if there would be differences in perceptions across disciplines. Another limitation is the researcher bias. The first researcher is a veteran TRPG player as well as a faculty. The second researcher is also familiar with TRPGs and serves as a Professor of Instructional Design. As such, while their rich game related backgrounds offered avenues for deeper appreciation of the motivational potential of TRPGs, the researchers took relevant measures to mitigate and eliminate any bias that could ensue as a result. A key step in this process was the use of a varied participant sampling that included participants with a wide range of TRPG and teaching experience. Including both insider and outsider perspectives is an established method for balancing viewpoint diversity in qualitative research (Tracy, 2020). To reduce interpretive bias, an outside coder was provided with deidentified raw data and codes were compared, which is a recommended method for bias reduction (Lincoln & Guba, 1985). When interviewing participants, care was taken to use neutral

language that avoided game jargon. This allowed for bracketing of information (Tufford & Newman, 2012) and helped maintain an open environment for participants unfamiliar or uncomfortable with TRPGs.

The development of the MASTER theory offers significant implications for future research. For future studies, it is imperative to include students' perceptions to deal with the limitations of understanding of how TRPGs might influence learner motivation, engagement, or performance. Future studies should incorporate student perspectives and learning data to validate the theory's pedagogical impact. The MASTER framework's performance in actual instructional settings across disciplines via observational and experimental studies involving faculty who adopt TRPGs in their courses can assess the real-world efficacy of the framework, including impacts on student motivation, engagement, and learning outcomes. As faculty readiness and confidence were major themes, research is needed to develop and test professional development programs based on the MASTER theory. These studies should evaluate which support formats such as workshops, simulations, or mentorship best prepare educators to integrate TRPGs into their teaching. Additionally, future studies should examine the value of MASTER in relation to discipline and field specific adoptions. Examining the changes in perceptions of use and challenges across disciplines will help develop the applicability of MASTER and widen its scope of influence.

In addition to face-to-face classroom settings, future studies could investigate the potential for extending TRPG-based pedagogy and the MASTER framework into online and distance education environments. With the growing shift toward remote and hybrid learning, future research should explore how TRPG elements can be effectively digitized and delivered in virtual spaces. A key area of this examination should focus on how and if digital platforms such

as virtual tabletops, learning management systems, and synchronous tools like Zoom or Discord can support collaborative storytelling, character-driven exploration, and decision-making in ways that mirror the in-person TRPG experience. Future studies might also explore how TRPGs can contribute to the social dimensions of online learning, including the development of social presence and teaching presence as described in the Community of Inquiry (CoI) model. As discussed in this study, TRPGs offer a unique opportunity to cultivate deep interpersonal engagement, peer collaboration, and a sense of community. Research could examine how character roles and interactive narrative structures enhance the emotional and cognitive presence of participants, thereby fostering a more engaging and immersive online learning environment. The role of the instructor as game master or narrative facilitator also opens new possibilities for rethinking facilitation strategies that promote both engagement and pedagogical effectiveness in digital spaces.

Additionally, there is a pressing need to investigate practical strategies that enhance the efficiency and effectiveness of TRPG integration for instructors teaching online. This includes developing the best practices for digital TRPG session management, integrating TRPG elements within course shells, and designing online modules that scaffold narrative play without overwhelming faculty workload. Future research should explore how instructors can use automated tools, AI-driven assistants, and customizable digital resources to streamline planning and assessment while still maintaining the creative and motivational benefits of TRPG pedagogy. These investigations will not only expand the reach of the MASTER framework but also contribute valuable insights to the broader field of online learning design and facilitation.

Conclusion

TRPGs represent a transformative pedagogical tool, offering unique opportunities to engage students in interactive, collaborative, and experiential learning. However, as our grounded theory demonstrates, the successful integration of TRPGs into the classroom requires adequate faculty training, clear curriculum integration, and innovative assessment strategies. By addressing these areas, educators can effectively use TRPGs to foster deeper engagement and enhance critical thinking, problem-solving, and social-emotional learning outcomes. Ultimately, the application of TRPGs can create dynamic and meaningful learning experiences that extend beyond the traditional classroom. The development of a TRPG Adoption in Learning Model and comprehensive faculty training programs based on the grounded theory is crucial for ensuring that TRPGs are successfully integrated into educational environments. By addressing faculty concerns, providing structured support, and leveraging digital tools, educators can effectively adopt TRPGs as powerful learning tools that engage students, promote experiential learning, and align with curricular goals. These steps will not only increase faculty buy-in but also ensure that TRPGs can be used to their full potential as dynamic, immersive, and effective teaching tools.

TRPGs present a powerful, interactive approach to learning that promotes student engagement, experiential learning, and collaboration. However, their successful adoption in education requires structured faculty training, thoughtful curriculum integration, and clear assessment strategies. While challenges such as time constraints and instructor hesitation exist, providing faculty with the necessary support can facilitate the widespread use of TRPGs in various academic disciplines. By embracing the principles outlined in this grounded theory, educators can harness the full potential of TRPGs to create dynamic and meaningful learning experiences that extend beyond the traditional classroom.

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CHAPTER FIVE: CONCLUSION

Introduction

Tabletop Role-Playing Games (TRPGs) have begun to emerge as powerful catalysts for engagement and learning in higher education. Yet, the conversation often stops at theoretical fascination rather than concrete classroom transformation. This chapter bridges empirical insight with pedagogical relevance, demonstrating how TRPGs, when intentionally structured, satisfy fundamental motivational needs of competence, autonomy, and relatedness, and act as vehicles for creativity, critical thinking, and community-building. Importantly, the conceptual contribution of this dissertation, the MASTER framework, offers a pragmatic scaffold for non-gamer faculty to harness these affordances, reimagining TRPGs not as niche experiments but as scalable, research-based strategies for transformative pedagogy.

My dissertation started with a curiosity regarding the value of Tabletop Role Playing Games (TRPGs) as motivating agents in the context of higher education. Being a gamer, game master and faculty, I was intrigued by the idea of harnessing the motivational power of TRPGs for educational purposes. The tiered journey concluded successfully, culminating in the development of the MASTER (Maneuvering Adventure Systems to Teach, Engage, and Reflect) theory of adoption of TRPGs in higher education through leveraging critical motivational and pedagogical elements of such games. The dissertation's findings also resonate with broader research on TRPGs and motivation, underscoring their value as tools for promoting learner engagement, autonomy, and collaborative meaning-making. Below is a synthesis of significant findings. By exploring the narratives of both educators and players, this dissertation provides insights into the potential benefits, challenges, and effective practices associated with adopting TRPGs into higher educational settings.

1. TRPGs as Motivational Systems

Throughout the studies, TRPGs were consistently shown to align with motivational elements of Self-Determination Theory (SDT; Ryan & Deci, 2017, 2020) and Keller's (2009) ARCS model, fulfilling the fundamental psychological needs of competence, autonomy, and relatedness.

- **Competence:** Players experience success and skill development through roleplay mechanics, leveling systems, and critical thinking tasks. This aligns with research suggesting that well-designed games foster mastery and self-efficacy by presenting appropriately challenging tasks (Hamari et al., 2016; Rigby & Ryan, 2011).
- **Autonomy:** Through character creation, personalized story arcs, and decision-making, players exercise meaningful choice, which mirrors findings that learner agency enhances intrinsic motivation and persistence (Deci & Ryan, 2020; Robinson, 2011).
- **Relatedness:** TRPGs promote collaboration, community-building, and peer interaction, thereby creating socially dynamic learning environments. This echoes Wenger's (1998) communities of practice framework, as well as scholarship emphasizing the importance of social connectedness in motivation and retention (Fredricks et al., 2019).

Participants consistently acknowledged the motivational potential of TRPGs, even as they expressed hesitancy about implementing them without structured guidance. Faculty found the reviewed Master Instructional Framework (MIF) appealing for its immersive, flexible, and social dimensions that are qualities associated with increased student engagement and collaborative learning. These perceptions align with research identifying TRPGs as intrinsically motivating

and highly adaptable to educational contexts (Almén & Ekman, 2025; Yuliawati et al., 2024). Importantly, this dissertation extends the literature by demonstrating clearer, empirically grounded connections between TRPGs and the three pillars of SDT, showing how narrative, play, and collaboration satisfy basic psychological needs in academic environments.

Across the three studies, a consistent picture of TRPGs as motivational tools for education emerged. *Quest for Motivation* highlighted roleplaying competence, player autonomy, and collaborative gameplay as core elements. The second study used the ARCS model to demonstrate how TRPG mechanics align with motivational teaching practices, particularly emphasizing the *Familiarity* principle of Relevance. This parallels other scholarships on authentic and situated learning, which shows that students engage more deeply when classroom practices mirror meaningful real-world tasks (Herrington et al., 2014). Faculty in *Mana for Motivation* reinforced these insights: character choice and open-ended narratives fostered autonomy, while collaborative structures cultivated social bonds and engagement. Together, these findings informed the emergence of the MASTER framework, offering a pragmatic scaffold to train non-gamer faculty by drawing direct parallels between game facilitation and classroom instruction.

2. Ludic Pedagogy and the Role of Fun, Play, and Socialization

Findings also intersect meaningfully with principles of Ludic Pedagogy (LP), which frames fun, play, and positivity as essential for motivation and engagement (Lauricella & Edmunds, 2022). Instructors across all three studies emphasized that TRPGs bring creativity, social interaction, and problem-solving into classrooms, aligning with calls for learning environments that balance rigor with enjoyment (Whitton, 2018; Gee, 2007).

In the *Campaign for Motivation* study, participants described TRPGs as environments that merge entertainment with intellectual challenge. This aligns with research showing that playful learning experiences enhance not only enjoyment but also critical cognitive engagement (Barab et al., 2010; Resnick, 2017). Moreover, the social elements of TRPGs like collaborative character-building, co-constructed narratives, and shared decision-making were valued for fostering community and peer support. These findings are consistent with Nicholson's (2013) work on play as a tool for reducing anxiety and building resilience, highlighting TRPGs' potential to improve classroom morale and psychological safety. Thus, TRPGs exemplify ludic pedagogy in action: they infuse classrooms with play, yet their structure ensures learning is not trivialized but deepened through socialization, critical thinking, and collaborative meaning-making.

3. Challenges can be Overcome by Transferable Skills

A prominent theme across the three studies was the role of challenges in adopting TRPGs. Participants initially worried about game mastery, classroom management, and instructional fit. This echoes broader literature noting that many TRPG studies come from gamer-scholars who bring dual expertise in game mastering and teaching (Woods, 2017; Frankos, 2018). For non-gamer faculty, the role of Game Master (GM) appeared daunting.

As participants in the second and third studies observed, their existing teaching practices already encompassed many GM-like responsibilities: structuring learning experiences, guiding discussions, and adapting to student needs. The role of instructors as analogues to Game Masters (GMs) emerged in both the second and third studies. Literature supports this connection, emphasizing that educators and GMs both orchestrate narrative spaces, balance rules with

improvisation, and facilitate collaboration (Bender, 2025; Boysen et al, 2023; Miller, 2023; Woods, 2017).

The MASTER framework builds on this by showing that TRPG integration does not require faculty to reinvent their practice but instead leverages transferable pedagogical skills. In this way, TRPG adoption mirrors broader models of technology adoption (Rogers, 2003) and pedagogical innovation (Koehler & Mishra, 2009), where familiarity and scaffolding are key to easing implementation.

4. Designing for Autonomy, Creativity, and Critical Thinking

Participants repeatedly emphasized TRPGs' value in fostering autonomy, creativity, and critical thinking. From character creation to collaborative storytelling, TRPGs provide flexible structures that allow students to engage in self-directed, imaginative, and analytical ways. These findings resonate with Resnick's (2017) argument that play-based learning environments cultivate creativity and problem-solving, as well as Craft's (2013) call for education to nurture possibility thinking.

Faculty in *Mana for Motivation* appreciated these affordances but sought structured pathways to ensure TRPG activities align with course outcomes. The MASTER framework addresses this by scaffolding integration into phases, ensuring that TRPGs function not as distractions but as vehicles for achieving curricular goals. This aligns with research on transformational play, which emphasizes the importance of situating creativity within meaningful learning contexts (Barab et al., 2010).

5. Emergence of the MASTER Theory from Participant Interpretation

A key outcome of the dissertation is the emergence of MASTER theory, based on an analysis of data gathered over three tiers, and an organic result of the faculty responses to the MIF framework. The analysis revealed recurring themes:

- A need for structured scaffolding to mitigate the intimidation factor for non-gamers.
- Recognition of motivation and engagement benefits linked to TRPG elements.
- Concerns about instructional fit, assessment strategies, and classroom management.
- Desire for professional development and clearer instructor roles when acting as facilitators of gameplay.

These themes were not just descriptors of faculty attitudes; they became the conceptual building blocks of the MASTER framework that is designed to offer faculty an easier, more pragmatic strategy to adopting TRPGs, by focusing on the familiarity between the processes of classroom teaching and running a TRPG game. Additionally, faculty participants, while initially cautious, recognized the motivational and pedagogical value of TRPGs, particularly their alignment with autonomy, relatedness, and competence.

These findings echo existing research on TRPGs as powerful tools for engaging students through play, narrative, and collaboration. MASTER reframes TRPG adoption as an extension of existing faculty strengths. This addresses barriers commonly cited in faculty innovation adoption (Trust et al., 2017) and provides a unique contribution to scholarship on game-based learning and faculty development. Importantly, MASTER situates TRPGs not as playful add-ons but as transformative pedagogical strategies supported by established motivational frameworks. In doing so, it contributes to wider conversations in game-based learning (Deterding et al., 2011;

Whitton & Moseley, 2019), ludic pedagogy, and motivational instruction, while offering a practical, research-informed roadmap for higher education.

Implications

This dissertation makes a timely and innovative contribution to the evolving field of game-based learning in higher education by addressing a crucial and underexplored problem: the limited adoption of tabletop role-playing games (TRPGs) in university classrooms due to faculty unfamiliarity, lack of support structures, and perceived implementation barriers. While the motivational and pedagogical benefits of TRPGs have been well-documented in player-centered and gamer-scholar research, this study shifts the lens to a critically important but often overlooked population: non-gamer faculty. It offers a grounded, actionable framework to support their engagement with TRPG-based pedagogy.

1. Originality and Theoretical Contribution

This dissertation breaks new ground by presenting the MASTER Theory, a grounded theory derived from faculty interpretations and reactions to a scaffolded TRPG instructional framework. MASTER is not only a theoretical construct, but also a practitioner-focused model that provides educators with structured guidance on how to integrate TRPGs into their teaching practice, even without prior gaming experience. By grounding theory in the lived experiences and perceptions of non-gamer faculty, as well as TRPG players and game masters, this study contributes original knowledge to the fields of constructivist grounded theory, instructional design, and game-based learning.

Furthermore, the study uniquely synthesizes multiple learning and motivational theories and models including Self-Determination Theory (SDT), Ludic Pedagogy (LP) and ARCS within

the context of TRPGs, offering an interdisciplinary framework for understanding how play, autonomy, competence, and social engagement intersect to enhance learner motivation. This theoretical convergence provides a robust foundation for future research in instructional innovation and game-informed pedagogy.

2. Methodological Innovation

Using a tiered, scaffolded engagement model and a constructivist grounded theory approach, the study exemplifies a thoughtful and iterative methodology tailored to both theory development and educational application. The design facilitates deeper reflection from participants and allows for the emergence of a meaningful theory directly informed by practitioner experience. The research also addresses a gap in grounded theory literature by providing a model that bridges participant feedback with the design of a pedagogical innovation, reinforcing the value of applied grounded theory in educational contexts.

3. Practical and Professional Relevance

This dissertation may be especially valuable to instructional designers, faculty developers, and curriculum leaders seeking innovative, motivational pedagogies that align with student engagement goals, 21st-century competencies, and inclusive teaching practices. By offering a structured pathway for TRPG integration, MASTER empowers educators, particularly non-gamers, to use interactive, narrative-based approaches without needing extensive gaming knowledge. It also addresses faculty development needs by articulating a clear analogy between the roles of instructors and game masters, offering a familiarity framework that reduces resistance and increases buy-in. These contributions are immediately applicable in faculty training, instructional design, and professional development contexts.

4. Broader Educational Impact

This work contributes to broader conversations about active learning, creativity, and play in higher education, advocating for learning environments that are socially rich, emotionally resonant, and cognitively rigorous. As institutions seek to reimagine education in ways that increase engagement, foster collaboration, and meet diverse learner needs, this dissertation offers a viable, research-informed pedagogical solution. It expands the accessibility of TRPGs beyond gamer-educators, increasing the potential for widespread adoption and innovation across disciplines.

To sum up, this dissertation is valuable because it:

- Fills a critical gap in TRPG and instructional design literature by focusing on non-gamer faculty.
- Develops a unique grounded theory (MASTER) grounded in faculty perceptions and needs.
- Unifies theory and practice, offering a model that is both conceptually rich and practically implementable.
- Supports innovation in motivational teaching, inclusive pedagogy, and faculty development.
- Advances scholarly discourse on how narrative, play, and social learning can be responsibly and effectively integrated into higher education curricula.

5. Limitations

As with all research, this dissertation has several limitations that should be acknowledged when interpreting its findings. While the study makes original contributions through the

development of the MASTER framework, these contributions must be understood within the contextual, methodological, and theoretical parameters of the research.

First, the scope of participants was limited primarily to faculty members, with particular attention to non-gamer instructors. Although some insights from TRPG players and game masters were incorporated, student perspectives were not directly examined. As a result, claims about learner outcomes such as motivation, engagement, and collaboration rest largely on faculty perceptions rather than empirical data from students themselves. Future research should include student voices to triangulate findings and assess the full impact of TRPG adoption on learning experiences and outcomes.

Second, the study was situated in specific higher education contexts that may not fully represent the diversity of institutional environments. Variables such as institutional type, discipline, class size, and cultural context were not extensively explored. Consequently, the transferability of findings across settings such as community colleges, international institutions, and fully online programs may be limited.

Third, the study focused primarily on face-to-face tabletop TRPG environments. With the rapid growth of hybrid and online learning, questions remain about how TRPG-based pedagogy translates into digital contexts, including the use of virtual tabletops, learning management systems, and AI-supported tools. These environments may present both new advantages and new challenges for implementation that extend beyond the scope of this dissertation.

These limitations underscore the need for continued empirical work that expands beyond faculty perspectives, engages diverse educational contexts, and systematically tests the MASTER framework in practice. By addressing these areas, future research can build upon this study to refine, validate, and scale TRPG-based pedagogy across higher education.

Future Research

As I reflect on the findings of this dissertation, I see them as laying the foundation for a dynamic and evolving research agenda; one that bridges the gap between innovative pedagogies and practical faculty engagement. The MASTER theory, which I developed to support non-gamer faculty in integrating tabletop role-playing games (TRPGs) into higher education, offers a structured and accessible entry point. Yet, I believe its true potential lies in its ability to grow through continued research, iterative design, and broad implementation across contexts. Looking ahead, I envision several directions for future work.

First, I plan to focus on empirical validation of the MASTER framework. Applying it across varied classroom settings and academic disciplines will help assess its real-world effectiveness. I am particularly interested in conducting longitudinal studies that track faculty confidence, student outcomes, and classroom dynamics after TRPG adoption. I want to understand whether the framework can truly reduce the intimidation factor for non-gamer faculty and foster sustained pedagogical innovation.

While this dissertation centered on faculty experiences, I recognize the importance of incorporating student perspectives in future research. Exploring student motivation, engagement, and collaboration in TRPG-rich learning environments will offer essential insight into learner outcomes. This, in turn, will guide the design of more student-centered curriculum models.
I am also excited by the possibilities for interdisciplinary and cross-cultural applications. TRPGs are inherently adaptable, and I see great value in exploring their use in STEM, the social sciences, business, health professions, and the arts. I hope to study TRPG adoption in varied educational settings such as community colleges, international institutions, and fully online environments. Comparative research across cultures and learner populations can shed light on how cultural narratives, language, and local pedagogical practices shape TRPG effectiveness.

In addition to face-to-face classroom settings, I see potential for extending TRPG-based pedagogy and the MASTER framework into online and distance education environments. With the growing shift toward remote and hybrid learning, future research should explore how TRPG elements can be effectively digitized and delivered in virtual spaces. I am particularly interested in examining how digital platforms such as virtual tabletops, learning management systems, and synchronous tools like Zoom or Discord can support collaborative storytelling, character-driven exploration, and decision-making in ways that mirror the in-person TRPG experience.

I believe TRPGs offer a unique opportunity to cultivate deep interpersonal engagement, peer collaboration, and a sense of community, which is why examining these games through the lens of Community of Inquiry (CoI) can show how character roles and interactive narrative structures enhance the emotional and cognitive presence of participants, thereby fostering a more engaging and immersive online learning environment. Future research should explore how instructors can use automated tools, AI-driven assistants, and customizable digital resources to streamline planning and assessment while still maintaining the creative and motivational benefits of TRPG pedagogy. Such investigations will not only expand the reach of the MASTER framework but also contribute valuable insights to the broader field of online learning design and facilitation.

Recognizing that faculty support is key to successful implementation, I aim to develop professional development and training models grounded in the MASTER framework. This might include scalable programs such as workshops, online modules, TRPG simulation labs, and peer mentoring opportunities. These training opportunities will be designed to guide instructors through the planning, facilitation, and reflection phases of TRPG integration.

Finally, I hope future scholars (and myself) will explore how the MASTER theory can be expanded and integrated with other learning theories, such as transformative and experiential learning. These theoretical intersections could deepen our understanding of how TRPGs can be used not only to motivate learners but also to foster critical thinking, self-reflection, and social transformation.

To sum up, the future of this work lies not just in expanding the reach of TRPG-based pedagogy, but in enriching our understanding of how narrative, play, and community can lead to powerful, meaningful learning. By advancing implementation, testing new environments, and promoting inclusivity, I believe the MASTER framework can evolve into a robust, widely adopted model for 21st-century teaching and learning.

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