Developing Undergraduate Group Creativity Through Play and Improv Comedy

by

Jessica Hill

A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Education

Approved October 2022 by the Graduate Supervisory Committee:

Josephine Marsh, Chair
Danah Henriksen
Sogol Homayoun

ARIZONA STATE UNIVERSITY

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ABSTRACT

The demands of the Fourth Industrial Revolution require a workforce prepared to collaborate on the creation of new products, processes, and services in a rapidly changing economy. Driven by this context, higher education is challenged to prepare graduates with the requisite transferable skills they will need to succeed in their careers. The purpose of this action research study was to better understand how co-curricular leadership educators can prepare undergraduate students with the transferable skill of group creativity. An innovation, the Creative Leadership Design Studio (CLDS), was designed using the theoretical and conceptual frameworks of play and improv comedy to introduce students to group creativity. A design studio application allowed students to collaborate to creatively address a problem in their organizations. Through a qualitative multiple case study design, the CLDS was delivered to two groups of undergraduate students. Four sources of data were used to answer the research questions including video observations, written student reflections, researcher journal, and semi-structured interviews. Major findings suggest that the innovation helped students identify and practice the skill of group creativity. Furthermore, play and improv comedy were viewed positively as a way for students to strengthen group bonds and improve creative thinking. In reflection, students indicated that the innovation held relevance to their future careers in preparing them with multiple transferable skills including collaboration, creativity, communication, confidence, and adaptability. These findings indicate that co-curricular leadership workshops using play and improv comedy can positively influence student’s transferable skills growth.
DEDICATION

This dissertation is dedicated to my abundantly playful children, Abigail and Eleanor.

May you always find joy in being goofy, clever, and creative.
ACKNOWLEDGMENTS

In the improv world, we talk about “giving gifts”—in other words, the ideas we plant for our scene partners to build upon and take in their own beautiful directions. As I have written this dissertation, I have been the recipient of so many gifts that guided my process. I am grateful to every person who has shaped the creation of the dissertation in large and small ways. In particular, I extend my gratitude to the many team members who helped bring this dissertation to life:

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CHAPTER 1
INTRODUCTION

In 2018, the University of Arizona released a new strategic plan which outlined an initiative to “[provide] students with an integrated support system, the skills and mindsets to lead in the 4th Industrial Revolution, and a degree that launches them to achieve their hopes and dreams” (University of Arizona, 2018). As the Associate Director for Leadership Programs within our Student Engagement and Career Development unit at the University of Arizona, this strategic plan informed my problem of practice, how co-curricular leadership education can offer innovative leadership development to better prepare undergraduate students with the transferable skills needed to excel in a rapidly changing workforce, particularly collaboration and creativity skills.

Driven by this new strategic plan, SECD has been considering how to adapt their leadership development practice and reach more students. The primary four-year co-curricular leadership program I coordinated has existed for over 20 years and has provided cohorts of undergraduate students transferable skills such as leadership strengths, creativity, collaboration, inclusive practices, and communication among others. However, the program’s strength in providing long-term, high-impact leadership development to a smaller cohort of students has also been its biggest challenge. To address the University’s strategic plan, SECD was asked to expand their offerings to reach more undergraduate students through a shorter-term leadership development model called Build the Skill (BTS). BTS has provided multiple ways to engage in leadership development including fully asynchronous learning, one-time workshops, and customized series developed for campus stakeholders. This expansion initiative comes alongside the ongoing debate about the return on investment of undergraduate education as students and their families look for examples of how the University is
preparing students for employment success post-graduation (Peck, 2017). These local and national challenges framed my research study and led to the creation of an innovative, engaging, and impactful co-curricular leadership development experience for undergraduate students. My action research case study dissertation explored how a leadership development innovation, the Creative Leadership Design Studio (CLDS), which uses playful practices and mindsets drawn from improv comedy as a pedagogical tool, impacted the development of transferable skills including creativity and collaboration.

**Situational Context**

The Student Engagement & Career Development (SECD) unit at the University of Arizona was created in 2016. The formation brought together three distinct departments to serve all university students, regardless of academic discipline: 1) Career Services, 2) the Office of Student Engagement, and 3) Leadership Programs. The intention driving this merger was to link the student engagement journey from the first year through graduation and beyond, helping students align their purpose and values with career and educational objectives (SECD, n.d). As stated on the SECD webpage (n.d):

The vision of Student Engagement & Career Development is that every University of Arizona student finds support within the University of Arizona community to:

- Develop in-demand employable skills within and beyond the classroom
- Design and implement a career plan aligned with personal strengths and values, for a lifetime of opportunity and well-being;
- Engage in experiences that expand the student’s capacity to lead and solve authentic challenges facing our communities and businesses
And that, UA’s reputation as a premier source of workforce talent among employers in Arizona and the nation enhances our graduates’ opportunity (para. 2).

Coupled with the strategic priorities of the University of Arizona to prepare students for a rapidly changing workforce, this departmental vision requires SECD to partner with industry, learn about employer demands, and stay abreast of current workforce trends.

The merger with the campus career unit increased SECD’s focus on aligning leadership development with career development. While students in Leadership Programs have always been asked to develop resumes and professional portfolios, this work had been largely siloed from the Career Services department and rarely involved employers, career outcomes, and industry expectations in the leadership curriculum. The increased career development focus and enhanced project-based learning helped strengthen leadership offerings, bringing existing programs into alignment with the SECD mission.

SECD’s department’s primary leadership development offering is the Blue Chip Leadership Experience (Blue Chip). Blue Chip is a four-year co-curricular program that has existed at the University of Arizona for over 20 years. Blue Chip has graduated over 700 students from the program and is frequently used as a benchmark by peer institutions looking to create a structured co-curricular leadership program (Franco et al., 2017). Blue Chip students have expressed high levels of learning across all measured leadership skills including collaboration, communication, problem solving and critical thinking, project management, and inclusive leadership. Students who participate in Blue Chip also succeed academically. Retention data indicated that Blue Chip students persist at a rate of 8% higher for first Time Full Time students than a comparable peer group (M. Forecki, personal communication, December 19, 2019).
Despite these successes, the four-year delivery model continues to be an obstacle for the SECD department. In fall 2019, Blue Chip Leadership enrolled 604 new students, but the spring enrollment decreased to 325 students, a program retention of only 54%. Due to the COVID19 pandemic, Blue Chip dramatically changed their first-year experience program to be an entirely credit-bearing experience. This resulted in higher program retention with 68% of students staying between the Fall 2020 and Spring 2021 semesters. However, due in large part to the pandemic, overall enrollment was down almost 56% in the first-year experience. Retention between each consecutive year of the program has also been a challenge with close to 40% of the participants exiting each year. Reason for withdrawal have included prioritizing other involvement opportunities, inability to commit the time, increased academic rigor, and the barrier of the annual program fee ($350/year).

The enrollment challenge faced by Blue Chip Leadership highlight the need for Leadership Programs to diversify program offerings. Students express interest in leadership development but frequently cannot commit to a prolonged experience, especially as they advance in their academic career. While some campus academic units, such as the College of Management, provide leadership development programming tailored to industry expectations, there exists an interdisciplinary leadership development gap at the University of Arizona where options are not universally available. At the time this study started, Leadership Programs was addressing this gap by developing and testing a series of short-term leadership workshops called Build the Skill that aim to prepare students with 21st century leadership skills. The innovation created for this dissertation, the Creative Leadership Design Studio, was intended to be situated within this new delivery method and aimed specifically at the development of group creativity skills.
Previous Cycles of Action Research

This dissertation was grounded in the action research tradition. Within education, action research is understood as an inquiry by educators to improve the educational setting including instruction and student learning (Mertler, 2020). Action research involves taking immediate and direct action within a practitioner-researcher’s place of work or situated context (Mertler, 2020). Action research often includes an intervention (action) that can address an immediate or localized need (Mertler, 2020). Action research is also iterative - it frequently includes multiple cycles of research to refine the intervention and research methods (Mertler, 2020). Intentional reflection is built into the action research model and is a driver of iterations (Mertler, 2020). Reflective practitioners consider what has worked in previous cycles of research and interventions as well as their own learning to adjust future cycles (Mertler, 2020). Action research has been used throughout this dissertation to both refine the focus of the study and to develop the innovation used to improve undergraduate student’s group creativity skills.

Action Research: Cycle Zero Overview

During the first cycle of research, a reconnaissance study was completed to get a better understanding of the problem of practice. In cycle zero, four employer partners were interviewed for the purposes of learning about 1) the types of leadership development programs offered to employees, 2) the leadership skills included in those programs, and 3) the practices and pedagogies used to teach transferable leadership skills.

Findings from the interviews reinforced the skills gap identified by the literature (Finley et al., 2021). The vast majority of the skills mentioned were those frequently
referenced as transferable skills or soft skills. The top skills identified were those required of students to effectively interact with others, manage conflict, communicate, work in a team, solve problems, and respond to change and failure. Emotional intelligence including the ability to understand one’s strengths and weaknesses and to manage interpersonal relationships with empathy and confidence emerged through all four interviews. Though creativity was not explicitly mentioned as a skill, employers did talk about the need for new hires to be prepared to adapt quickly and be nimble in solving problems, especially given how quickly technology and innovation happen in their organizations. This indicated that there is a need for out-of-the-box creative problem solving to address contemporary challenges.

Multiple practices and pedagogies used to deliver skill building were referenced by the employers including traditional workshop series, self-guided development models, readings, and simulations. Delivery methods that offered employees the opportunity to gain hands-on application through experiential programming such as job shadows, stretch projects, and immersion in other areas of the organization were highly valued. Similarly, case studies were noted as less time-intensive but highly effective ways for employees to apply a new concept in a real-world context. These practices suggested that an important component to leadership development in industry is the ability to apply leadership concepts directly to the work being done.

As directly related to the guiding problem of practice, the reconnaissance cycle of research indicated the need to consider how colleges and universities might help minimize the leadership skills gap by providing comprehensive training on topics such as emotional intelligence, creativity, communication, critical thinking, and the ability to work in a team. However, my original innovation idea of embedding corporate leadership development practices within undergraduate leadership education no longer
felt relevant as many of the same practices shared by employers were ones we already used (ex. job shadows, workshops, readings, simulations, etc.) or would not fit within a short-term delivery model (ex. immersion experiences, internships, stretch assignments). In reflecting about what employers shared, specifically the need for improved collaboration and problem solving skills, I thought about my own development in these areas and came to the realization that some of my most enjoyable and meaningful leadership growth happened through my experience as an improv comedian and as a teacher of improv comedy for the past ten years. I firmly believe that my improv practice made me a better leader, helping me be more adaptable, collaborative, confident, and adept at problem solving. As a result, I switched my focus to align with a personal passion of mine: improv comedy.

**Action Research: Cycle One Overview**

In keeping with the action research tradition, Cycle One built upon the reconnaissance study by developing a leadership development intervention, the *Improv & Leadership Workshop*, grounded in tenets of improv comedy to teach the transferable leadership skills of emotional intelligence, creativity, problem-solving, collaboration, communication, and adaptability. The decision to use improv comedy was the result of a conversation with a course mentor who encouraged me to think through the experiences that had been the most valuable in my own development as a leader. In reflection, I recalled how transformative my improv comedy practice has been in solidifying my leadership philosophy. As a leader, I value positivity, teamwork, humor, play, creativity, deep listening, and adaptability. I remembered how challenging and rewarding my first improv classes were and how that foundation has seeped from the improv stage into my professional life. As a leader in my department, I called upon my improv practice to guide the way I led change. In a rapidly changing environment, I harnessed the central
tenet of improv comedy, a “yes, and” mindset, to support new directions and borrowed heavily from improv when engaging in creative endeavors such as creating new programs. Furthermore, I continue to infuse my classroom and work environments with signature fun, energy, and collaborative exercises which make for a more lively and joyful learning and work environment. Invigorated by this insight, I moved forward with creating an intervention informed by improv comedy practices.

The first iteration of the innovation (Cycle 1) consisted of a fast-paced, hour and a half virtual workshop where I led eleven students through improv activities and reflected on the connections to leadership. Pre-and post-workshop surveys were conducted to measure changes in student’s leadership self-efficacy, perceived skill ability, and the relevance of the skills to their future careers. This cycle of research found that the Improv & Leadership Workshop did not significantly impact students’ leadership self-efficacy (LSE) with respect to transferable leadership skills. Additionally, I found that the Improv & Leadership Workshop did not significantly impact students’ key employability skills. However, students indicated that the skills covered in the workshop were all important to very important for their future careers. The limited qualitative data gathered through a post-workshop interview also suggested that with additional time to practice and reflect, participants might become more confident in applying their leadership skills. Upon reflection, I realized I had included too many transferable skills and learning outcomes in one very short session. Covering so many different topics during one workshop made the experience feel disjointed and unfocused and did not provide enough time for students to engage in reflection, discussion, or to apply the concepts being practiced.

Guided by these findings, the next iteration of this innovation, the Creative Leadership Design Studio, focused exclusively on group creativity which is the process
by which groups collectively generate a creative product (Sawyer, 2017). Zeroing in on group creativity allowed for a more nuanced conversation about how effective groups work together and how they can borrow from improv tenets and practices to establish group norms. Furthermore, participant recruitment was directed at already existing groups so that they could discuss how the concepts being taught are relevant to their current context. Finally, in order for the conversation to move from an abstract discussion to an applied understanding, the groups were tasked with a design activity where they worked together to create something that could improve their organization or setting.

**Innovation Overview**

Previous cycles of research indicated that there is a need for undergraduate students to develop transferable skills including collaboration and creativity. Additionally, the first iteration of the innovation in this study suggested that the use of improv had merit as a teaching tool, especially if the focus of the innovation was narrowed and more time was given to practice and apply the concepts. Building upon these findings, the Creative Leadership Design Studio (CLDS) was made up of four 1.5 hour long experiences which build upon each other and borrow from improv comedy to practice concepts related to group creativity (See Appendix A for complete CLDS curriculum). For ease of scheduling, the workshops presented in this study were bundled together into two 3-hour workshops. The workshops asked students to identify relevant improv tenets, learn about group creativity concepts, practice skills through improv exercises and games, and apply their skills in a collaborative project grounded in design studio best practices. The CLDS was tailored to the specific audiences so that the applied collaborative design project was relevant to the student’s context. Each workshop ended with a reflection activity. An activity about the relevance of these skills to the
participants’ future career goals concludes the series. The target audience for this series is undergraduate students at the University of Arizona.

Larger Context

The Fourth Industrial Revolution and 21st Century Skills

The advent of the Fourth Industrial Revolution has shifted the focus of higher education to the growing demands of a changing and increasingly technological society. Klaus Schwab (2017) of the World Economic Forum coined the term “the Fourth Industrial Revolution” to explain the seismic shift being experienced throughout our systems. Schwab (2017) explained that the fourth industrial revolution is “marked by the emergence of new business models, the disruption of incumbents and the reshaping of production, consumption, transportation and delivery systems” (pp. 1-2). The Fourth Industrial Revolution includes the emergence of technologies such as artificial intelligence, 3D printing, start-up economy, personal digital assistants, and other technological advancements (Schwab, 2017). To respond to this changing context, higher education needs to consider how to adapt so as to best prepare graduates for a new world of work (Kruger & Peck, 2017; Salomon-Fernandez, 2019).

A focus on 21st century skills development requires educators to consider innovations that help students be prepared in an increasingly technological and interconnected world (Partnership for 21st Century Learning, 2019). The Partnership for 21st Century Learning developed a framework for 21st century teaching and learning which positions the 4Cs of learning and innovation at the center: critical thinking, communication, collaboration, and creativity (2019). As jobs of the future shift away from traditional skilled labor towards automation, the need for management skills and those that allow for continuous learning, flexibility, and self-management are increasingly critical (Brewer, 2018). Just as employers are considering how they will
respond to this shift through the reskilling of employees, higher education must contend with this shift by ensuring that new graduates are equipped with the requisite skills including emotional intelligence, collaboration, problem-solving, creativity, initiative, communication, and leadership to succeed in a changing economy (World Economic Forum, 2018; Kruger & Peck, 2017).

**Changing Landscape of Higher Education**

The need for colleges and universities to better prepare graduates with the skills and experiences needed to excel in the workforce underpins the return on investment debate involving the rising costs of higher education and the purpose of a postsecondary degree in the 21st century. To some, the purpose of an undergraduate degree as a workforce and career-readiness credential is antithetical to the value of a traditional liberal arts education which aims to create an educated base of engaged citizens rather than exclusively prepare students for employment settings (Kruger & Peck, 2017). However, the skyrocketing cost of higher education has led many Americans to question the return on investment (Finley et al., 2021). While the majority (60%) of Americans still believe that higher education is important (Finley et al, 2021), only 6 in 10 employers say that recent graduates have the knowledge and skills needed for success in entry-level positions (Finely, 2021). Despite employer’s disappointment in students’ skill readiness, they still overwhelmingly believe in the value of a college degree with 87% of employers believing that getting a college degree or credential is “definitely” or “probably” worth the investment of time and money (Finley, 2021). This finding is echoed by the current generation of students (frequently labeled “Generation Z”) who believe that college is still worth the financial investment (Finley et al., 2021), but that colleges and universities need to provide services that offer practical skill and career development (“The new generation,” 2018).
Co-Curricular Leadership Development and Career-Readiness

One avenue for embedding career skill development throughout the undergraduate experience is in strategic use of undergraduate co-curricular programming. Co-curricular leadership education in higher education as we understand it today began to come into prominence in the mid-1980s, and formal leadership development programs (both curricular and co-curricular) have been developed at many institutions (Spencer & Peck, 2017). Co-curricular leadership experiences provide pathways for students to develop critical career competencies (Lawhead et al., 2017). Through involvement outside the classroom in experiences like club and organization involvement, fraternity and sorority programming, intramural sports programs, and structured leadership development programs, students can practice and develop the employability skills that can help them succeed post-graduation (Lawhead et al., 2017; NACE, 2019).

The study of leadership at the collegiate level is expansive with many formal studies, theories, and models in place that directly look at college student leadership identity development (Owen, 2015; Spencer & Peck, 2017). Within leadership education, there has also been a movement to focus on competency-based education, noting that students and leadership educators should be able to identify competencies needed for post-graduation success and intentionally structure experiences to develop specific competencies (Seemiller, 2014).

The inclusion of co-curricular leadership and engagement programs within the career center structure has become a popular trend as it supports students in successfully articulating their transferable leadership skills to future employers (Lawhead et al., 2017). Opportunities for students to engage in career exploration activities like job shadows, informational interviewing, and employer field trips can
become a natural extension of efforts to engage with employers (Lawhead et al., 2017). Furthermore, as employers continue to look for new graduates with well-developed transferable skills (Finley, 2021), the opportunity exists for co-curricular leadership programs to develop innovative transferable skill building programs that can help minimize the employability skills gap. In this dissertation, I examined one such innovative leadership development offering that uses the playful pedagogy of improv comedy to address the creativity and collaboration skills gap.

**Higher Education and the Employability Skills Gap**

Higher education continues to come under scrutiny for the apparent failure to prepare new graduates for employment. Employers report that college graduates are not equipped with the skills needed for success in the workplace (Finley, 2021). Specifically, employers noted a significant gap between proficiency and need for transferable skills such as critical thinking/problem solving, teamwork, and professionalism/work ethic (NACE, 2019). Conversely, students feel they are well-prepared, with the majority of students saying they were prepared in the very same areas that employers gave them significant low marks (Hart Research Associates, 2015). For example, employers surveyed by the National Association of Colleges & Employers (2019) believed that only 60.4% of recent graduates were proficient in the competency of critical thinking and problem solving but 99% of those surveyed indicated that this was an essential skill.

The top skills sought by employers align with the demands of 21st century careers. The NACE annual *Job Outlook* survey includes a report of attributes that employers seek on a candidate’s resume. Table 1 represents the top 15 attributes employers seek on a candidate’s resume.
Table 1

*Attributes Employers Seek on a Candidate’s Resume*

<table>
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<tr>
<th>Attribute</th>
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<td>Problem-solving skills</td>
<td>91.2%</td>
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<td>Ability to work in a team</td>
<td>86.3%</td>
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<td>Strong work ethic</td>
<td>80.4%</td>
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<td>Analytical/quantitative skills</td>
<td>79.4%</td>
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<td>Communication skills (written)</td>
<td>77.5%</td>
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<td>Leadership</td>
<td>72.5%</td>
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<td>Communication skills (verbal)</td>
<td>69.6%</td>
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<td>Initiative</td>
<td>69.6%</td>
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<td>Detail-oriented</td>
<td>67.6%</td>
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<td>Technical skills</td>
<td>65.7%</td>
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<td>Flexibility/adaptability</td>
<td>62.7%</td>
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<tr>
<td>Interpersonal skills (relates well to others)</td>
<td>62.7%</td>
</tr>
<tr>
<td>Computer skills</td>
<td>54.9%</td>
</tr>
<tr>
<td>Organizational ability</td>
<td>47.1%</td>
</tr>
<tr>
<td>Strategic planning skills</td>
<td>45.1%</td>
</tr>
</tbody>
</table>


**The Creativity and Collaboration Skills Gap**

Within this employability skills gap, the need for new graduates to possess creativity and collaboration skills is more essential than ever. The ability to effectively work in a team setting is essential to success in today’s workforce with employees now spending as much as 85% of their time in collaborative endeavors (Cross et al., 2021). Unfortunately, the biggest gap identified by employers according to a 2021 American Association of Colleges & Universities (AAC&U) report is in working in teams (Finley, 2021). Ninety-three percent of employers believe this skill is either very important (62%) or somewhat important (31%) for college graduates to possess (Finley, 2021). However, only 48% of employers believe that new graduates are prepared with this skill (Finley, 2021). Similarly, 89% of employers believe that creative thinking is very important (53%) or somewhat important (39%) for new graduates, but only 46% believe that students are
equipped with this skill (Finley, 2021). An interesting generational divide also emerges when considering the skills and mindsets required for success in today’s workforce (Finley, 2021). In the AAC&U employer study, 60% of younger employers (40 and under) indicated that creative thinking is a very important skill compared to only 43% of older employers (50 and above) (Finley, 2021).

This skills gap is emerging at a time when the need for collaborative employees is at an all-time high (Cross et al., 2021; Sawyer, 2017). Collaborative work has significantly increased by 50% or more over the past decade (Cross et al., 2021) and recent surveys of employees indicate that collaborative work now makes up 85% or more of many people’s work week (Cross et al., 2021). Even as the COVID-19 pandemic pushed us into physical isolation, collaborative work through online tools such as Zoom and Slack were on a rise, with some organizations seeing a 3x increase in collaborative endeavors (Cross et al., 2021). The world of work today is deeply collaborative with workers jumping between team experiences all day as they connect about product design, marketing decisions, daily stand up meetings, recruiting processes, etc. (Duhigg, 2016). Organizational efforts to improve employee performance have frequently focused on individual behaviors and practices (Duhigg, 2016; Sawyer, 2017). However, as organizations recognize the critical importance of collaborative activities to the workplace, efforts to improve team dynamics and collaborative processes have taken center stage (Cross et al., 2021; Duhigg, 2016). A New York Times article about this shift notes that “if a company wants to outstrip its competitors, it needs to influence not only how people work but also how they work together” (Duhigg, 2016, para. 11). Google, one of the companies leading the charge on how to improve teamwork, led a massive study, code-named Project Aristotle that looked at how effective teams operated (Duhigg, 2016; Sawyer, 2017). Despite looking for trends in over 180 groups including how individuals connected outside of work, personality
types, and other socialization patterns, Google’s study failed to isolate the variables associated with successful team makeup (Duhigg, 2016). However, one key theme emerged throughout the study: effective groups had higher social sensitivities including an awareness of others’ feelings and an ability to make sure everyone felt their contributions were welcomed (Duhigg, 2016). To sum it up, Laszlo Block, the head of the People Operations department at Google stated:

The biggest thing you should take away from this work is that how teams work matters more than who is on them. You can take a team of average performers, and if you teach them to interact in the right way, they’ll do things no superstar could ever accomplish. (as cited in Sawyer, 2017, p. 16).

The world of work requires employees who can navigate team environments. Because the ability to effectively work on a team continues to emerge as the biggest gap in new graduates’ skills, the need to consider how to better prepare students to work and create on a team is at the core of this dissertation.

Given how critical collaboration and innovation is to the current world of work, it is no surprise that companies are especially interested in how collaborating teams can generate new innovations to stay competitive in the Fourth Industrial Revolution (Duhigg, 2016; Sawyer, 2017). This merger of creative pursuit and collaboration is the guiding ethos of group creativity researchers who are interested in how groups produce creative outcomes together (Paulus & Njistad, 2019; Sawyer, 2017). To innovate, groups must be comfortable with both idea generation in which new products, processes, or strategies are developed, as well as idea implementation in which ideas are made a reality (Stollberger et al., 2019). Both the idea generation and implementation stages of innovation require teams to engage in prolonged collaboration to generate novel approaches to whatever problem they are trying to solve (Stollberger et al., 2019).
Though creativity has often been viewed as an individual endeavor, it is incumbent upon groups to explore the intersection of collaboration and creativity to harness the power of the collective (Sawyer, 2017; Paulus & Njistad, 2019). New graduates looking for employment amidst such a collaborative and innovative work environment must be poised to explain how they approach collaborative endeavors and how they will contribute to the productive generation of new directions for their work.

**Problem of Practice and Research Questions**

The problem of practice addressed by this action research study is how co-curricular leadership education can offer innovative development experiences to better prepare undergraduate students with the transferable skills needed to excel in a rapidly changing workforce. Specifically, the skill at the core of this study was group creativity or how individuals engage in the collaborative creative process. Group creativity effectively merges the skills of creativity and collaboration which are top skills valued by employers. This research study is guided by the following research questions:

**RQ1:** In what ways does the *Creative Leadership Design Studio* facilitate the development of undergraduate students’ group creativity skills?

**RQ2:** How do undergraduate students perceive and experience the *Creative Leadership Design Studio* as a leadership development program?

**RQ3:** How do undergraduate students describe the career relevance of the *Creative Leadership Design Studio* within their future careers?
CHAPTER 2
THEORETICAL AND CONCEPTUAL FRAMEWORKS

The rapidly changing economy guided by the demands of the Fourth Industrial
Revolution has heightened higher education’s responsibility to prepare a skilled
workforce equipped with the capacity to innovate in highly collaborative environments.
In order to thrive in this world of work, students must have the tools to effectively work
and innovate in teams. However, employers consistently identify the ability to work in a
team as the largest area of improvement for new graduates. To address this skills gap,
higher education institutions are tasked with generating new approaches to transferable
skills development, which is one of the primary objectives of Student Engagement &
Career Development at the University of Arizona. The leadership development
innovation explored in my dissertation, the Creative Leadership Design Studio, offered a
unique co-curricular approach for students to learn how to work and innovate in a team
setting. Using improv comedy exercises, students experienced a playful approach to
practice group creativity skills in a low-stakes environment and immediately applied
these skills by developing an innovation that addressed a problem in their organization.

In this chapter, I introduce the theoretical and conceptual frameworks that
guided this study. First, I review the concept of group creativity which explores how
individuals work together to creatively generate new products. I share the work of group
creativity scholars who provide a blueprint for how groups can generate an environment
ripe for collaborative and creative pursuits. Next, I explore one avenue for teaching
group creativity using play and playful pedagogy. The literature around play identifies
how students can learn important real-life skills through fun, low-risk simulations and
makes a case for its role as a valuable learning tool within higher education. Finally, I
showcase one approach to creating a playful learning environment through the use of
improv comedy. This final section introduces the tenets of improv comedy and demonstrates how the use of improv as a playful pedagogy benefits skills development in both industry and higher education settings.

**Group Creativity**

Images of creative individuals generating culture-changing inventions permeate our collective definition of what it means to be creative. The “lone genius” mythos of creativity perpetuates the idea that creativity strikes selected individuals, inspiring novel masterpieces (Paulus & Nijstad, 2019; Sawyer, 2017). However, collaboration has become a central feature of modern innovation (Sawyer, 2012, 2017) which has moved researchers and organizational leaders to study how groups can best work together for the purposes of driving innovation. Group creativity is defined as the ways in which “groups of individuals collectively generate a shared creative product” (Sawyer & DeZutter, 2009, p. 83). The central belief about group creativity is that individuals do not operate in social isolation and are often generating creative products together (Paulus & Nijstad, 2019). Understanding the dynamics, characteristics, and processes involved in group creative processes has become a focus of creativity researchers in recent decades (Sawyer, 2017; Paulus & Nijstad, 2019).

Relevant to the focus of this dissertation, the linkages between improv comedy and studies of group creativity are deeply entwined. In attempting to explain how creative groups function, Keith Sawyer, author of *Group Genius: The Creative Power of Collaboration* (2017), spent many years analyzing the collaborative processes of Chicago improv teams to see how “surprising and radical creativity emerged from the power of collaboration” (p. 15). Sawyer (2017) observed how improv groups build off one another, valuing individual contributions, and heightening those contributions to create novel products. Though there are many benefits to group creativity, as anyone who has ever
worked on a group project knows, collaboration isn’t always a seamless experience. Collaborative groups may encounter challenges that hinder creative innovations such as groupthink in which members of a team end up making worse decisions than if they had been left to their own devices (Sawyer, 2012; 2017). The research reviewed here explores the process of group creativity and recommendations for collaborating teams looking to generate novel ideas.

**Characteristics of Group Creativity**

Group creativity researchers are interested in understanding the characteristics and dynamics at play when groups work together to generate a creative product (Paulus & Nijstad, 2019; Sawyer, 2003, 2017). Sawyer (2003; 2017), used in-depth interaction analysis to analyze participants' verbal gestures, body language, and conversation in order to study the collaborative interaction of improv comedians. Sawyer’s (2003, 2017) analysis identified five characteristics significant to group creativity: process, unpredictability, intersubjectivity, complex communication, and collaborative emergence.

**Process**

Frequently, conversations about creativity focus on the end product—the creation of a sculpture, the final symphony of a composer, an award-winning script, etc. (Sawyer, 2003). However, many group creativity scholars are less concerned about the final product and more interested in the process that is used to achieve the creative product (Sawyer, 2003). Researchers who focus on process approaches of creativity explore what happens during group interactions rather than analyzing all the inputs that comprise a group (ex. What resources the group receives, how the group is composed, and what sorts of instructions they are given) (Sawyer, 2012). Group creativity, especially as connected to improvisation, is characterized by its focus on the process rather than the
end product (Sawyer, 2003). Improv comedians are acutely aware that the art they are creating is impermanent—it will only be created once and likely never seen again. Therefore, instead of worrying about memorizing lines or stage directions, improvisers spend ample rehearsal hours developing an implicit understanding of how to work with their team members and the best ways to generate the laughs.

**Unpredictability**

Group creativity is fundamentally unpredictable - both in what the end product will look like as well as the process used to get there. Sawyer (2003) states that unpredictability has a “combinatorial complexity: A large number of next actions is possible, and each one of those actions could result in the subsequent flow of the performance going in a radically different direction” (p. 7). These actions generate interesting and surprising questions that yield new solutions or new ways to understand a problem that has never existed before (Sawyer 2003; 2017). As a means to learn group creativity, simulating an ever-changing environment in which participants can get comfortable with change allows participants to expect the unexpected. The use of improv exercises, as will be discussed later in this chapter, provides an ideal format for students to navigate an unpredictable environment.

**Intersubjectivity**

Sawyer (2003; 2017) posits that group creativity is also marked by the challenge of intersubjectivity, or “mutual understanding.” In other words, there is no shared understanding of ideas, nor the process being undertaken until after the process has been completed. Sawyer (2017) explains, “In a creative collaboration, each person acts without knowing what his or her action means. Participants are willing to allow other people to give action meaning by building on it later” (p. 19). Intersubjectivity poses a challenge for collaborators because in order to drive their vision, collaborators will
frequently superimpose their ideas, making it difficult to get onboard with others’ ideas (Sawyer, 2003). Improvisers are taught not to hold on to their ideas too tightly in order to authentically affirm their teammates’ contributions. In this respect, improvisors are open to co-developing their art and recognizing that successful collaboration occurs when they are not in control of the final product but are open to where the process will take them (Sawyer, 2003).

**Complex Communication**

Creative collaboration is highly unpredictable and subject to multiple interpretations (Sawyer, 2003; 2017). To navigate these challenges, collaborators need to be in a constant state of communication, engaging in deep listening to get on the same page as their team (Sawyer, 2003; 2017). In an improv scene, improvisors are taught not to ask questions nor pause the scene to make sure they are on the same page as their scene partners (Sawyer, 2003). Successful improvisers can comment on what they are doing organically within the scene and know how to nonverbally connect with their scene partners to negotiate any decisions that need to be made (Sawyer, 2003). While these same limits don’t exist for people engaging in other forms of creative collaboration, there is still a responsibility for collaborators to check in with each other through deep listening and observation to ensure they are moving ideas forward together (Sawyer 2003; 2012; 2017).

**Collaborative Emergence**

The term emergence refers to our understanding that the whole is greater than the sum of its parts (Sawyer, 2003; 2017). Group creativity allows teams to harness the strengths of individuals, pushing them to perform at higher levels than if they had been left to their own devices (Sawyer, 2003; 2012; 2017). Sawyer (2003; 2009; 2017) refers to this process in small groups as “collaborative emergence.” Collaborative emergence
exists when participants are contributing equality, there is an unpredictable outcome, decisions are being made moment-to-moment and can be altered by the actions of any of the other participants (Sawyer, 2009). Groups that generate creative and innovative products engage in a process of collaborative emergence, navigating the unpredictable nature of collaboration and valuing the contributions of group members by allowing them to drive the direction of the creative process. Sawyer (2003) states, “in group creativity, the group leads each individual to perform at a higher level than he or she would have been capable of alone” (p. 11).

**Teaching Group Creativity Through Group Flow**

In studying jazz and theatrical improv groups, Sawyer (2017) compared excelling groups’ processes to that of flow. Flow, a term coined by Sawyer’s academic mentor and late creativity scholar, Mikhail Csikszentmihalyi, refers to those times when a person is operating at their peak (Sawyer, 2017). Sawyer (2017) expands on this concept, labeling it *group flow* and applying it to groups who are operating at their peak by building off each other’s ideas seamlessly and creating a novel product. To foster group creativity and innovation, the conditions for group flow must be realized. These conditions are the blueprint for teaching group creativity and all activities and discussions need to include markers back to how these conditions were (or were not) achieved. The innovation in this study introduced the concepts of group flow and repeatedly returned to them to emphasize what behaviors individuals and groups can take to achieve group flow. The ten conditions for group flow as explained by Sawyer (2017) are:

1. **Group goal**: Groups must have a clearly defined and commonly held goal driving their work. However, that goal must be broad enough for problem-finding creativity to be used.
2. **Close listening:** Group members engage in deep listening and do not prepare their responses ahead of time.

3. **Complete concentration:** Group flow happens when groups are fully immersed in the task and are not distracted by anything else.

4. **Being in control:** Group flow increases when groups feel that they have autonomy over key decisions or the ability to effectively execute plans.

5. **Blending egos:** Group members relinquish ideas, giving them up to the whole of the group so that, at the end, group members don’t remember which ideas were theirs or someone else’s. Group members experience group sync.

6. **Equal participation:** All group members play an equal role in the process, and all bring similar levels of skill and knowledge to the group.

7. **Familiarity:** Group members need to know each other fairly well and have a shared set of guiding principles to follow.

8. **Communication:** Group flow necessitates constant communication, always talking to generate fresh ideas and hear new perspectives.

9. **Keep moving forward:** Harkening back to the “yes, and” tenet, group flow happens when group members are building upon the others’ ideas. “Listen closly to what’s being said; accept it fully; and then extend and build on it” (p. 63)

10. **The potential for failure:** Innovations require frequent failure, and group flow happens in an environment where failure is acknowledged as a facet of creativity. Failure is not viewed as a negative, but as a reality that should be accepted in order to achieve a great final product.

This list of characteristics can be effectively used to practice group creativity. In reading these characteristics, I was struck that the use of improv comedy exercises and mindsets would help create a learning environment that quickly replicates the
experiences of improvising teams. In structuring the innovation in this study, these facets of group flow are woven throughout the lessons and reflections. For example, improv activities such as “Same Word” are included to help the group experience complete concentration and close listening. The “Same Word” exercise requires the group to get two people to say the exact same word at the same time. This deceptively simple exercise requires complete concentration so that group members don’t repeat words that have already been said (otherwise they may have to start over). Through the improv exercises, participating students were exposed to the characteristics of group flow with the aim of identifying what it takes to achieve peak group performance.

**Barriers to Group Creativity**

**Groupthink**

Anyone who has ever worked in a team setting is acutely aware of the challenges to navigating group dynamics. To effectively teach group creativity, it is important to recognize and address the downfalls of groups so as to prevent these challenges from appearing in the future. One of the biggest faults of group work is when groups default to groupthink, which Sawyer (2012) defines as a “state of lazy, shared consensus where no one wants to rock the boat” (p. 232). Despite the belief that many brains operating on one task would default to more creativity, there is evidence to suggest there is an illusion of group effectiveness in which groups think they are more effective than they actually are (Sawyer, 2012; 2017). This illusion is especially present in homogenous groups where positive feelings abound and everyone gets along (Sawyer, 2012; 2017). Individuals feel so comfortable with the group and genuinely like the group members that they become overconfident about the decisions they are making (Sawyer, 2012; 2017). All these positive feelings also make challenging ideas or individuals more difficult as group
members don’t want to be perceived as a troublemaker or ganged up on by other members (Sawyer, 2012; 2017).

**Brainstorming**

The struggles of groups can be most readily seen in studies of group brainstorming. Brainstorming, a term coined in the 1950s by Alex Osborne, a legendary advertiser and founder of the Creative Education Foundation at the University of Buffalo, refers to when groups develop as many unique ideas as possible without judging them (Sawyer, 2017). Though brainstorming in a group can be enjoyable, there are a number of factors that can lead to productivity loss compared to the efforts of solo individuals (Sawyer, 2012). Productivity losses can be separated into two categories: 1) motivation losses and 2) coordination losses (Sawyer, 2012).

**Motivation Loss**

Motivation loss can occur for several reasons including the phenomenon of free riding in which an individual in the group might sit back and not offer any brainstorming contributions while others generate all the ideas (Sawyer, 2012). Motivation loss occurs because other group members feel their individual contributions are not as significant since they are all combined at the end and there was essentially no consequence for free riding (Sawyer, 2012). To combat free riding, groups can keep the group size smaller to make each member’s contributions indispensable and identifiable (Sawyer, 2012). Groups can also add more structure to brainstorming by having each member share their contribution in turn or “pass” if they don’t have anything to contribute (Sawyer, 2012). Additionally, groups can be given the goal to develop quantity over quality ideas so group members who might be concerned about their perceived lack of creativity aren’t worried about the originality of their ideas and will contribute (Sawyer, 2012).
Coordination Loss

Coordination losses occur when members have difficulties contributing to group processes (Sawyer, 2012). Two forms of coordination loss include production blocking and social inhibition (Sawyer, 2017). Production blocking occurs when members are unable to generate as many ideas as a result of listening to other people’s ideas or being distracted by the flow of energy and idea generation happening in the brainstorm session (Sawyer, 2017). Topic fixation, in which groups become stuck on a topic and stop generating novel ideas, can be a cause of production blocking (Sawyer, 2017). Social inhibitions also contribute to productivity loss because group members become overly concerned about the quality of their ideas and are less likely to contribute their thoughts (Sawyer, 2017).

To overcome these barriers, there are some recommendations that have been studied to maximize brainstorming effectiveness (Sawyer, 2012; 2017). One suggestion to prevent production blocking is to give each member solo time to generate ideas (Sawyer, 2012; 2017). This process is often called brainwriting in which each member is given ample time to produce their ideas solo before contributing them to the team (Sawyer, 2012; 2017). Studies using brainwriting have been proven to generate more unique ideas than using traditional brainstorming methods (Sawyer, 2017). In order to overcome social inhibitions, one recommendation is to ensure that group members feel truly equal, and no person of authority is present in the brainstorming session (Sawyer, 2017). Additionally, it is recommended that groups have a trained facilitator who can help manage the process and ensure participants feel comfortable sharing their ideas (Sawyer, 2017).

Knowing the potential for problems to arise in groups informed the innovation in this study. First, using improv exercises to develop group creativity aimed to provide a
space for the group to talk freely about the challenges that can occur in groups and how, as leaders, they can create productive spaces for groups to operate. Secondly, as the creator and facilitator of the experiences, it was incumbent upon me to make sure I was not replicating these group issues in the brainstorming and applied exercises. As the facilitator, I worked to create a space for contributions to feel welcomed without judgment and invite contributions from all members of the group.

**Play and Playful Pedagogy**

At the core of this dissertation is the belief that undergraduate learning about group creativity can emerge through the use of play. While frequently viewed as the domain of young children, play can be a transformational practice that invigorates the brain and energizes the creative and innovative potential of adults (Brown, 2009; Parr, 2014). Researchers frequently connect play to Social Constructivist Learning Theory (Piaget, 2013; Vygotsky, 1980) as learning through play requires active engagement and social relationships to socially construct new knowledge (Forbes, 2021). Through low-risk simulations, play allows learners to develop new and socially constructed understandings of their world. Stuart Brown (2009), a noted play researcher and author of *Play: How it Shapes the Brain* states that

> In play we can imagine and experience situations we have never encountered before and learn from them. We can create possibilities that have never existed but may in the future. We make new cognitive connections that find their way into our everyday lives. We can learn lessons and skills without being directly at risk (p. 34).

Brown (2009) leaves the definition of play intentionally broad, suggesting that play is experienced by individuals in many unique ways and that it is “a thing of beauty best appreciated by experiencing it” (p. 16). That said, Brown (2009) provides seven
properties of play to help others identify what might be characterized as play. These principles can be seen through the design of the innovation and approach to leadership development presented in this dissertation. The properties that relate most directly to the forms of playful and improv pedagogy used throughout this study include: 1) *apparent purposelessness* - play is done for its own sake and doesn’t always have an immediate purpose, 2) play is *inherently attractive* - it’s fun and makes people feel good, 3) play provides *freedom from time* or the age-old adage of “time flies when you’re having fun,” 4) play diminishes *consciousness of self* wherein players are not concerned about how they look or act, they are free to just be present in the moment, and 5) play holds *improvisational potential* where players are open to whatever is going to happen and may discover new ways of approaching a situation.

As a leadership educator and improver, these principles of play guided the development of the innovation in this study. It is not a stretch to say that some of my most profound personal lessons about creativity and collaboration were learned on the improv stage where play features heavily. Improv empowered me as a leader and educator to find the fun in my work, to draw connections between games and learning, to approach challenges with an adaptable and open mindset, and to be confident in my leadership style. I found myself enjoying collaborative processes more and infusing my workshops and classrooms with energy and fun. One of the truths about life in higher education is that the only constant is change - new strategic plans, organizational shifts, and programmatic directions are frequent and fast. Success within this ever-changing environment requires constant adapting and collaborating to meet the current challenge.

As a leader within SECD, I was called on to help unify our merged units and oversee the development of new leadership programs. Approaching these challenges from a playful lens allowed me to infuse otherwise challenging situations with levity. In
workshops, classes, and meetings, I often incorporate short games and energizers to loosen up the participants, leading to a more joyful environment. One of my favorite quotes about improv (and perhaps life?) comes from famed comedienne and co-founder of the famed Upright Citizens Brigade improv theater, Amy Poehler (2014), who said, “There is power in looking silly and not caring that you do.”

I believed the creation of an innovation guided by the principles of play, and, specifically of play using improv comedy, would create a rich and joyful learning environment where undergraduate students could grapple with complex leadership concepts such as creativity and collaboration in an exciting and novel way (James, 2019; Whitton & Langan, 2018). As an improv instructor, I have seen firsthand the value of play as a teaching tool—students are able to get out of their comfort zones, open up quickly, and engage fully in the activities and lessons at hand. As will be discussed in more depth below, the research on play backs up these observations. As a tool, play is a valuable addition to learning experiences, creating a vibrant learning environment that can allow participants to grapple with challenging concepts in a lower risk environment (Forbes, 2021; James, 2019).

**Playful Pedagogy in Higher Education**

Research on the use of playful pedagogy in higher education showcases its value in contributing to undergraduate learning (Forbes, 2021; James, 2019). A playful pedagogy incorporates play into the structure and activities of a course or generates learning through playful practices such as humor (James, 2019). Examples of playful pedagogy include learning about leadership through tango, using LEGO to practice design and problem solving, facilitating icebreaker games to create interpersonal connections, creating a design sprint to reimagine a hamburger in an architecture class, or using Jurassic Park as a course-long case study in a labor law class (James, 2019;
Forbes & Thomas, 2021. Beyond the intended learning outcomes of play and games in the classroom, a playful pedagogy creates spaces where students feel more comfortable, less stressed, and more engaged in their courses compared to classes that don’t incorporate play (Forbes & Thomas, 2021; Whitton & Langan, 2018). Playful educators believe that the adoption of a playful pedagogy can help motivate students by helping them find joy in learning and in the social connections forged through the creation of a playful environment (Forbes, 2021; Lauricella & Edmunds, 2021).

In a qualitative study of her own teaching practices, Forbes (2021) discovered the value of play within her masters counseling class. Counseling students who participated in course-based play distinguished the course from more traditional classroom settings. They reported feeling more connected to the learning content rather than having to just regurgitate information in high-pressure testing environments (Forbes, 2021). Furthermore, the students felt more relaxed and less stressed than in other classes which, they posited, helped them process complex and challenging counseling concepts (Forbes, 2021). Finally, play created deeper social relationships between peers, helping students be more vulnerable with each other throughout the course (Forbes, 2021). Forbes’ (2021) playful classroom demonstrates how Brown’s (2009) principles of play can be applied in higher education - play made the class time fly, students felt more comfortable with themselves and others, and they were open to applying new, challenging counseling techniques in a lower-risk environment.

Similarly, Loudon (2019) used playful practices to teach undergraduate design students creative approaches to their work. The objective of the play modules implemented by Loudon (2019) was to help students grapple with creative strategies and mindsets, helping them improve their creative process. Students who participated in the modules which included puzzles, improv games, idea generation challenges, and others
shared that play was a way for them to overcome destructive self-doubt and self-criticism (Loudon, 2019). Furthermore, students shared that they felt more comfortable and confident experimenting with ideas without fear of judgment from peers or the instructor (Loudon, 2019).

The Playful Educator

Transforming a learning space into one that incorporates play requires educators to reconsider their approach to teaching and facilitating (James, 2019). Educators must embrace the notion that play belongs in the classroom and other learning settings and model a level of playfulness themselves in order to give students the freedom to play (Forbes, 2021). Creating a space where learners feel safe to be themselves is a critical first step to any learning environment, but particularly important when incorporating play as play may fall outside the norms of expected classroom conduct (Forbes, 2021). In many respects, what it takes for an educator to incorporate play into learning parallels the general strategies for successful facilitation (McRee & Haber-Curran, 2016). As with any learning experience, educators must first clearly identify learning outcomes and the purpose for achieving that outcome through play (James, 2019). That said, some play scholars believe that free play, or play for no predetermined purpose, allows students to explore creative pathways free of any expectations, much in the same way that Google allows employees to designate 20 percent of their time to explore personal passion projects (James, 2019). However, within structured learning environments such as classrooms and workshops, it is a good best practice to align any play-based activities with intended outcomes, even if that outcome is to establish community or set a tone (Forbes, 2021; James, 2019; McRee & Haber-Curran, 2016).
In a study about how co-curricular leadership educators approach leadership facilitation, McRee and Haber-Curran (2016) identified seven facilitation strategies that can be used to guide learning and are certainly relevant to facilitating play:

1. Being student-centered: prioritizing students by making sure lessons are relevant and enjoyable.

2. Creating environments conducive to learning: establishing a safe and non-judgmental co-learning environment.

3. Disclosing personal information/displaying vulnerability: being transparent and willing to display authenticity to students, perhaps through displaying vulnerabilities.

4. Exhibiting passion/enthusiasm: sharing their excitement, passion, and emotions to generate that same enthusiasm from students.

5. Displaying humor: establishing a light-hearted environment and incorporating humor into the setting when appropriate.

6. Bringing significant commitment/energy: modeling being fully present in the activities and bringing high levels of energy.

7. Communicating clearly and effectively: giving clear directions and explaining the rationale behind each activity while managing expectations.

As these strategies suggest, incorporating play into learning requires more than just presenting a game and hoping students learn from it. Effective facilitation and teaching strategies are essential to creating an environment that values play, and role-model instructor playfulness, and allows students to engage fully without fear of judgment (Forbes, 2021; McRee & Curran, 2016). Additionally, the incorporation of playful activities should drive learning outcomes and be value-added to students’ learning experiences (Forbes, 2021; James, 2019; McRee & Curran, 2016). The strategies
outlined in the list above were used throughout this study’s innovation as it was essential that students felt free to play and learn using improv exercises. As the creator and facilitator of the experience, it was my responsibility to review facilitation best-practices to create a space for students to play, learn, and grow through play.

**Critical Perspectives on Play**

Resistance to play in higher education generally revolves around perceptions of universities being serious spaces with clear expectations of what appropriate rigor and learning looks like (James, 2019). Instructors who integrate playful pedagogy into their lessons may surface fears and concerns about being viewed as childish, foolish, or wasting time (Forbes & Thomas, 2021; James, 2019; Whitton & Langan, 2018). It has become an instructional default in higher education to use lecture-based approaches, with this method being passed on for generations (Forbes, 2021). As a result, higher education academics have not experienced the value of play in the classroom, nor have they learned how to incorporate active and playful learning strategies (Forbes, 2021). Students may also experience some resistance to the inclusion of play in educational settings, believing that play is merely for entertainment purposes and lacking educational merit (Swank, 2012). However, upon reflection, students who experience games and play in the classroom frequently demonstrate higher learning achievement and engagement with the content (Swank, 2012).

As active learning practices become more common in higher education, playful pedagogy needs to be considered as a way to generate engagement and learner satisfaction (Whitton & Langan, 2018). While there are many ways to address the problem of practice in this study - how co-curricular leadership education can offer innovative development approaches to better prepare undergraduate students with the transferable skills needed to excel in a rapidly changing workforce - the innovation
developed here will use the playful pedagogy of improv comedy to create an engaging and fun learning environment. The use of improv will create a dynamic space where students will practice the fundamentals of play (Brown, 2009) by engaging in low-risk activities, suspending judgements, being open to where the activities take them, and drawing valuable connections between play and engaging in group creativity.

**Improv Comedy**

**A Very Brief History of Improv Comedy**

Improv comedy has a long history of being a space for adults to engage in imaginative play. In recent years, improv comedy has found a home in the leadership development space and has been used in educational and corporate settings to teach transferable skills such as collaboration, adaptability, innovation, communication, confidence, creativity, and more (Leonard & Yorton, 2015). As such, it is valuable to consider the history and development of improv comedy and how it has evolved from an obscure theatrical artform to a popular method for teaching and learning valuable transferable skills. The founder of modern improv is widely considered to be Viola Spolin who developed a new way to teach acting through games and play in the 1940s (Leonard & Yorton, 2015; Wasson, 2017). The use of games to create improvisational theater was built upon by Spolin’s son, Paull Sills, who co-founded the famous Second City in Chicago (Wasson, 2017). During its renaissance in the 1960s in Chicago, improv comedy became increasingly ensemble-based with the help of Del Close who placed serious emphasis on working with others and creating art in deep connection with peers (Leonard & Yorton, 2015; Wasson, 2017). This collaborative art form attracted many actors and comedians who all flocked to Chicago to hone their skills through improv games and techniques, all of which also improved their teamwork skills and made them successful collaborators off the stage (Leonard & Yorton, 2015; Wasson, 2017).
Not long after the inception of Second City, non-actors began to seek out improv
to meet people, improve teamwork, and practice transferable skills relevant to their
respective fields (Leonard & Yorton, 2015). The Second City, and other improv training
programs across the country, saw the potential to influence business and other industries
by translating improv comedy to generalizable leadership and life lessons (Leonard &
Yorton, 2015). Corporate training has helped professionals gain foundational skills of
creativity, communication, collaboration, and many others using improv comedy
(Leonard & Yorton, 2015). In more recent years, the popularity of improv as a training
and education tool has made its way into traditional education settings (Dufresne,
2020). Improv has been used in several different capacities including teaching
interpersonal skills such as listening and critical thinking, helping with public speaking
skills, improving classroom climate, and enhancing classroom activities (Dufresne,
2020). While improv is a tool that can be used in many educational contexts, this
dissertation places it in a higher education co-curricular leadership development setting
where it will be used to support the development of group creativity skills in
undergraduate students.

Tenets of Improv Comedy

There are a number of improv tenets that ground the practice of improv comedy
and are regularly shared with those who practice the art form. While there is no
universal set of improv tenets, there are some common principles found throughout the
literature which I share here.

Yes, And

“Yes, and” is as close as one can get to a “Golden Rule” in improv comedy and is
the tenet that all others build off (Benjamin & Kline, 2019; Fey, 2011; Leonard & Yorton,
2015; Sawyer, 2019). “Yes, and” is the idea that actors in a scene should seek to first
agree to the reality of the scene by saying “yes,” and then building that reality by saying “and” while contributing new ideas (Fey, 2011; Leonard & Yorton, 2015; Sawyer, 2019). For example, if a player starts a scene saying, “Wow, it’s a beautiful day on the moon,” the next player might respond by saying, “Yes, it is a beautiful day, and I am so glad your mom packed extra astronaut ice cream for us to share.” In this case, the second player affirmed the first player’s statement that they are on the moon then takes it a step further by adding an interesting detail (their mom packed ice cream for them). Implicit in “yes, and” tenet is the cardinal improv error of denial in which you explicitly or implicitly disregard your partners’ ideas in order to promote your own (Sawyer, 2019). This can have a chilling effect on the scene by negating your partner’s idea and forcing them to pivot awkwardly. For example, in the above scene, if the second player responded by saying, “What are you talking about? We’re not on the moon. We’re clearly at the beach” it would likely force the first player to justify why they thought they were on the moon rather than taking the story of astronauts whose moms packed for them forward. Sticking to the tenet of “yes, and” allows actors to always seek agreement, honor the ideas being offered, and build upon them to create a shared reality. “Yes, and” is central to the practice of improv and is the starting point for both collaborative and creative practices (Leonard & Yorton, 2015; Sawyer, 2019). “Yes, and” allows collaborators to listen intently to the offers their partners are making and build upon them rather than shutting them down right away. A resulting outcome is that collaborators can build upon each other’s ideas in more interesting ways rather than immediately shutting down an idea.

Make Statements

The tenet of “make statements” invites actors to actively contribute to their scenes by making declarative statements rather than asking questions (Fey, 2011). Actors
are told to avoid asking questions, so they are co-creating the scenes rather than placing the burden of creation on their partners (Sawyer, 2019). Fey (2011) states, “in other words: whatever the problem, be part of the solution. Don’t just sit around raising questions and pointing out obstacles” (p. 85). Making statements sets the stage for “yes, and” by providing declarations that can be agreed to and built upon. For example, a player should not start a scene by asking “What are you doing?” rather, a declarative statement such as “I am so glad you chose skydiving for our first date” jumps the scene into the action and sets the players up with an interesting premise. In relation to the leadership skills of creativity and collaboration, this improv tenet helps leaders understand that everything is an offer that can be built upon (Poynton, 2013). Collaborators should be willing to offer ideas and not just expect others to generate them, nor should they just sit back and lob questions or dissenting views at those contributing their opinions.

**Share the Stage**

To honor the “yes, and” rule, actors need to share the stage by not taking all the energy, lines, or laughs (Sawyer, 2019). The Second City talks about building an ensemble where the strengths of all players are valued (Leonard & Yorton, 2015). Honoring the ensemble means relinquishing ideas you might have loved in order to advance your partner’s ideas, it means stepping back when you notice you are taking up a lot of the energy, and it means surrendering some level of control to honor the collaborative process (Leonard & Yorton, 2015). In collaborating groups, the tenet “share the stage” can remind the group that everyone’s voice is valued and that no one person should be hogging the limelight. Furthermore, “share the stage” encourages leaders to validate the best ideas and build off those rather than stubbornly lobbying for your ideas.
There Are No Mistakes, Only Opportunities

Successful improvisers believe that everything happening on the stage can become an opportunity to find the funny. The idea that in improv “there are no mistakes, only opportunities” means that improvisers are constantly being challenged to manage change, adapt to new scenarios, and respond decisively to what is happening on stage (Benjamin & Kline, 2019; Fey, 2011). Moreso, this tenet evokes the “yes, and” mindset in which even errors can become great comedy. Clinging to this mindset allows improvisers to approach their comedy with resilience and innovation (Fey, 2011; Benjamin & Kline, 2019). As leaders are asked to create innovative solutions that tackle contemporary issues, the idea of managing failure and resilience are critical skills. Innovation takes time, and rarely is the first iteration of a solution the best one (Kelley & Kelley, 2013; Sawyer, 2012). Tom and David Kelley (2013), founders of the innovation and design thinking firm IDEO, believe that innovators should give themselves permission to fail, to learn from those mistakes, and to view failure as constructive. Embracing failures gives innovators a “get-out-of-jail-free card” allowing them to learn and lead from failure and be willing to see where those lessons lead next (Kelley & Kelly, 2013, p. 51). As participants in this dissertation’s innovation go through the improv exercises, attention will be given to student’s responses when they feel like they have messed up and how we can use those mistakes to learn and improve.

Improv Comedy in Organizational Development

The popularity of TV improv and sketch comedy shows over the past two decades such as Whose Line is it Anyway?, Key and Peele, and Saturday Night Live has led to an increased use of improv as a leadership development tool in corporate settings (Scinto, 2014). Improv comedy has become an increasingly popular way to develop employee’s innovation, creativity, collaboration, and even customer service skills (Dohe & Pappas,
2017; Decker, 2020). As a playful pedagogy, improv comedy infuses corporate leadership development training with fun, energy, and low-risk activities (Scinto, 2014). As the innovation in this dissertation works to bridge the creativity and collaboration skills gap experienced by undergraduate students, lessons taken from organizational development and corporate training practices inform the innovation created for this study.

Vera and Crossan (2005) provide one of the first empirical studies about the role that improvisation can play in innovative performances on work teams. In this study, Vera and Crossan (2005) use concepts from improv theater to create a theoretical model of organizational improvisation with the intent of helping organizations understand what it takes to improvise well in teams. The authors implemented their workshop series to teach organizational improvisation in a large municipal setting of 175 municipal employees and 25 unique work teams. (Vera and Crossan, 2005). Though the training did not use improv comedy exercises, it did reflect the theory of improvisation developed by Vera and Crossan (2005). The authors’ theory “delineates how the improvisational theater principles of “practice,” “collaboration,” “agree, accept, and add,” “be present in the moment, “and “draw on reincorporation and ready-mades” can be used to understand what it takes to improvise well in work teams” (Vera & Crossan, 2005, p. 203). The authors found that participants left with a better understanding of improvisation, specifically that improvisation is a team skill requiring practice in an environment that nurtures improvisational processes in work teams (Vera & Crossan, 2005). Vera and Crossan’s (2005) work set the stage for future studies to consider the role of improvisation, improv comedy, as an organizational training and development tool to create highly effective teams.

One of the facets of Vera and Crossan’s (2005) workshop that informs the CLDS is that they kept work teams together to better create an environment that values
improvisation and collaboration. The rationale for this decision was that work teams would be able to talk about specific issues related to their group, the group's culture, and specific facets of their work that could be discussed directly within the training sessions (Vera & Crossan, 2005). My action research innovation targets existing student groups and creates a space for them to apply creativity and collaboration concepts within their current context. Rather than bringing together a group of relative strangers, adapting the innovation to focus on the unique needs of an established group will provide more specific context for the application of the exercises.

The use of theatrical improvisation to learn about effective leadership was also deployed by Gagnon et al. (2012). Specifically, the authors contend that improvisational theater training can help develop affiliative leadership, which describes a leader's ability to develop relationships in the workplace (Gagnon et al., 2012). The authors state that “improvisational theater skills are directly aligned with those suggested in newer leadership theories - adopting an external focus, developing adaptability to changing conditions, optimizing curiosity and responsiveness, and honing abilities to listen, interact, collaborate, and co-create with others” (Gagnon et al., 2012, p. 300). In line with theories of leadership that view leadership as a relational process, Gagnon et al. (2012) claim that improvisational theater, a highly collaborative process in which there is no one identified leader, can help groups build relationships by encouraging leaders to be in the moment, listen wholly, and take care of their partners. This study reinforces the value of improv comedy exercises as a tool to support group development and some of the presented activities and facilitation strategies will be incorporated into the CLDS as I will describe in Chapter 3.
Improv Comedy in Higher Education

Within higher education, the use of improv comedy has been used as a practice to help undergraduate students develop skills they may need for their respective careers (Bayne & Jangha, 2016; Boesen et al., 2009; Dufresne, 2020; Higgins & Nesbitt, 2021). The research included here on the use of improv within higher education indicates that improv can be successfully used to teach a variety of essential transferable skills. The CLDS grounds itself in this body of research that supports the value of using improv comedy as a strategy to teach varying course concepts including professional communication, leadership, adaptability, creativity, and collaboration.

Higgins and Nesbitt (2021) conducted an improv workshop series with undergraduate nursing students with the intent of improving their patient communication skills. Participants shared that they found the workshops helpful in improving their clinical communication skills (Higgins & Nesbitt, 2021). When asked how beneficial they found the communication workshop, 41% of the participants said it was somewhat beneficial and 59% stated it was very beneficial (Higgins & Nesbitt, 2021). The playful use of improv in the training helped provide levity to the content and students commented that the fun environment helped them feel more present and positive throughout the workshop (Higgins & Nesbitt, 2021).

Similarly, Boesen et al. (2009) developed an extensive improvisation intervention that embedded improv exercises into their coursework with the goals of improving pharmacy students’ professional communication (Boesen et al., 2009). The instructors in this study created a twelve-week series that introduced students to improv concepts (Boesen et al., 2009). Participants engaged in improv exercises and games to help them demonstrate effective communication skills such as listening, observing, responding, and not just giving specific technical communication directions (Boesen et al., 2009). The
instructors analyzed the assessments of pharmacy students before the improv intervention and afterwards found significant differences between each of the post-innovation years compared to the pre-innovation years (Boesen et al., 2009). The pharmacy students felt the improvisation session had a positive impact on their overall communication skills (Boesen et al., 2009). The students felt that the exercises helped them think more quickly on their feet, come up with creative ideas on the spot, and generate conversation without prior preparation (Boesen et al., 2009). Course evaluations indicated that the pharmacy students felt the improv innovation was helpful in helping with all the intended patient communication outcomes and they believed this intervention should be available to other pharmacy students throughout the country (Boesen et al., 2009).

In an undergraduate business management course, Huffaker & West (2005) used improv games to help students build community, encourage risk taking, and provide a “dynamic alternative to traditional classroom discussion, capitalizing on creative, nonlinear expression and idea exchange” (p. 854). The authors observed that students were more engaged in classroom activities and more receptive to collaborative projects compared to previous iterations of the class (Huffaker & West, 2005). On the weeks when the course instructors included improv warm-up games prior to jumping into discussions of course readings, they observed that students listened, engaged verbally with each other, and participated enthusiastically with in-the-moment creative thinking exercises (Huffaker & West, 2005). Beyond a warm-up strategy, the instructors used the exercises in connection with real-world business scenarios. For example, after playing an improv game, a robust conversation was had about leadership and how frustrating it can be to relinquish control (Huffaker & West, 2005). The authors suggest that having a recent simulated example of these concepts deepened the conversation by providing a
non-theoretical reference point to pull from (Huffaker & West, 2005). The authors recommend starting with small, easily accessible games to help students get into the improv mindset as well as encouraging students to lean into the perceived silliness of the activities (Huffaker & West, 2005).

Dufresne (2020) incorporated improv comedy techniques into his undergraduate leadership course. The three primary outcomes for the improv workshop were 1) to help students improve their self-awareness, especially in situations they might experience discomfort, 2) to improve communication skills including confidence in speaking and listening, and 3) to develop stronger collaboration skills (Dufresne, 2020). In presenting the improv tenets and activities to students, Dufresne (2020) partnered with the campus improv troupe to add a peer-led component to the intervention. In a mixed-method study, Dufresne (2020) had students indicate their level of growth on a post-experience survey. Students shared that they felt their leadership skills of listening, public speaking, creativity, and collaboration all improved (Dufresne, 2020). Qualitative responses indicated that students gained a better understanding of the “yes, and” mindset, not shooting down others’ ideas, feeling more comfortable with discomfort, and strategies to collaborate (Dufresne, 2020). One student shared that their top lesson was, “Building conversations with constructive feedback rather than shooting ideas down. Truly listen and articulate your point of view in collaboration with the other person’s idea and how they can work better together” (Dufresne, 2020, p. 130). One recommendation provided by the author to others considering this sort of improv innovation is to ensure that appropriate time and discussion is given to creating a sense of psychological safety so that students who might be pushed too far out of their comfort zones can opt out of the improv experience (Dufresne, 2020).
**Improvisational Pedagogy**

Additionally, the research also points to the value of instructors using improvisational techniques to engage students (Benjamin & Kline, 2019; Sawyer, 2019). Keith Sawyer (2019), a leading expert on group creativity and creative instruction informed by improvisation, discusses improvisational teaching strategies in his text *The Creative Classroom: Innovative Teaching for 21st-Century Learners*. In line with social constructivist views of learning, Sawyer (2019) contends that improvisational knowledge construction allows students to build their own learning pathways and helps them accomplish key learning outcomes. Sawyer (2019) explains that teachers can apply instructional strategies from improvisation to help create a dynamic and collaborative learning environment that gives students freedom to explore content. For instance, Sawyer (2019) tells the story of a first grade teacher guiding the class on a lesson about bees. In this example, the teacher uses the idea of “yes, and” when her students were pretending to be bees doing a dance (Sawyer, 2019). As the teacher, she “yes, ands” their energy and ideas by inserting in observations and statements about bees that are factual (ex. As a student pretends to drink from a flower she states “oh, you’re pollinating” and helps the students name things like “the hive, queen bee, honey, etc.”) (Sawyer, 2019). Guided improvisation allows students to engage in open-ended activities where they can improvise solutions and ways to navigate through the activities, all while being supported by a teacher who knows how to respond (Sawyer, 2019). As the facilitator and instructor of the activities in this innovation, I used guided improvisation not only through the improv activities, but also in the applied experiences where I helped students grapple with a project of their choosing. The aim in coaching students appropriately through these activities was to push them to consider their decisions, encourage their ideas, and ensure they have the freedom to create.
While Sawyer (2019) discusses the use of a teaching pedagogy informed by improvisation, there is research to suggest that the use of improv exercises directly can impact student learning. Benjamin & Kline (2019) introduced improv teaching games and activities to the hospitality and tourism faculty at a national conference. This “train the trainer” session had hospitality and tourism faculty learn improv tenets, play improv games, and identify ways these games could be used within their respective classrooms to teach skills such as adaptability, customer services, and others relevant to the hospitality industry (Benjamin & Kline, 2019). The researchers found that instructors in their session identified many benefits to using improv exercises and tenets in their teaching practices (Benjamin & Kline, 2019). For example, instructors noted that the improv games they learned would help their students practice listening and communication skills, create a more relaxed environment for students to learn, help students embrace vulnerability, and encourage more collaborative practices in their classrooms (Benjamin & Kline, 2019).

Finally, instructors themselves benefit from the inclusion of improvisational games and strategies within learning environments. Huffaker and West (2005) share of their improv innovation, that “an unexpected boon was that, as instructors, we had great fun and were more spontaneous, resulting in more creative facilitation and greater sensitivity to student process in class” (Huffaker & West, 2005, p. 854). The reciprocal nature of improv includes facilitators and instructors as well - seeing students “yes, and” the content and engage in meaningful play creates a dynamic environment that energizes those delivering the information as well. In relation to the development of the CLDS, I hoped to see students challenge themselves and others to try out new skills and activities in a fun, creative, and energetic environment.
Summary

The studies presented in this section all point to the value of incorporating improv comedy techniques into the classroom setting to achieve course goals and skill development. The CLDS borrowed from many of the best practices shared by the authors including being clear about the game’s objectives, providing adequate space for students to reflect on the games and draw real-world connections, creating a psychologically safe environment with an opt-out for students who truly are pushed to their comfort limits, and to engage in enthusiastic, humorous, and energetic strategies.

Additionally, a gap in the higher education literature as it pertains to this dissertation is the lack of studies about the use of improv in the co-curricular environment. All the above studies share the value of improv when used in the classroom environment. While it stands to reason that the same benefits will apply to out-of-classroom experiences, I was not able to find any empirical studies that point to the specific value of improv in co-curricular settings. One of the challenges is that practitioners who coordinate co-curricular experiences gather assessment data on student learning for primarily internal use and do not publish or widely share their findings (Peck, 2017). That said, the co-curricular space may have more freedom to use improv games as the out-of-classroom context doesn’t require the use of grades, equips facilitators with different authority than faculty members, and allows for more formatting options (McRee & Haber-Curran, 2011).

Chapter 2 Summary

The problem of practice guiding my dissertation is how undergraduate co-curricular leadership education can offer innovative development experiences to better prepare undergraduates students with the transferable skills needed to excel in a rapidly changing workforce. Prime among these skills is the ability for individuals to work
collaboratively in service of generating new ideas and products. This chapter introduced relevant literature related to group creativity, including the characteristics of group creativity and how groups can create the conditions needed to get into peak performance, or group flow. Additionally, I introduced common barriers to group creativity including groupthink and free riding. This literature informed the creation of the CLDS as the primary focus of the innovation is to prepare students with the tools needed to maximize group performance and minimize the barriers to successful collaboration. Next, while there are many paths to teach group creativity, I chose to explore a route grounded in play and playful pedagogy. The literature I explored in this chapter provides a justification for a playful approach, making the case that play is a valuable way for undergraduate students to develop skills in a low-risk, and fun environment. Incorporating play into the learning process involves both creating playful activities as well as approaching instruction from a playful position that infuses enthusiasm, humor, and energy into the learning environment. As an improviser, I have found that a valuable way to infuse play into leadership development is through the use of improv comedy exercises. Therefore, the playful pedagogy I adopted in this study is the use of improv tenets and games to explore group creativity. In this chapter, I briefly introduced the history of improv comedy, explored the foundational tenets of improv, and demonstrated how the use of improv comedy within industry and higher education has contributed to skills development. Taken together, the theoretical and conceptual frameworks presented in this chapter laid the foundation for my innovation, the CLDS, a playful leadership development approach that uses improv comedy to teach the essential skill of group creativity. In Chapter 3, I will describe this innovation in more detail as well as my research design, data collection methods, and timelines and procedures to conduct the study.
CHAPTER 3

RESEARCH METHODS

The problem of practice addressed by this research is how co-curricular leadership education can offer innovative development approaches to better prepare undergraduate students with the transferable skills needed to excel in a rapidly changing workforce, specifically creativity and collaboration skills. In developing the innovation at the core of this study, the Creative Leadership Design Studio (CLDS), I drew from the theoretical and conceptual frameworks of play and playful pedagogy, improv comedy, and group creativity. Through their participation in the CLDS, students engaged in playful improv-based activities to develop the mindsets and skills required of creative collaborators. To investigate the impact of the innovation in question, I used a qualitative, multiple case-study methodology grounded in the action research tradition. The research questions guiding this study are:

**RQ1:** In what ways does the Creative Leadership Design Studio facilitate the development of undergraduate students’ group creativity skills?

**RQ2:** How do undergraduate students perceive and experience the Creative Leadership Design Studio as a leadership development program?

**RQ3:** How do undergraduate students describe the career relevance of the Creative Leadership Design Studio within their future careers?

This chapter shares the research design, a description of the setting and participants of the study, data collection and analysis methods and a timeline of the study. A comprehensive description of the CLDS innovation is also included.

**Methodology**

This study utilized a multiple case-study action research design to explore how the proposed innovation impacts the development of undergraduate student's creativity...
and collaboration skills. Yin (2018) defines a case study as an empirical method ideal for exploring how a particular social phenomenon shows up within its real-world context. Furthermore, the features of case studies as outlined by Yin (2018) are relevant to the study at hand. Yin (2018) explains that a case study:

- “copes with the technically distinctive situation in which there will be many more variables of interest than data points, [...]”
- “benefits from the prior development of theoretical propositions to guide design, data collection, and analysis, [...]”
- “relies on multiple sources of evidence, with data needing to converge in a triangulating fashion” (p. 15).

As such, the current study utilized multiple data points and sources of evidence to reveal findings including video-taped observations, individual interviews, researcher journals, and artifact analysis (Yin, 2018). Furthermore, this case study used existing theoretical and conceptual frames of play, improv comedy, and group creativity to guide the creation of the innovation. It also pulled from best practices in action research case study design to inform the research design, data collection, and analysis (Mertler, 2020; Yin, 2018).

The value of a case study method is that it allows for an in-depth examination of how or why a particular social phenomenon might work (Yin, 2018). Case study research aligns nicely with the action research tradition in that both position the context at the center of the study (Mertler, 2020; Yin, 2018). In educational action research, the practitioner-researcher studies their local setting whether that be the classroom or another educational environment (Mertler, 2020).

A multiple-case study structure was used to examine how the same case material, the CLDS, was experienced by two different groups of students (Campbell, 2010; Yin, 2018). A multiple-case design allows for the replication of a study among two or more
cases for the purposes of examining how and why a certain intervention impacts outcome (Yin, 2018). Yin (2018) recommends that whenever possible, the use of a multiple-case design should be selected over a single-case design as it allows for a more powerful analysis of the issue at hand by looking at the same phenomenon through multiple examples. For the purposes of this study, the use of two cases allowed for a cross-case analysis to be conducted in which findings are aggregated from multiple individual studies (Yin, 2018). Yin (2018) warns that in a case-based approach to cross-case synthesis, “the goal is to retain the integrity of the entire case and then to compare or synthesize any within-case patterns across the cases” (P. 196). Furthermore, when discussing the cases, Yin (2018) notes that it is critical for the researcher to transparently share the similarities and differences between the cases that may impact the findings. For the purposes of this study, both cases shared the same institution setting, the University of Arizona, and similar undergraduate populations. However, there were some nuances in the groups’ makeup and prior familiarity with improv comedy which showed up in the ways the two groups experienced the CLDS.

**Setting and Participants**

**Setting**

This study took place in the Spring of 2022 at the University of Arizona. The University of Arizona is a large, public, land-grant institution located in Tucson, AZ. The undergraduate enrollment at the University of Arizona in the fall of 2021 was 36,503 with 61.1% in-state enrollment (Enrollment, n.d).

As the Associate Director for Leadership Programs, one of the units within Student Engagement & Career Development (SECD), it was my responsibility to support the growth and development of undergraduate students through a variety of leadership development experiences. In the Summer of 2021, Leadership Programs took on
oversight of SECD’s transferable skill-building programs called Build the Skill (BTS). BTS had historically been a primarily asynchronous development option with students engaging in self-guided online content around transferable skills topics. In order to expand the BTS offerings and modalities, my staff and I developed a menu of options for students and staff to pick from. This new menu included in-person workshops such as Leadership Strengths, Giving and Receiving Feedback, Motivating Teams, etc. Part of the new model involved working with existing student groups to put together customized training rather than hosting open opt-in workshops. The CLDS was designed to be an extension of these BTS efforts and, based on the findings from this study, the goal was to incorporate it into the existing BTS menu.

**Participants**

As part of our efforts to expand the reach of leadership programs, my department had been reaching out to groups that work with undergrads and who were not currently involved in SECD offerings. Our goal was to embed transferable skills programs within existing campus experiences. For example, students who are employees at the campus bookstore have participated in a leadership development series intended to align their employment experience with transferable skills development. Acknowledging that student time and attention is limited, this approach allowed us to connect with students where they already were, rather than requiring them to build in more time into their schedules.

To select cases I emailed 15 organizations that Leadership Programs had not historically worked with to present this innovation and get their consent to work with their students. Of the groups I emailed, four responded and I held a preliminary meeting to discover the needs of the group and to determine how and if the CLDS would be a fit
for their desired goals and timeline. Through this process, I identified two groups that agreed to complete the CLDS in Spring of 2022.

The first case was the Arizona Arts Ambassadors, a group of students involved in the College of Fine Arts. Arizona Arts Ambassadors are responsible for attending and coordinating recruitment and social events for prospective University of Arizona Students as well as current students. At the time of recruitment, there were 38 Arts Ambassadors who were sophomores, juniors, and seniors and represented the four College of Arts schools: Arts, Dance, Music and Theater, and Film and Television. The lead student Ambassador and the group’s advisor requested to hold the series on two weekend dates in the month of February to alleviate conflicts with the performing arts schedules. The group requested the series be held in two 3-hour blocks to make participating easier for the students by only having to take up two weekends instead of four. The series was promoted to all the ambassadors and eight students attended both workshops held a week apart. The group used the design studio application to brainstorm how the Ambassador program can better engage their alumni.

The second case was a Resident Assistant (RA) staff in one of the larger residence halls on campus. The staff consisted of 17 student staff members and one full time Community Director (CD) who supervised the group. The makeup of the staff was sophomores through seniors with many different majors and career goals. This group was recruited later in the Spring semester after the originally scheduled RA honorary organization was no longer able to participate due to a COVID-19 surge. I emailed all Resident Assistant supervisors to offer the CLDS as a professional development opportunity for their staff. The supervisor of this staff reached out to me and we held a preliminary meeting where I learned more about the dynamics of the group and the supervisor's objectives. The CD shared with me that her large staff had experienced
challenges feeling cohesive as a team because normal meetings and programming had been impacted by a COVID-19 surge. Additionally, students in the building were reluctant to show up to programs which had a deflating effect on the staff. The goals for the CLDS were to help reinvigorate the staff, provide a team building and professional development opportunity, and to help them think differently about community programming. Originally the series was scheduled for four consecutive weeks during their existing evening staff meetings. However, after talking to the RA staff, the CD shared that the students requested for it be run twice for three hours each about three weeks apart during their regularly evening staff meetings.

**Role of the Researcher**

Consistent with an action research case study method, my role within this study was as a participant-observer as I engaged significantly with the students as the primary creator and facilitator for the CLDS (Mertler, 2020; Yin, 2018). Prior to facilitating the workshops, I did not engage with the students, making me somewhat of an outsider to the groups. In both cases, I did hold a preliminary consultation with key members, either the staff or student leads for the group in order to better understand the groups’ needs. My role as a participant-observer aligned with an improvisational pedagogy as my lead facilitator role within the workshop series allowed me to adjust and tailor the activities based on in-the-moment group needs (Sawyer, 2019; Yin, 2018).

As a leadership educator, improviser, and improv instructor for over a decade, I brought a unique positionality to this research. Interestingly, I began my study of improv at around the same time I started working as a staff member in Leadership Programs. As my knowledge of both co-curricular leadership education and improv grew, I began to see many parallels between leadership education and improv comedy. I was inspired by how improv revealed essential leadership lessons such as collaboration, adaptability,
resilience, inclusion, and more. I was also inspired by how improv instructors engaged learners in playful practices, drawing out valuable lessons through active exercises and discussion. As such, my philosophies on both leadership and education were fundamentally impacted by my practice of improv. This positionality and abundance of experience as a leadership educator and improviser made me qualified to create and facilitate the CLDS.

However, both my researcher role as participant-observer and my close relationship with the topic at hand posed a challenge for my objectivity. Mertler (2020) warns researchers that the more closely you participate in the context you are researching, the more difficult it is to maintain an “eye of objectivity” (p. 97). Subsequently, it was essential to let the findings speak for themself and not to let my own beliefs about the value of improv cloud my judgment.

**Innovation**

The *Creative Leadership Design Studio* (CLDS) was made up of four 1.5 hour long interactive workshops. Participants had the option of spreading the series over four weeks or bundled together for two 3-hour sessions. In both cases, the groups requested the three-hour iteration as it was easier for students to commit to two blocks of time instead of four. See Table 2 for the learning outcomes and activities I facilitated and [Appendix A](#) for a more detailed description of each workshop.

Each of the workshops was designed to engage participants through playful activities that introduce different improv tenets, practice skills through improv exercises and games, and apply their skills in a collaborative project informed by design studio practices. Students were introduced to the concept of group creativity and the elements of group flow were discussed in connection with each of the improv exercises. Figure 1
provides a visual representation of how the problem of practice, theoretical and conceptual frameworks, innovation, and methodology aligned.

**Figure 1**

*Concept Map Aligning Theoretical and Conceptual Frameworks, Innovation, and Methodology*

![Concept Map]

The CLDS was tailored to the specific audiences so that the applied collaborative project was relevant to the student’s context. Each workshop ended with a reflection activity and a take-home idea which will be revisited at the start of the next session. When bundled together into two 3-hour offerings, the take home-ideas were jointly discussed at the start of the next session. Due to space and time constraints, there were some minor differences between the activities facilitated in the two groups. For example, because of the larger size of the RA staff case, improv warm-ups and games took longer to run requiring me to cut some of my planned activities to ensure there was enough
time for the design studio components. Table 2 shows the activities that were facilitated in both cases.

**Design Studio Pedagogy**

In labeling this innovation a “design studio,” I borrowed from design studio pedagogy which offers a collaborative venue for participants to co-create specified projects (Sullivan, 2016). The design studio method has been used for many decades by creative artists, architectural design schools, and advertising agencies (Sullivan, 2016). In recent years, this method has found prominence in educational settings due to its active, collaborative, and creative value (Ioannou, 2018). In a design studio, students are asked to work together to produce a product which is accomplished through constant communication, collaboration, and feedback processes (Ioannou, 2018). At the end of the studio, the final product is presented to an audience of experts and receives feedback from peers, instructors, or other guests (Ioannou, 2018; Sullivan, 2016).

Practices from design studios were embedded within the CLDS series due to their highly collaborative and creative nature. Furthermore, the inclusion of an applied design studio-type project within the CLDS was intended to have students quickly and immediately apply their newly acquired knowledge and mindsets about creativity and collaboration in a tangible project. The hope was that by including an applied design experience within the series, students could see an immediate value to the role that creativity and collaboration play in both their current and future contexts. Activities such as generating ideas, sketching, giving and receiving feedback, and presenting as described in Appendix A were incorporated into the series to help students practice and apply their skills. The incorporation of design studio elements moved this series from a merely theoretical and abstract discussion about the connections between improv,
collaboration, and creativity and grounded it in an immediately relevant application within the student’s context.

Due to the differences in group size as well as space and time constraints, I adjusted the activities such as cutting the “Attacker/Defender” and “Conducted Story” games in the RA staff CLDS. Adjusting the activities allowed me to leave enough time for the design studio components. Table 2 outlines the activities I facilitated for both groups.

Table 2

<table>
<thead>
<tr>
<th>Session</th>
<th>Learning Outcomes</th>
<th>Arizona Arts Ambassadors</th>
<th>Resident Assistant Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td></td>
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<tr>
<td>Part 1: Intro to Improv &amp; Building the Creative Team</td>
<td>Students will:  ● Identify key tenets of improv comedy  ● Establish interpersonal connections with peers  ● Practice improv tenets through improv warm ups and games  ● Collaboratively determine the focus of their design project</td>
<td>● Facilitator Introduction  ● Warm-ups:  ○ Superhero Names  ○ Zip, Zap, Zop  ○ Chase  ○ Whoosh Bong</td>
<td>● Facilitator Introduction  ● Warm-ups:  ○ Superhero Names  ○ Zip, Zap, Zop  ○ Whoosh Bong</td>
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<tr>
<td></td>
<td></td>
<td>● Fundamentals of Improv</td>
<td>● Fundamentals of Improv</td>
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<td></td>
<td></td>
<td>● Improv Games  ○ Yes, Let’s!  ○ Plan the Party  ○ Dr. Know it All  ○ What Are You Doing?</td>
<td>● Improv Games  ○ Plan the Party  ○ Dr. Know it All  ○ What Are You Doing?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Design Application - Part 1  ○ Introduction to the Design Studio Method</td>
<td>● Design Application - Part 1  ○ Introduction to the Design Studio Method</td>
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<tr>
<td></td>
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<td>● Defining the Design Project</td>
<td>● Defining the Design Project</td>
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<tr>
<td>Day 1</td>
<td>Part 2: Improv &amp; Group Creativity</td>
<td>Students will:</td>
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<td>● Define group creativity, the process in which people collaborate on a creative product</td>
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<td>● Identify the conditions of group flow that leads to effective group creativity</td>
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<td></td>
<td>● Produce solutions to a design problem through sketching</td>
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<td></td>
<td>● Collaborate on identifying a final solution to a problem</td>
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<td></td>
<td>○ Create an Improv Team Name</td>
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<td></td>
<td>○ Identification of a design problem</td>
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<td></td>
<td>○ Introduction to Group Creativity</td>
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<td>○ Group Flow</td>
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<td>○ Warm-ups:</td>
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<td></td>
<td></td>
<td>○ Attacker/Defender</td>
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<td>○ Orbits</td>
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<td>○ Same word</td>
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<td></td>
<td></td>
<td>○ Improv Games</td>
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<td></td>
<td></td>
<td>○ Conducted Story</td>
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<td></td>
<td>○ Yes, And Picture Pairs</td>
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<td>○ Design Application - Part 2</td>
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<td></td>
<td>○ Crazy 8’s</td>
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<td>○ Present and Vote</td>
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<td>○ All-in-one v. Rumble group decision</td>
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<td>○ Reflection Activity</td>
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<td></td>
<td>Break</td>
<td>○ Review Improv Tenets &amp; Group Flow Conditions</td>
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<td></td>
<td></td>
<td>○ Warm-ups:</td>
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<td>○ Shake Down</td>
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<td>○ We Demand!</td>
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<td></td>
<td>○ Thunderdome</td>
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<td></td>
<td>○ Improvement Games</td>
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<td>○ Yes, And Picture Pairs</td>
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<td>○ Warm-ups:</td>
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<td>○ Chase</td>
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<td>○ Same Word</td>
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<tr>
<td></td>
<td>Day 2</td>
<td>○ Review Improv Tenets &amp; Group Flow Conditions</td>
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<tr>
<td></td>
<td>Part 1: Group Creativity &amp; Generating Ideas</td>
<td>Students will:</td>
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<td></td>
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<td>● Apply group creativity concepts in a final improv show</td>
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<td>● Present a storyboard as a team to show their solution to their identified problem</td>
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<td>○ Warm-ups:</td>
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<td>○ Shake Down</td>
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<td>○ We Demand!</td>
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<td>○ Thunderdome</td>
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<td>○ Reflection Activity</td>
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<td></td>
<td>Break</td>
<td>○ Warm-ups:</td>
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<td>○ Chase</td>
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<td>○ Same Word</td>
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<td>○ Improvement Games</td>
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<td>○ Yes, And Picture Pairs</td>
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<td>○ Warm-ups:</td>
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<td>○ Chase</td>
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<td>○ Same Word</td>
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<td>○ Improvement Games</td>
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<td>○ Yes, And Picture Pairs</td>
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<td>○ Warm-ups:</td>
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<td>○ Shake Down</td>
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<td>○ We Demand!</td>
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<td></td>
<td></td>
<td>○ Thunderdome</td>
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<tr>
<td>Students will:</td>
<td>Warm-ups:</td>
<td>Warm-ups:</td>
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<td>-----------------------------------------------------------------------------</td>
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<tr>
<td>• Apply group creativity concepts by playing improv games</td>
<td>• Bunny, Bunny</td>
<td>• Zip, Zap, Zop</td>
<td></td>
</tr>
<tr>
<td>• Create a presentation that showcases the storyboard idea they generated</td>
<td>• Same Word</td>
<td>• Same Word</td>
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<tr>
<td>• Present their final idea pitch</td>
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<tr>
<td>• Reflect on how they will use improv and group creativity concepts in their lives</td>
<td></td>
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</tr>
<tr>
<td>• Design Application - Part 3</td>
<td>• Prepare to Pitch</td>
<td>• Prepare to Pitch</td>
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</tr>
<tr>
<td>• Solidify ideas</td>
<td>• Present the Pitch</td>
<td>• Present the Pitch</td>
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<tr>
<td>• Storyboard</td>
<td></td>
<td>• Rapid Feedback</td>
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<tr>
<td>• Improv Games</td>
<td>• Reflect Activities:</td>
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<tr>
<td>• Freeze</td>
<td>• Snapshots</td>
<td>• Snapshots</td>
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<tr>
<td>• New Choice</td>
<td>• Interview Response</td>
<td>• Interview Response</td>
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<tr>
<td>• Solidify ideas</td>
<td>• Final Debrief</td>
<td>• Final Debrief</td>
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<tr>
<td>• Storyboard</td>
<td>• Wrap up</td>
<td>• Wrap up</td>
<td></td>
</tr>
</tbody>
</table>

**Timeline of the Study**

I developed both the innovation and the research design for this study in the fall of 2021. Participant recruitment and initial consultation meetings were held in the fall to learn more about the groups, their hopes for the innovation, and establish dates to hold the series. The actual workshop series and study were conducted in spring of 2022. Table 3 presents the timeline and procedures of the study.
Table 3

*Timeline and Procedures of the Study*

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Actions/Procedures</th>
<th>Data Collection &amp; Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Development Phase</strong>&lt;br&gt;August-December 2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>August-September</td>
<td>Sent email to prospective campus partners to serve as case study partners</td>
<td></td>
</tr>
<tr>
<td>September-November</td>
<td>Held consultation with case partners to share details about the <em>Creative Leadership Design Studio</em> innovation and learn more about the needs and interested of the group</td>
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</tr>
<tr>
<td></td>
<td>Finalized innovation logistics and activities</td>
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</tr>
<tr>
<td></td>
<td>Obtained IRB Approval</td>
<td></td>
</tr>
<tr>
<td><strong>Implementation Phase</strong>&lt;br&gt;January-May 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>January-February</td>
<td>Received consent from participants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hosted first <em>Creative Leadership Design Studio</em> series with Arizona Arts Ambassadors (February)</td>
<td>• Video recording observations</td>
</tr>
<tr>
<td></td>
<td>Recruited AZ Arts Ambassadors students for post-innovation interviews</td>
<td>• Document collection: Participant reflections</td>
</tr>
<tr>
<td>March-April</td>
<td>Hosted second <em>Creative Leadership Design Studio</em> series with Resident Assistant Staff (March &amp; April)</td>
<td>• Video recording observations</td>
</tr>
<tr>
<td></td>
<td>Recruited students for post-innovation interviews</td>
<td>• Document collection: Participant reflections</td>
</tr>
</tbody>
</table>
Conducted post-innovation interviews

Began session recording and interview transcription

- Interviews and interview transcripts

<table>
<thead>
<tr>
<th>Analysis Phase May-September 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>May-September</td>
</tr>
<tr>
<td>Completed data transcription</td>
</tr>
<tr>
<td>Conducted coding process</td>
</tr>
<tr>
<td>Analyzed and reported data</td>
</tr>
</tbody>
</table>

**Qualitative Data Collection and Analysis**

**Data Collection**

Action researchers following case-study protocols collect multiple forms of data to help gain an in-depth understanding of the case at hand (Mertler 2020; Plano Clark & Creswell, 2015; Yin, 2018). Having multiple data points allows the researcher to triangulate themes, providing “converging lines of inquiry” that are strengthened when multiple points of evidence lead to the same finding (Yin, 2018). In other words, conclusions about the cases are reinforced when they are based on a few different sources of evidence (Yin, 2018). In this tradition, I used four sources of evidence to address the research questions addressed in this study (Table 4): observational video recordings, student reflection activities, semi-structured interviews, and my research journal.
Table 4
Alignment of Data Collection with Research Questions

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Data Collection Methods</th>
</tr>
</thead>
</table>
| **RQ1:** In what ways does the Creative Leadership Design Studio facilitate the development of undergraduate students’ group creativity skills? | ● Observational video recording  
● Student reflection activities  
● Semi-structured interviews  
● Research journal |
| **RQ2:** How do undergraduate students perceive and experience the Creative Leadership Design Studio as a leadership development program? | ● Observational video recording  
● Student reflection activities  
● Semi-structured interviews  
● Research journal |
| **RQ3:** How do undergraduate students describe the career relevance of the Creative Leadership Design Studio within their future careers? | ● Observational video recording  
● Student reflection activities  
● Semi-structured interviews  
● Research journal |

**Observational Video Recordings**

I recorded myself facilitating each of the sessions and documented how the students participated during the activities and discussions. After each CLDS series, I played back the footage and used an observational instrument (Appendix B) to organize and guide my observation notes. The observational tool generated descriptive field notes which documented the activities, reactions, behaviors, and quotes of participants (Creswell & Guetterman, 2019). During the data analysis phase, I played back the video footage and jotted down any notable interactions and key quotes that came up during activity debriefs. I also included reflective field notes where I recorded my personal thoughts related to themes or insights I had during observation (Creswell & Guetterman, 2019). Field notes included thoughts about how I facilitated an activity, things that seemed confusing or didn’t go well, and general insights into trends I was noticing. Because I was actively facilitating, reviewing the sessions after the fact allowed me to note any behaviors or participants’ statements related to my research questions that I
may have missed in my initial research journal. Video recordings were stored on a password protected and university approved cloud storage system and will be deleted after the conclusion of the study.

**Student Reflection Activities**

Each workshop ended with a reflection activity that involved students sharing their main “takeaways” from the session. See Appendix A for the complete curriculum and description of reflection exercises. These reflection exercises varied from session to session but included exercises such as writing up a reflection or using post-it notes with quick insights at the end of a session. Reflections were collected for analysis by gathering the written reflections and taking photos of the gathered post-it notes. Written reflections and post-it note statements were transcribed and consolidated into a word processing document and imported into a computer aided qualitative data analysis software (CAQDAS) software for coding.

**Semi-Structured Interviews**

I conducted semi-structured interviews (see Appendix C) with four to five of the students who participate in each of the design studios, for a total of nine students. Students initially expressed interest in being interviewed when completing the study consent form. I also asked at the end of the series for students to submit their name and email address directly to me if they were willing to be interviewed. All interested students were emailed and those who responded were scheduled based on their availability. As an incentive for participation, students who signed up for an interview were sent a $25 digital gift card to either Target, Starbucks, or Amazon after their interview was complete. Interviews were conducted on the online video meeting platform Zoom. The choice to conduct digital interviews was made for ease of scheduling and to take advantage of Zoom’s built-in transcription service. Student interviews lasted
between 30-45 minutes. Interviews solicited insights on what they experienced during the CLDS and how they see the skills playing into their immediate context as well as future career goals. Interviews used a semi-structured interview protocol developed the questions in advance and generated follow up questions as necessary. See Appendix C for the list of questions I used. One-on-one interviews allowed me to get individual insights into the activities I facilitated and to dig deeper into the individual perceptions and beliefs held by the students (Creswell & Guetterman, 2019). Interviews were recorded and transcribed using Zoom’s built-in transcription software. Transcripts were placed in a word processing document, cleaned up and reviewed for accuracy before being loaded into the CAQDAS for analysis. Recordings and transcripts were saved in a University approved password protected cloud storage system.

**Research Journal**

I used participant-observation as the mode of observation within this case study because I served as an active member of the innovation by creating, facilitating, and researching the innovation. To track my experiences with the CLDS, I created a research journal where I tracked my immediate thoughts, reactions, and reflections each time I facilitated. Immediately after each workshop, I spent approximately 30 minutes writing a reflection in an online word processor. My reflections included immediate observations about how the students engaged with the exercises and each other, what activities seemed to work and what didn’t, and any quotes or insights shared by students that stood out. My research journal was saved as a word processing document and uploaded into a CAQDAS for coding.

**Data Analysis**

I used an inductive analysis process to review the data I collected. An inductive analysis allowed for the identification of key patterns and themes that can be organized
to present findings (Mertler, 2020). A step-by-step guide to my data analysis process can be seen in Table 5. After collecting my data, I saved all photos, videos, and interviews on a university approved cloud storage system. All documents were transcribed into word documents that I later uploaded into the computer aided qualitative data analysis software MAXQDA. In order to maintain the integrity of each of the cases, I uploaded all documents related to each case into separate work spaces in MAXQDA. This allowed me to compare and contrast the generated codes to detect any differences between the two cases. Before coding, I conducted a preliminary exploratory analysis where I thoroughly immersed myself in the data by reading through transcripts, and drafted memos in transcripts, field notes, and documents to begin identifying themes and patterns (Creswell & Guetterman, 2017; Mertler, 2020).

Next, I analyzed the gathered materials from the first case, the Arizona Arts Ambassadors and created a coding frame using a concept and data-driven process (Schreier, 2014). During the first phase of coding, I used an eclectic coding process where I combined descriptive codes, process codes, and in vivo codes (Saldana, 2021). Before starting the coding process, I created some codes related to concepts of group creativity, including the components of group flow such as “familiarity” and “keep it moving forward.” While coding, I organized some of the codes as I went along, color coding them in MAXQDA and bundling similar codes together. As I coded, I created categories that aligned with my research questions as well as my theoretical and conceptual frameworks such as “Career Application,” “Improv Tenets,” and “Play.” For example, codes that related to improv tenets and activities I coded orange and placed them under the category of “improv tenets.” I also developed new codes as I went through the process, staying open to new discoveries presented by the data. Analytic memos were used to capture my thoughts about the codes as I created them. Figure 2
provides a sample excerpt from my coding process in MAXQDA and how I applied codes to one of the AZ Arts Ambassador’s interview transcript.

**Figure 2**

*Coding Excerpt in MAXQDA*

Between the first and second phase of coding I used MAXQDA’s creative coding feature to create a code map. This process allowed me to visually merge, connect, and organize the codes by creating categories and subcategories (See Figure 3 and 4 for snapshots of this process). For example, all the codes related to perceptions and feelings about the CLDS were sorted into “Negative Perceptions and Experiences in CLDS” and “Positive Perceptions and Experiences in CLDS.” To ensure coding consistency, I coded segmented units twice within ten days of the first coding (Schreier, 2014). Through an iterative review process, I revisited the code maps multiple times to revise the coding frame and create a comprehensive list of categories and subcategories (Saldana, 2021; Schreier, 2014). After this review, I evaluated the codes and modified them in order to
ensure consistency and validity before completing a final analysis (Schreier, 2014). This process involved merging similar codes, eliminating redundant codes, and identifying larger categories to organize the codes. See Appendix E and F for the complete list of codes generated through the AZ Arts Ambassador and RA staff data.

After completing the coding of the first case, the AZ Arts Ambassadors (Appendix E), I transferred the generated code book to a new workspace in MAXQDA and began coding the documents related to the RA staff case. This allowed me to use the codes, categories, and subcategories established by the first case review with the second case without needing to start from scratch. I also let the data speak for itself and generated new codes that did not exist in the first case (Appendix F). This allowed me to better build a case-based analysis to highlight some difference in how the two groups interacted with the innovation. Any codes that were not used in the second case were also deleted.

In presenting the findings, I followed Yin’s (2018) recommendation to maintain the integrity of each case and then synthesized themes and patterns across the cases.
Figure 3

MAXQDA Creative Code Map - Arizona Arts Ambassadors
Table 5

Qualitative Data Analysis Process

<table>
<thead>
<tr>
<th>Steps</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Preliminary exploratory analysis to identify initial patterns</td>
</tr>
<tr>
<td>Step 2</td>
<td>First cycle coding of all data sources from the first case (Arizona Arts Ambassadors) using eclectic coding method.</td>
</tr>
<tr>
<td>Step 3</td>
<td>Transition process involved creating a code map in MAXQDA to identify categories and subcategories.</td>
</tr>
<tr>
<td>Step 4</td>
<td>Second cycle coding was conducted where I merged codes and eliminated redundancies</td>
</tr>
<tr>
<td>Step 5</td>
<td>AZ Arts Ambassadors code book was loaded into a new MAXQDA project and I coded all data sources from the second case (RA Staff) using an eclectic coding method.</td>
</tr>
<tr>
<td>Step 6</td>
<td>Transition process involved creating a code map in MAXQDA to identify any new categories and subcategories.</td>
</tr>
<tr>
<td>Step 7</td>
<td>Second cycle coding was conducted where I merged codes, eliminated redundant codes, and deleted unused codes.</td>
</tr>
<tr>
<td>Step 8</td>
<td>After completing both coding processes, I created code clouds in MAXQDA to visually represent some of the codes such as positive and negative feelings and experiences.</td>
</tr>
</tbody>
</table>
Methodological Integrity

Credibility

Credibility was established in this study by validating my findings through triangulation, member checking, and reflexivity. Triangulation allows for ideas to be corroborated from multiple points of evidence (Cresswell & Guetterman, 2019). Using video observation, interviews, document analysis, and personal reflection will draw from multiple sources in order to ensure that my findings are credible. Yin (2018) talks about “converging lines of inquiry” in which findings are given strength when multiple points of evidence are used to demonstrate how that finding was achieved.

After generating my findings, I engaged in member checking where I emailed one participant from each case, asking them to review my findings and verify their accuracy (Creswell & Guetterman, 2019). This process allowed participants to check if my assessment is complete, accurate, and fair based on their own experiences and recollections (Creswell & Guetterman, 2019). For both cases, the member who reviewed my results approved my findings and responded that they were an accurate portrayal of what happened in the CLDS.

Finally, engaging in reflexivity by intentionally engaging with the data during the collection process helped me document my initial interpretations, and become aware of any personal beliefs or biases that may have informed my analysis (Mertler, 2020). This reflective practice is a cornerstone of action research and, according to Mertler (2020), is essential to establishing credibility.

Chapter 3 Summary

In this chapter, I described the research design for my qualitative action research case study. The purpose of this study was to understand how the CLDS, an innovative leadership development experience using the playful pedagogy of improv comedy, can
prepare undergraduate students with the transferable skill of group creativity. I described the data collection procedures I used through this study including the use of observational video recording, semi-structured interviews, student’s written reflections, and my personal research journal. I shared how I used an inductive analysis process to generate themes and findings connected to the concepts of group creativity and improv comedy as well as generated new themes as they emerged from the data. Additionally, I discussed how my findings will be reported through cross-case case synthesis approach which both unique cases will be shared and similarities and differences between the cases will be discussed. Finally, I explained how I maintained methodological credibility using data triangulation, member checking, and reflexivity.
CHAPTER 4

RESULTS

Creative collaboration is as critically important to success on the improv stage as it is in the workforce. The problem of practice addressed by this research is how co-curricular leadership education can offer innovative development approaches to better prepare undergraduate students with the transferable skills needed to excel in a rapidly changing workforce. Specifically, this dissertation focuses on creativity and collaboration skills, referenced throughout as group creativity. The innovation developed to address this practice, the Creative Leadership Design Studio, used a playful pedagogy through the use of improv comedy to help students navigate a collaborative design challenge. This chapter shares the findings of two cases of University of Arizona students who participated in the CLDS in the Spring of 2022: the Arizona (AZ) Arts Ambassadors and the Resident Assistant (RA) staff. The research questions guiding this study are:

**RQ1:** In what ways does the Creative Leadership Design Studio facilitate the development of undergraduate students’ group creativity skills?

**RQ2:** How do undergraduate students perceive and experience the Creative Leadership Design Studio as a leadership development program?

**RQ3:** How do undergraduate students describe the career relevance of the Creative Leadership Design Studio within their future careers?

To present my findings, I have used a playful analogy that mirrors the experiences of improv comedians creating a team, preparing to perform, putting on a show, and reflecting on their performance. I have included short vignettes throughout as a way to provide context to the readers about some of the activities and experiences referenced through my analysis. The dialogue in the vignettes is largely pulled from the video recordings of the session, though I have taken some creative license on names and
consolidated what was said to present a quick snapshot of the activity. As a multiple case qualitative study, I used data gathered from interviews, video observation, student reflections, and my research journal to tell the story of the Creative Leadership Design Studio and its impacts.

**Case 1: Arizona Arts Ambassadors**

**Set the Stage**

The AZ Arts Ambassadors arrived promptly at 9am on a bright Saturday morning in February. The group was composed of eight undergraduate students all of whom agreed to participate in the Creative Leadership Design Studio, a two-weekend, 6-hour total endeavor. I could tell as they approached the classroom, set up with a semicircle of chairs and snacks available on a table outside, that there was some slight tiredness and perhaps lack of familiarity with each other. It was 9 in the morning after all, an exceptionally early call time for undergrads. Contrary to my first impression, I learned that this group of eight had worked together as AZ Arts Ambassadors for the past 6 months, some even longer, putting on events and supporting the College of Fine Arts’ programming efforts. While some of the relationships were more established than others, the group’s prior interactions helped them quickly fall into a pattern of collegiality. The students came from different majors within the art—arts education, musical theater, music production, and studio arts among them. Two identified themselves as soon-to-be graduating seniors, and the rest were a mix of sophomores, juniors, and one freshman. While the call time may have been early, it wasn’t long before the ice was broken and the group jumped whole heartedly into the activities and lessons planned.

The Creative Leadership Design Studio’s activities involved a blend of improv warm ups, longer improv games, and design studio elements (See Appendix A). As the
creator and instructor of the series, I led all the activities and opted to play the warm up games with the students, but stepped out of the bigger improv games and design studio components. This allowed me to be both with the students and also slightly removed, hosting the games and facilitating the design studio process. As described in Chapter 3, the objective of the design studio was to give the students a place to apply the group creativity skills and concepts practiced in the improv games. The intent was also to allow students to drive the focus and decision-making process of the design challenge. Prior to meeting with the AZ Arts Ambassadors, I had a preliminary conversation with the group’s staff advisor and Tina, the group’s student President. In this initial conversation, both Tina and the advisor noted that engaging alumni was a goal for the group. As such, in the CLDS, this issue became the focus of the design challenge, and I helped the students create a “How Might We” question to guide the direction of the idea generation and storyboard process. The question generated and voted on by the group was “How might the Arizona Arts Ambassadors better connect alumni with graduating seniors?” As we moved through the design studio, I returned to this “How Might We” question frequently to ensure that students were aligning their solutions with the problem.

Table 6

Arizona Arts Ambassador Interview Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Major</th>
<th>Career Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nora</td>
<td>Music Production and Arts Administration</td>
<td>Music production</td>
</tr>
<tr>
<td>Tina</td>
<td>Journalism and Musical Theater</td>
<td>Broadcast journalism</td>
</tr>
<tr>
<td>Melissa</td>
<td>Photography</td>
<td>Professional or corporate photography</td>
</tr>
<tr>
<td>Stephen</td>
<td>Musical Theater</td>
<td>Musical theater</td>
</tr>
</tbody>
</table>
Form the Team: Developing Familiarity

**Superhero Names.** “Everyone up! Into a circle” I exclaimed. “I know you all know each other, but I don’t. So we’re going to do a round-robin introduction. As we go around the circle, you’ll share your name, your major, your role with the AZ Arts Ambassadors, and, most importantly, your superhero name. Your superhero identity must be an alliteration—it has to start with the same letter as your name. And it must contain some sort of action. For example, my superhero name is Jackhammer Jess!!” As I pantomime the use of a jackhammer, I hear the first sounds of laughter. To make sure they are ready to go I ask them to give me their biggest ‘Kool-Aid Man “Ohhhhhhh Yeaaaaaahhhh!” Which they did - with vigor! Each student quickly got into it, and soon we were throwing superhero names around the room.

The first action taken by any improv team is to form and take time to get to know each other. Unlike the improv teams I have been on who play together for years and have opportunities to connect during weekly rehearsals and socials, we had limited time together to quickly form a team. For the AZ Arts Ambassadors, forming the team was accomplished through the series of warm up activities and improv games (See Appendix A for the complete curriculum). This allowed the students to become more comfortable with each other and to begin to identify the strengths of each player.

While many of the AZ Arts Ambassadors had previously met each other, there were varying levels to those relationships. Some had worked with each other for years, while newer members had only occasionally interacted with the group. I was reminded that the entire AZ Arts Ambassadors was over 40 members strong, and only 8 of those members were present for the CLDS. Melissa was one of those newer members and
shared that she did not know everyone prior to the workshop. In her interview, she indicated that the CLDS helped her feel more comfortable with people both as a function of having a shared identity and shared characteristics. “I didn’t know everybody. I knew a few of them knew each other. And I only knew two people, so, I don’t know, just that we’re in the same group and probably like the same ages and stuff like that and made it a lot easier to connect” (Interview - Melissa).

The AZ Arts Ambassadors noted how important it was to feel comfortable with the team, which evoked the group flow concept of familiarity (Appendix D). In the post-session written reflections, the concept of familiarity showed up more than any other group flow concept. Statements that support this included: “It is extremely important to see a group dynamic and know who you are working with,” and “familiarity is so important for creativity” (Student reflection). Many of the AZ Arts Ambassadors had existing relationships with each other, this may have helped them feel more comfortable with each other right away as Tina shared, “I felt comfortable and it felt easy being able to do these kinds of things with a group that I was already familiar with, so I think it would have been a lot harder, had it been people that I had no idea who they were” (Tina- Interview).

The relationships that students built throughout the series were actually so strong that they persisted even after the series ended. All interviewed students talked about feeling closer with the group that attended. Tina, whom I interviewed close to two months after the series ended, said, “I feel closer to those ambassadors and when we do events [...] because we have that shared experience they’re like, ‘oh my gosh remember this?’ We have, like, a little special bond over some of the other ones who didn’t attend” (Interview - Tina).
Warm Up the Team: Preparing for Group Creativity

Zip! Zap! Zop! “Improv is all about energy passing.” I explained, “You need to be ready to take and pass the energy. I am going to toss my energy at someone around the circle by pointing at them and saying “Zip!” that person is going to point at someone else and say “Zap,” and then that person will point at someone else and say “Zop!” And if you screw it up and you “Zop” instead of “Zip,” it’s fine. You’re human, you’re going to drop the ball, and we just need to keep going. Repeat after me: Zip! Zap! Zop!”

Half the group had played this game before, and they picked it up quickly. Half way through, I paused the game, and told them that I thought they could do it even better—faster and with more enthusiasm. They jumped at the challenge. At the end I heard someone say, “I feel the energy flowing in this room now! Absolutely!”

One of the ways that improv teams build their comfort with each other and prepare to perform is through a series of warm up exercises. Warming up improves the team’s mood, puts the players at ease, and fires up the brain prior to performing. At the start of each CLDS, I took note of the atmosphere and quickly got students into warm up games.

Take the Group Pulse: Addressing Apprehension

While the CLDS helped students feel more comfortable with each other as the series went on, the group did not automatically feel at ease in the workshop or with each other. As with any educational experience, students came to the CLDS with a myriad of expectations and feelings. Prime among them was apprehension or an uncertainty of what to expect. Equipped only with the brief blurb that highlighted the series as
Some Arts Ambassadors were a bit nervous and unclear about what they were getting into. Despite being a theater student, Tina shared that she had prior negative experiences with improv and was nervous about this component. When asked what word she would pick for the series, she chose “challenging” and shared:

I think, just for me [the challenge is] improv in general. I mean, I’ve grown up doing improv games and that has been such a huge part of my life, but every time we would have to play an improv game in acting class, I would want to cry because I felt like I was so bad at it and I wasn’t funny enough and stuff like that. And so improv has always been hard for me. So yeah, I would just say that, in general, it was challenging because it’s just been a mental block I’ve had for years and years. (Interview - Tina)

Similarly, both Nora and Melissa shared that they were hesitant to attend. Nora explained she just didn’t know what to expect and showed up without much information about the series. Melissa shared that she is really shy so was initially concerned about doing improv, but later said that it was fun because the people she was with made her feel comfortable.

While students certainly felt apprehensive and nervous about the series, the most prominent concern was the early meeting time (9am), which had been requested by the group’s advisor and the student president, Tina, so as not to conflict with any performance schedules. Both my video observation and research journal reflected that the group seemed tired both weekends when we started but that they quickly woke up as we dived into the exercises.
Loosen Up: Easing Tensions

The warm-up games eased tension and created a space for students to feel more comfortable with each other. In the first set of reflections, when asked what one of their takeaways was so far, multiple students identified the improv games as helping them loosen up and familiarize themselves with each other. One participant wrote: “Theatre games/activities really warm a group of people up to each other. It doesn’t matter if the grander purpose is theatre-related, but it makes everyone relaxed and we all appear to be having a good time!” (Student reflections 1).

The quick impact of the warm-up activities was buoyed by the presence of three theater arts majors who had previously experienced some of these activities. I noted that on the first day of the series, it was often the theater arts students (who also happened to be the more senior members of the group) jumping up to play the games first or contribute with the most enthusiasm. This early energy helped to create a setting where others felt comfortable to participate in the games. Nora, a music major with a focus on business and music production reflected:

I think it helped that some of our theater majors were there to help out again with the energy and being more comfortable. But definitely the majority of us were not theater majors and I think people, especially our artists that are probably not as physical and performative all the time, I think that those improv exercises would help them [...] just feel more comfortable in their body, I think. Just overall, like, the whole workshop helped me and everybody else feel comfortable. (Interview - Nora)

There were rarely any moments where I needed to prompt participation (Research Journal 1). Students seemed largely comfortable to participate, and the laughter and claps emanating from their peers served as a motivator for continued engagement.
Create a Fun Environment: Setting the Tone for Group Creativity

Conducted Story. “This game is called ‘Conducted Story’ and I am your conductor.” I explained. “I am going to be pointing at you, and while I am pointing at you, you can talk. But when I pull my finger away, you stop. Your goal is to tell a cohesive story as a team. The goal is to collectively create a shared creative process. See what we’re doing here? (as I point to our group flow concepts posted on the wall). You need to use all these! When I move my finger away, you have to stop immediately, and the next person has to pick up the story where you left off. All I need to get us started is the type of animal, the name of that animal, and how that animal is feeling.” There were four people up “on stage” (aka: what we named the front of our workshop room). The rest of our “audience” yelled out names and animals and moods, and I gathered them up, naming our story “Charles the Angry Monkey!” The story was wild. Twists and turns in the plot abounded. And the audience loved it, clapping, and laughing throughout.

One of the goals of any improv theater is to create a space that folks want to return to - either as audience members or, going a step further, by taking a class and joining the company. One of my hopes for the CLDS was that the introduction of improv games and exercises would energize the group and create a joyful atmosphere. For the AZ Arts Ambassadors, this goal was accomplished early in the series.

Despite any preliminary concerns, once we launched into the planned curriculum, students expressed a lot of positive feelings which were reflected in interviews and written reflections. Overwhelmingly, the most prominent code in all the
data was “fun,” which showed up 23 times in the Arizona Arts Ambassadors data. Tina who had confessed that she had been slightly reluctant to attend said:

Oh my gosh, that was so fun! I remember telling my friends, like, “Oh, I have a really early morning thing tomorrow.” I’m like, ‘Oh, I wish it was later, I don’t want to go,’ you know. And I remember leaving, I literally called my friend on the phone and I said, [...] ‘I feel so bad that I didn't want to go, because I had a blast and I can't wait for next weekend,’ so I think it was a lot of fun. (Interview - Tina)

Fun was not the only positive feeling that was expressed throughout the data. Figure 5 shows the positive words shared about the CLDS. Words such as “excited,” “silly,” “energetic,” and “laughter” showed up frequently. In reviewing the CLDS footage and research notes, one frequent observation was the presence of positive energy and laughter.

**Figure 5**

*Word Cloud of Codes Related to the AZ Arts Ambassador’s Positive Feelings About the CLDS*

These positive feelings contributed to students offering a favorable testimonial of the CLDS. When I asked students in the interviews what they would tell other people about this series, it was a common refrain for them to talk about how much fun it was
and how it wasn’t just a six-hour lecture. When I asked Tina to share how she would pitch this experience to other students, she reinforced the fun factor of the series:

It’s fun. Like, it’s fun to watch your friends, it’s like a little comedy show and I definitely would have just stressed that. We had so much fun, because we were just hanging out and even when we were, like, in the circle talking, and we were engaged and we were answering questions, it still felt like hanging out with friends [...] It wasn’t like a lecture, it wasn’t like learning about something that I had zero interest in. It was fun. (Interview - Tina)

Much like an improv team getting ready to hit the stage, the AZ Arts Ambassadors said they were more connected to each other, energized by the warm ups, and felt like they were in a comfortable and fun environment. The CLDS was intended to replicate some of these facets of successful improv teams and harness them through a tailored design studio. As the “coach” (aka: facilitator) for this team, I felt like the group’s participation in the improv games and exercises prepared them for the main show: the design studio.

**Learn the Format: Design Studio Application**

*Defining the Design Project.* “Has anyone ever been in a design studio before?” I asked.

> Without hesitation, one of the Arts Ambassadors raised her hand and chimed in, “Yes! In my art and design studio. A lot of it is coming up with a bunch of ideas and choosing from the best. In the design class, you are shooting out, like 50 ideas, and building on them.”

> “Wow,” I said, “my job is done, I’ll see myself out. But, yes, the idea of a design studio is that it is simple, it’s fast and it’s going to let us generate as many ideas as possible as we can by sketching, critiquing, and deciding in a
really rapid fashion. Over the next session, we are going to build the scaffold together that is going to help us get on the same page. As a team, we will identify something that will help you address the idea of alumni connection. We are going to spend some time creating a response to this challenge. All of this is building towards something that you can leave this design studio with, something you can potentially implement as Arizona Arts Ambassadors. We are going to sketch some solutions, get some feedback, and we are going to pitch those ideas by the end of your last session.”

Improv comedians apply their skills in a number of different performance formats including short form games (like the ones we played in the CLDS) and long form improv shows. It’s important for improvisers to know their format and spend time practicing it in order to become more comfortable with the style as well as more familiar with their peers. In the CLDS, the “format” for the students was the design studio where the participants engaged in solo and group brainstorming activities in order to address their design problem.

Students viewed the opportunity to generate a solution to a real issue in their group as a meaningful addition to the workshop. The design studio format helped facilitate the development of group creativity skills because students were able to apply the concepts we had been playing with to a problem that was not merely hypothetical. Melissa, a photography student, talked about how she thought that the focus of the design studio on the alumni connections was helpful because it was something that they could use in the future:

I think [the focus of the issue] definitely helped. That it’s focused for people in the arts, especially since we’re in the arts. I would be interested in something like that
happening. So, like, coming up with ideas and working together on that pitch is better since we're interested, we're part of the group that's going to be using it.

(Interview - Melissa)

A couple of students indicated that the blend of play and focused creation felt meaningful. They shared that they enjoyed playing the improv games and having fun, but that they were grateful that the series wasn’t just six hours of improv games. Tina, the leader of the group, shared:

I like getting to dial it back, I guess, and work on something tangible because I feel like that's where I thrive, is in a place where it's not all fun and games, where we do get to crack down and focus on a task. So those were my favorite parts and getting to talk to my peers about something tangible, like, something we were working for, I really enjoyed doing that part. (Interview - Tina)

Importantly, the creation of the design studio pitch became a process where students could see the elements of group flow emerge, and students were able to speak about the collaborative process they used in both the large group reflections, interviews, and written responses (Video Observation, Interviews, Student Reflections)

Get a Prompt: Group Goal

At the start of every improv show, it is customary for players to get a suggestion from the audience. This prompt inspires the stories and helps the audience feel invested in the show. For the AZ Arts Ambassadors, the “suggestion from the audience” was the creation of the “How Might We” question that guided their storyboard and pitch creation. The AZ Arts Ambassadors identified their broad challenge as figuring out better ways to engage the College of Fine Arts alumni. As we dug into this prompt, I led students through a couple of activities where they narrowed the focus of the challenge to better guide the creation of their solution. Based on the results of these activities, I
generated two “How Might We” questions that the students narrowed to one through a voting process. For the AZ Arts Ambassadors, they landed on a question that read, “How might the Arizona Arts Ambassadors better connect alumni with graduating seniors?” This question was posted on a large white board in the room and returned to frequently to ensure that the prototype they created effectively addressed the challenge.

Students acknowledged that having a common goal helped everyone feel like they were on the same page. Stephen shared, “The question that we proposed before we even started working, that was the goal, it was the question that we're all working toward and I think setting that up initially before you even get started, is important. Vital, actually, to the end result” (Interview - Stephen). The presence or absence of a common goal was evoked when students shared in pairs prior experiences working with a team. Students sharing in pairs their prior experiences working with a team triggered responses around the idea of a common goal. When asked to share about past experiences they had working in a group, a few students pointed to times when they felt like they had a common goal (Video Observation 1). Students acknowledged that having a goal that the group was working towards was beneficial in establishing motivation, a tangible direction, and a sense of accomplishment when the goal was achieved.

**Start Acting: Generate Ideas & Solutions**

**Crazy 8’s**: Each student got a blank piece of paper. As I passed them out, I explained, “We are going to try to leave this sprint with an idea of how we can better connect alumni with graduating seniors. As we go through this next activity, I want us to keep in mind our improv tenets: yes, and; sharing the stage; there are no mistakes, only opportunities; make statements, etc. With your paper, you are going to fold it twice: one hot dog fold, one hamburger fold to create 8 squares—four on the back, four on the front. What you are going to
do is, individually, generate 8 ideas in 6 minutes. You are going to come up with 8 unique approaches that could help you better connect alumni to students.

Think of all the things that are at your disposal: technology, events, think about things you have never seen done before, keep in mind things you’ve seen done outside of the university—in industry, theater, etc. I don’t want you to self-edit. Don’t worry about the logistics or constraints. For the purpose of this, there are no constraints. There is no budget, there is nothing that is an obstacle. Think outside the box. I want you to sketch this out. They can be the worst sketches in the world, stick figures, blobs. They don’t have to be beautiful, but I do want you to sketch them. Are there any questions? That’s it! The timer is set! Divide! Conquer! Create!”

After an improv team gets a suggestion from the audience, it’s time for them to start acting! Equipped with their prompt and an idea, one improviser will move to the center of the stage and initiate a scene while teammates join in, building upon the original idea and heightening the scene. In an improv scene, improvisers move the action forward and blend the ideas so that the audience feels like they are watching a scene that has been planned out in advance. In the CLDS, this same process of generating ideas, merging ideas, and getting into sync was experienced by the AZ Arts Ambassadors as they moved through the design studio activities.

Initiate the Scene: Solo Idea Generation

In order to avoid the pitfall of groupthink (e.g. having everyone latch onto the first idea for fear of creating conflict), I built in time for students to brainstorm by themselves and then partner up to combine or build upon ideas. As the students went through the first “Crazy 8’s” activity (See Figure 6), I noticed that there were a lot of
similar ideas being generated (things like social media pages, workshops, etc.) (Video Observation 1). Some students had no problems filling up their papers in short order, while others seemed to struggle to think about new ideas, slowing down as they got towards the end (Research Journal 1). In my interviews, multiple students shared how they felt more empowered to generate ideas without overthinking. For instance, one student reflected, “Improv helps wire [the] brain to make faster connections. Better ideas generated, less social anxiety, ideas can connect with one another, discover new perspectives, ways of thinking” (Student Reflections 1).

**Figure 6**

*Solo Brainstorming (Crazy 8s Activity)*

![Image of brainstorming notes]

*Note:* The image includes one of the AZ Art’s Ambassadors “Crazy 8’s” brainstorming. The picture shows some of the ideas that this student generated including a game night, an alumni podcast, job shadowing, online chats, and hosting game watches or performances.
**Heighten the Scene: Keep Moving Forward**

Once the group generated ideas as individuals, I asked them to get into pairs and combine ideas to create one bigger idea. We revisited the idea generation process one more time at the start of the second workshop where I asked students to sort out their ideas and land on one big idea. The students did this by combining and adding to the already generated ideas (Research Journal 1). I asked students, as a pair, to identify “one big idea” that they would share with the team. The big ideas they created ultimately involved many different components such as speakers, performances, social media pages, and networking events (Figure 7).

**Figure 7**

*Present & Vote Image*

*Note:* The image includes the two ideas that were combined from two students' “Crazy 8” activity and then voted on to advance to the final storyboard and pitch.
In putting together the storyboard (Figure 8), each group member was actively involved in either drawing, clarifying, or presenting the ideas. I noticed a lot of affirmations and moments where the group paused to make sure they were all on the same page. This was especially true when talking about their first scene. There was some confusion about what the order of the storyboard should be and I noticed there was some question of the order and purpose of some of the activities (Research Journal). For example, one student spoke up and said, “I think we should add something before the first slide that’s, like, the coordinators meeting to talk through their ideas” and another said, “I think slides 4 and 5 should be swapped” (Video Observation 1). When a challenge like this was raised, students paused the action and took time to affirm the questions or clarify what was happening to make sure everyone was on the same page. In some cases, this resulted in slides being moved, and in other cases it resulted in the questioning student(s) proclaiming that they better understood what was happening.

Throughout the group processes, the idea of building upon and combining exemplified the group flow characteristic of “keep moving forward” as well as the improv tenet “yes, and” (See Appendix D). During the design studio, when brainstorming and combining ideas, I noticed a lot of “yes, and-ing” and very few instances of ideas being negated (Research Journal 1). This process of building upon ideas was revisited at multiple points in the series and was mentioned multiple times in the data. In an end of session reflection, one student wrote: “Biggest takeaway: the importance of building off of current ideas rather than holding onto your own -- be open-minded” (Student reflection).

This process of adding onto each other’s ideas and working to clarify the process was really significant for students. Melissa reflected on how helpful it was to build upon others’ ideas: “Going into creating the pitch, it does help to go with the flow and, you
know, just work with your teammates. Just try to expand on what’s being said” (Interview - Melissa). When describing the process that the group used to create their pitch, every interviewee referenced building upon other’s ideas and keeping the ideas flowing as being a key to their success.

**Figure 8**

*Arizona Arts Ambassadors Storyboard*

![Arizona Arts Ambassadors Storyboard](image)

*Note:* The AZ Arts Ambassadors storyboard pitch outlines an event that invites Arts Alumni to campus in a variety of ways including a webinar, TedTalk style conference, performances, and networking event.

**Build the Scene Together: Blending Egos**

For the group to successfully build off each other's ideas, it was necessary for individuals to relinquish their hold on their own ideas and place greater value on the collective process. This group flow concept of blending egos came up a lot in student reflections and interviews. Associated with this is the idea of giving up control over the process and being willing to go with the flow, even if that wasn’t the direction you envisioned. During the improv games, participants shared that it was sometimes difficult
to go with the flow. One student reflected, “As a type A person who likes to be in control, I learned that letting go and being open to everything is SUPER beneficial” (Student reflection).

When talking about brainstorming for the pitch, Nora shared the challenge she encountered with this idea saying, “I was very stubborn into, like, my own ideas” and felt loosened up doing some of the exercises, more willing to buy into others' ideas (Interview - Nora). Stephen, a musical theater major, talked about the idea of blending egos in relation to theater:

“Maybe one of the harder things I guess was kind of letting go of the ego, and like, “Oh, but that was my idea,” and just kind of letting it go in the group. I never thought that that would be hard [...] but it’s not as much maybe this project that we were working on, but it was another one that I was working with other people, a group project. [...] And, it’s like, you know, I threw out my ideas and some of them the group didn't like, and that was very disappointing. And then some of them they did like and then it just got mixed up in the group and it’s like, “That was my idea!” You’ve just gotta let it go because it's not about you, it's about the end result is about the end product. (Interview - Stephen).

Both in relation to letting to go of ideas during improv games and larger applications, the group flow concept of blending egos was noted as a crucial aspect of getting into group flow, but also a significant challenge for students whose sense of pride was impacted when ideas became the domain of the group rather than the individual.

Group Mind & Agreement: Complete Concentration

**Same Word.** “Circle up everyone! This game is called "Same Word’ the idea being that, as a group, we are going to try to sync up and say one word. So, for example Melissa and Stephen are going to look at each other and say, “3-2-1"
and are going to say a word—you might say ‘banana’ and you might say ‘dog’—so that is the suggestion that the next two people will work from. What does banana and dog make you think of? I don’t know! That’s for you to figure out. We will go around the circle and see if we can come up with the same word. Make sense?” With nods of agreement, we began the game.

The energy was high as we started around the circle, and it stayed high as we worked our way around almost three times. As pairs got close to saying the same word, students started to pantomime pulling their hair, swaying back and forth holding their hands by their mouths, and jumping up and down when pairs didn’t get the same word. We got close multiple times, but after 10 minutes, I needed to move the series ahead. “Wait! That’s it?! We have to stop?” they argued and sighs of, “Well, we had complete concentration, that’s for sure!” “Fear not!” I exclaimed, “We WILL revisit this again next week, and we WILL accomplish this.” And, lo and behold, the following week, with only three pairs in, we did win (and kept on winning, finding three same words in one single rotation!).

As improv teams perform together for a long time, they experience times where they are synced up with their teammates. This group flow concept of complete concentration, or when you are fully invested in the process and not given to distraction, came up throughout the CLDS. Students associated the feeling of complete concentration with getting into group flow, or a moment when it felt like the group was focused and on the same page. One of the major moments for the AZ Arts Ambassadors was the “Same Word” exercise described in the vignette. Students noted that they were fully immersed in that game, disappointed when it ended, and elated when we finally won the game the
following week. Tina, Stephen, and Melissa all talked about this moment in their interviews, identifying it as a huge win that boosted morale.

A second time that the group identified as being in complete concentration was during the creation of the pitch. Tina stated:

Working together to put that final pitch on the wall, I felt like we were all really getting into it, and I mean there are a couple of time, where it was kind of like silence and everyone was just thinking, but I feel like once we kind of got on a roll, especially when we were putting things in chronological order and thinking those kind of things out, I felt like we were really moving and I felt like everyone was saying things and everyone was participating and like working towards putting that together. (Interview - Tina)

My observations during the creation of the pitch mirrored Tina’s experience. My research journal indicated many moments where I witnessed “yes, and-ing,” affirmation of others’ ideas, clarifying questions asked, and focused investment. For example, I noticed that many students were physically leaning in and that every student chimed in to contribute to the process. Cell phones were put away, and the group’s energy remained high for the entirety of the pitch. Group flow happens when team members are fully immersed in what is going on and not distracted. In both moments that students experienced flow, complete concentration on addressing the design challenge kept the group deeply invested in the outcome and highly focused on the activities.

**Get Out of Your Head: The Challenge of Idea Generation**

When improvisers experience challenges initiating ideas, they often say they are “in their heads.” For the AZ Arts Ambassadors, while the improv and design exercises helped students feel more comfortable generating ideas, they still experienced challenging moments throughout the series. Melissa, who identified herself as a shy
student, shared that it was hard for her to come up with things explaining, “Sometimes with improv you were put on the spot, or just had to come up with something that you didn’t think about before and, I don’t know, being on the spot like that gets me a little bit nervous” (Interview- Melissa).

Nora struggled with thinking outside of the constraints. When coding, I made a note that a lot of her responses reference thinking about logistical items such as time, budget, or reality, which sometimes made it hard for her to get on board with the group’s grand direction:

I remember, while we’re in the workshop, I was very, I wasn't negative, but I was more just kind of like, well,-logistically, like if we do this, then we need to make sure that this is included or there’s a component to it that I think some people may have forgotten. I think we were all really wrapped up with, ‘Oh yeah this is gonna be so much fun!’ like, we can see it happening and I’m just like [...] ‘Oh well, money? How are we going to connect to people after that?’ (Interview - Nora)

Tina also gave me the feedback about the design studio that even though it was something that the group might have been able to pull off with a lot of time and planning, the entire scope of what they created was not realistic, and she had wished that they had been able to narrow down their pitch into something that might actually have had a chance of being implemented:

In my perfect world, we just come up with this idea we could do it, but I started thinking like, how are we going to do this in real life? And then I see all those barriers, like the money, the school, we can’t do that, you know. So I start getting, oh, I don’t know, if we’re actually gonna be able to do it and I don’t want to feel
like we’re wasting time on coming up with a great idea that we won’t be able to follow through with. (Interview - Tina)

For these students, getting out of their heads involved suspending constraints in order to think outside the box. Moving past their nerves and allowing themselves to think beyond what might be possible allowed them to engage in the process, even if it wasn’t always easy.

**Take What You Learned: Reflect and Apply**

In every improv rehearsal, the team shares what went well and how they could use what was practiced in our next show. Additionally, when I teach Improv 101 to new improvisers, we talk about how the skills we are practicing on stage can bleed into our non-improv lives. One of the goals of the CLDS was for students to see greater value in the concepts and skills being practiced throughout the series, particularly in their future careers. As such, we spent time reflecting on future applications at the end of the final sessions. Students identified ways that the improv tenets and group creativity concepts would play into their future career goals. Not surprisingly, the importance of collaboration emerged as a critical skill for future success. Additionally, transferable skills such as communication, adaptability, and confidence all emerged through the CLDS as skills that students indicated as important for their futures.

Nora, a music and arts administration major, explained that she wanted to go into music production or arts administration and said that everything she would be doing would be collaborative to some extent, whether it be advocating for the arts or producing music. She stated:

My future career basically would probably be collaborating with other people. I definitely see, for me, it's collaborating for the power of arts, advocating for the arts in all those ways, and I think being able to apply our collaborations and ideas
and then still have a business model that whatever, that I help produce, like, that will make it successful. (Interview - Nora)

Consistent with her view of the CLDS, Nora talked about event planning and collaborating on the logistics of events such as budgets and volunteers. For Nora, an important part of the creation process is getting to focus on logistics and what it will take to bring an idea into reality.

Melissa, a studio art student focusing on photography, had the goal of becoming a professional photographer for either a magazine like National Geographic or for an advertising agency. She identified the importance of working with others to meet the needs of clients whether it be working with wardrobe, makeup, or people who have a specific vision for their work. She noted that it is essential to be able to work with others and to be an effective communicator in order to make sure that things get done and people stay on track. She stated:

To create a photo, especially for like [...] a brand. You have to work with [...] the people that want the photo. And see what they want and work with them to [...] see what they want and what you can bring to the table. [...] [It will be necessary to] work together, for sure. Just being good and working as a group and kind of being like a leader, just so stuff gets done on time and people are on track.

(Interview - Melissa)

Stephen, a musical theater student, identified wanting to continue in the performing arts, either in musical theater or other performance settings. In an inherently creative industry, Stephen identified the importance of working with others on the final product. Throughout his interview, Stephen talked a lot about the blending egos concept and related that to his future in the performing arts:
Suppose I’m in a show and, it’s not a one man show, I’m with other people. I suppose I do have to collaborate in that form, and I have to, you know, give my creative input, but also, you know, kind of take a passive role, sometimes when it comes to the director and stuff there [...] so kind of give what I can, and then let go of my ego when it comes to not having the winning idea. [...] There's collaboration everywhere. You know, it’s not just work, it's all of life. And if there's not collaboration, then you're alone. (Interview - Stephen)

For Stephen, collaboration will be an integral part of his creative life and being willing to blend egos and generate ideas in a group setting will be a key to his success.

Tina was another musical theater major with minors in journalism and public relations. When I spoke to her two months after the CLDS, she had just accepted a full time position as a TV journalist for a midsize affiliate on the East Coast. She described how some parts of multimedia journalism are actually very solo—picking the stories, writing the script, shooting, editing is all done independently. However, she described how collaboration emerges in an entire newscast or investigative journalism:

When you’re working on these longer form stories, it really is a collaborative effort with photographers and other reporters and with your news directors. So [...] even though you do a lot of your work individually, when you’re putting together a show or where you’re putting together a longer piece, you’re really having to work as a team. Especially thinking of how they put together a newscast, like, there’s the anchors and reporters, there's producers, there's engineers that do all the tech stuff, so it really is like a huge group collaboration process, putting together a newscast and having it air live on TV. (Interview - Tina)
For Tina, knowing how to effectively work with others will be critical to her future role, even in those moments where she might be working more independently on news stories. Group flow components of having a group goal, blending egos, communicating effectively, and dealing with failure all came up in our conversation, and she drew significant connections between the concepts we talked about and her future career.

**Arizona Arts Ambassadors Case Summary**

The AZ Arts Ambassadors expressed that throughout the CLDS play, through the use of improv exercises, helped the group loosen up, feel more creative, and improved their collaborative and creative process. Students shared that the engaging improv warm-ups and games set the mood for the series and helped them feel more connected to each other. The AZ Arts Ambassadors also expressed that applying their newly honed group creativity skills within the design studio activities elevated the value of the CLDS by giving them a real-world problem to tackle as a team. Finally, all the AZ Arts Ambassadors identified ways that they would be collaborating in their future careers and how the group creativity concepts covered in the CLDS could be applied within future creative and collaborative settings.
Case 2: Resident Assistant Staff

Set the Stage

When I walked into the 2nd floor study room where the Resident Assistant (RA) staff held their weekly staff meeting, I was immediately struck by the energy (Research Journal). There was so much chatter and laughter, I felt like I had walked into a reunion of people who hadn’t seen each other in a long time. A small handful of students had their attention turned to their laptops, and a couple even had notecards out, clearly trying to get in a few minutes of last-minute studying. The staff of 16 RAs and one full-time Community Director (CD) were gathered around pushed together study tables, with a couple of students sitting on couches around the outside. I learned afterwards that my read about the reunion-energy was spot on. The first Creative Leadership Design Studio was held on March 31, well over halfway through the spring semester. However, due to the COVID-19 Omicron variant, Spring Break, and the NCAA March Madness tournament, this was the first time the RA staff had gathered in person since January.

My connection with the RA staff was initiated after my original attempts to schedule the CLDS with the Resident Assistant Honorary (Rho Alpha Sigma) fell through because of the January COVID-19 surge. After a few failed attempts to reschedule with Rho Alpha Sigma, I turned my energies to Resident Assistant staffs. In early March, I sent a recruitment email to all the campus Community Directors inquiring if any of them would be interested in running the CLDS with their staff. One CD reached out to me expressing interest, and I arranged a consultation meeting with her. The CD informed me that she was interested in offering a professional development opportunity for her team as it had been a challenging year due to the pandemic, low student engagement, and more students being documented for negative behaviors in the dorm, all of which had affected team morale. She thought the CLDS would be an opportunity for the team
to reconnect, have some fun, and tackle a problem in their hall. The CD wanted to leave the focus of the design studio open for the students to decide, though suspected that the challenge of student engagement and sense of community would come up. Indeed, with the RA staff, I spent more time with them brainstorming possible directions for the challenge and voting and narrowing down the topics than I had with the AZ Arts Ambassadors. Ultimately, the students landed on the guiding question of “How might the Resident Assistant staff create an active and involved dorm community?” confirming the CD’s suspicions.

Originally, the CD had scheduled me to attend four staff meetings to run the CLDS during their regularly scheduled 7:30pm-9:30pm time block. However, the student staff later requested that they run it twice from 7:30pm-10:30pm so that they could skip a future staff meeting instead. The CLDS was scheduled for March 31 and April 22 to accommodate previously scheduled speakers and end-of-semester closure meetings.

As you will read, for the RA staff, the CLDS encouraged them to develop as a team and work together to create a solution that would help their dorm community feel more connected and engaged.

Table 7
Resident Assistant Staff Interview Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Major</th>
<th>Career Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordan</td>
<td>Molecular Cellular Biology</td>
<td>Medicine</td>
</tr>
<tr>
<td>Kristen</td>
<td>Leadership, Learning &amp; Literacy, and Francophone Studies</td>
<td>Higher Education Administration</td>
</tr>
<tr>
<td>Sarah</td>
<td>Systems Engineering</td>
<td>Biomedical Engineering</td>
</tr>
<tr>
<td>Amy</td>
<td>Nursing</td>
<td>Nursing</td>
</tr>
<tr>
<td>Aidy</td>
<td>Psychology and Spanish</td>
<td>Criminal Psychology</td>
</tr>
</tbody>
</table>
Form the Team: Developing Familiarity

**Dr. Know-It-All.** “You don’t even know how lucky you are! For today only, I have brought in an all-knowing Doctor to answer your questions! This game is called ‘Dr. Know-It-All,’ and I am going to need three volunteers.” I waited patiently, as the RAs looked tentatively around the room at each other. After a few seconds, three RAs reluctantly stood up and came to the space that I had designated as our “stage.” As she came to the stage, one of the students muttered under her breath, “I’m scared.” “Don’t be scared,” I assured her, “You can do this. I am going to need you all to link arms. Great! What you are going to do is answer a question I get from the audience one-word-at-a-time. When you feel like you have successfully answered the question, you will take a bow at the same time. Let’s practice that.” The first “doctor” giggled and took a collective bow to practice and the audience burst into laughs. “Fantastic. To get the good doctor started, all I am going to need from you, the audience, is a burning question you have.” After a slight pause, the student sitting on the coaches at the back of the room yelled “How many years did you go to school?” I said, “Fantastic! Let’s hear about those credentials!” The group went through the line, one word at a time, explaining how long they had been at school and why they should be trusted. The group watching was smiling the whole time. We repeated this activity with three different groups with the questions getting goofier and goofier such as “I need advice for a date I’m going on this weekend.” I sensed that the students were feeling more comfortable, and I was grateful for the first group of students who willingly volunteered to get the group going.
A theme that I uncovered in the RA staff data was the impact that the CLDS had on improving staff dynamics and, subsequently, how those improved dynamics showed up in the design project. I learned in my interviews that prior to the CLDS there had been some long-standing staff challenges that had begun around a major Halloween program and had not been resolved, in large part because of the challenges presented by the COVID-19 Omicron surge. Sarah talked about her experience on the team:

I think [...] when we went into it we're still very divided. [...] There's two groups that you can definitely tell are the groups and then you have a couple of us in the middle, we're like “we don't know.” We kind of go with everything. So I think going in we were very divided. As [the CLDS] continued, we definitely felt more of a staff and even now we definitely feel like a staff again, which was really nice to see because we've had these issues since Halloween. (Interview - Sarah)

Getting to play games and focus on a joint project helped bring the team together. Kristen talked about how she had not been able to connect with colleagues in a long time and that she enjoyed getting to work on a project that was lower stakes. Aidy shared how when her team was putting together the ideas for their storyboard, she was able to see that there were a lot of similar ideas which helped her see eye-to-eye with some peers that she didn’t think she agreed with.

Furthermore, participants said that the team’s dynamic was improved by getting to focus on a cause they all cared about. Amy explained how the CLDS supported team bonding:

It felt like team bonding but with a purpose, because a lot of team bonding is you just play silly games, like all the improv games, and then that kind of ends there. But you took it one step further, to where, okay, now we have this camaraderie
among us and what can we do with it that will benefit us as a staff and benefit our job and the residents here? (Interview - Amy)

There was a lot stacked against the RA team due to pre-existing tensions, the continuing impact of the COVID-19 pandemic, student disengagement, and their own busy student-leader lives. But when the RA staff came together for the CLDS, they were able to leave that baggage at the door and be present for the six-hour series. Subsequently, students reflected that CLDS helped to create a cohesive and creative team environment.

**Warm up the Team: Preparing for Group Creativity**

**Yes, and...Plan the Party:** “The object of this game is to plan a party with your partner—whatever kind of party you want...but don’t get too wild! For this first brainstorming session, I want the suggested idea to be met with a “no,” and a justification. For example, if my partner were to say, “I think we should have cake at the party,” I might say, “No, I’m allergic to cake.”

I let the students go back and forth for a few minutes, rejecting ideas. I asked them to do it again, this time with a “yes, but” response. Such as, “Yes, we should have a petting zoo, but only if there’s baby goats.”

And, finally, I asked them to respond with a “yes, and” response where they built upon their partner’s ideas to generate the biggest and most exciting suggestion such as “Let’s have cake,” “Yes! And, the cake should have tons of sprinkles” and so on and so forth...

At the end of the game, students shared observations such as, “With the “no” I eventually just said “Fine, let’s cancel this party!” and “Yes, and’ was the most fun for sure, our ideas kept getting bigger and bigger, they got out of hand, actually.” I wrapped up the warm-up by sharing the purpose of the game,
explaining that we sometimes go into brainstorming sessions and shut down our peer's ideas by saying things like “Yes, but, we don’t have the budget for this,” or “Yes, but students aren’t going to show up.” I acknowledged that there is a time and space for logistics-minded thinking, but there is also a time for thinking big, which I transitioned into explaining the larger purpose of the CLDS as a place where we could think outside the box to solve a problem.

**Take the Group Pulse: Addressing Apprehension**

While the RA staff was able to re-establish a positive staff dynamic through the CLDS, the cohesive team environment was not initially present. Despite the positive mood of the room and the fact that I provided an assortment of snacks, the second I started talking, I felt the positive energy deflate. As I began describing the purpose of the series, some students turned back to their laptops or looked at me with what I named as slight skepticism (Video Observation 2). The first couple of questions I lobbed out to the group were met with long silence before someone finally offered up a response (Video Observation 2). In reviewing the data, students had several negative feelings and perceptions related to the CLDS that they were carrying with them at the start of the series. Figure 9 shows a word cloud generated that presents some of the negative feelings and perceptions shared by students through the written reflections, interviews, as well as my observations.
Figure 9

*Word Cloud of Codes Related to the RA Staff’s Negative Feelings About the CLDS*

![Word Cloud]

Note: Plus signs were generated in MAXQDA when I merged similar codes such as “nervous” and “nervousness”

The prevailing feeling was one of apprehension, unsure of what to expect and concerned about how they might come across in the series. Understandably, students were nervous about the improv comedy components and concerned about the three-hour workshop being boring or detracting from other responsibilities they had. Undeterred, I quickly got the students up and moving around in warm-up games and immediately felt the earlier energy, laughter, and positivity return (Research Journal 2, Video Observation 2). The improv games and activities loosened up the team and helped them feel open to the design studio activities that came later. Amy shared her own journey from apprehension to comfort:

I don’t like people watching me unless I want the attention. So being told, like. ‘Oh, you’re doing this, now this, now this,’ it’s like, ‘Oh my God I’m going to look so stupid, they’re all gonna laugh at me.’ But that is the point of it. So, once you kind of get over that mindset because everyone’s doing it, so it’s not like it’s singled out or anything. So at first, I was a little bit apprehensive but the ones
that included the whole group, like the “Zip, Zap, Zop,” up and the “Cherry Bridge” one, those ones felt better because it’s like, ‘Oh I don’t talk to you that much, but [...] we can still play games together and kind of build up that relationship in a smaller way to help later on.’ (Interview - Amy)

Similarly, in her interview, Aidy shared how throughout the first few improv games, she was worried about being judged by her peers and skeptical that they would participate in the activities. She noted that there were moments throughout the series where she felt uncomfortable, but that the common experience of discomfort was actually an important part of the process and made her feel:

Uncomfortable yet satisfying is the best I way I can describe it, because at the end of the day I left the group very, like, proud of myself and very, like, satisfactory, even though there were some uncomfortable parts [...] at the end of the whole thing you weren't uncomfortable, you were all in the same page, we were all in unison, if that makes sense. (Interview - Aidy)

This experience of feeling discomfort and fear of being judged was named as “vulnerability” a few times through the written reflections and interviews. Vulnerability meant students did not automatically feel comfortable with each other and were hesitant to engage because of their fears of judgment and looking stupid in front of their peers. Students who felt vulnerable did ultimately see the value in engaging with the activities and embracing those moments of discomfort.

Loosen Up: Easing Tensions

At the start of both of my sessions with the RA staff, I noted some students seemed initially unengaged. A couple of students returned to their laptops, and the group seemed especially reluctant to respond, keeping quiet when I asked questions of the large group (Video Observation 2, Research Journal). This observation came up in the student
written reflections and interviews as well. One student wrote they were “bored and uncomfortable initially but energized toward the end” (Student reflection). As noted above, a few of the students I interviewed shared that they felt apprehensive about attending the series, concerned about other obligations they had or unsure of what to expect (Interviews - Aidy, Amy). However, once we jumped into the warm-up games like “Superhero Name Game” and “Plan a Party,” it took only 5 minutes for students to start loosening up (Video Observation 2). The games had the effect of helping students feel more comfortable in the larger design activities, as Amy stated:

I think the improv activities just make people more comfortable in general and feel, like, looser. I think a lot of our staff felt very tense and kind of stand-offish, because they weren’t sure what the three hours was going to entail and so that made them a little bit apprehensive to the whole process. But I think, with the improv, it gave them a chance to be like, this isn’t serious, this is for, like, you guys to learn from and for you guys to feel comfortable in and want to participate. Because if you participate in silly little games, it makes you feel better participating in the bigger stuff, I think. (Interview - Amy)

Even the students who I had originally tracked as being on their computers or removed from the groups seemed to be present and invested in the activities. During breaks, these students took the time to talk to their peers rather than hop back on to finish homework, and they jumped in to either lead their group’s storyboard creation or, at the very least, participate in it.

Seeing their peers let loose, laugh, and be silly created an environment where they felt more comfortable engaging in the activities. One student wrote, “I get anxiety over looking dumb which reduces my want to participate. Embracing being silly makes me feel better about speaking up and being myself” (Student reflection). One of my
interviewees, Aidy, was one of those students who seemed apprehensive about the series. In her interview she expressed concerns about being judged by her peers or feeling like she didn’t want to participate unless other people were:

At the beginning, I would stay more quiet and reserved and, like, kind of eye people and that’s it. But as I started gradually getting more enthusiastic between everybody and people just getting on board with it, I was like, okay, I can come out of my shell more, this is just a normal thing now, like, all right, I don’t have to be so uncomfortable anymore. (Interview - Aidy)

The warm-ups made students feel more willing to participate and offer ideas. I noticed that one student was on her laptop sitting on the couches, on the outside of the team at the beginning of the series, and I was concerned that she might not participate during the activities (Video Observation 2). I observed that after the warm-up games, she was participating in the activities a lot more and was one of the first people to ask a question during the “Dr. Know-it-All” game, though she continued to be reserved participants through the series (Video Observation 2). Jordan, who was also one of the quieter members of the staff, reflected the impact that playing through improv had on the students:

I’d say it allowed people to talk more to each other, because before then a lot of people weren’t talking to each other and were just avoiding each other. So, I felt like it did open that up a lot more. (Interview - Jordan)

The improv warm ups elevated the mood and loosed students up, ultimately making them more willing to participate in the games and design activities.

Create a Fun Environment: Setting the Tone for Group Creativity

The cumulative impact of the improv activities and collaborative design studio was the creation of a dynamic and positive environment. Despite the preliminary
concerns voiced by the RA staff, the student’s perceptions and experience of the CLDS was overwhelmingly positive. Figure 10 is a word cloud depicting the positive words students associated with the CLDS. Right in the center is the word “fun” which showed up 21 times throughout the data. Other words that popped up multiple times were “laughter,” “opening up,” “comfortable,” and “energy/energized.”

Figure 10

Word Cloud of Codes Related to the RA Staff’s Positive Feelings About the CLDS

The ability to have fun in a workshop setting emerged as a major takeaway for Kristen who shared:

That’s my takeaway - you can have these, like, structured programs, and you can have these, you know, meetings, but you can also have fun with it. It doesn’t have to be this cut and dry, “Okay, what are we going to do?” like, we can laugh and enjoy ourselves. (Interview - Kristen)

Recalling that the RA staff was entering this series with some apprehension and lingering staff dynamics challenges, the CLDS evoked positive feelings which students
found beneficial. Kristen reflected on how the series helped the overall mood of the team:

Honestly, I think it was really beneficial and I’m not just saying that. I really appreciated it. [...] It was really fun just to see my staff let loose and not have all this stress on top of us 24/7, talk about heavy topics [...]. A lot of our staff meetings this semester have been online, but, even when we've had a couple that are in person, you know, normally we leave immediately and just go straight to our rooms or your homework, or whatever the case. But it was nice, because I think a lot of people kind of stayed around a little bit. We were talking with one another, and you know, eventually we all went our own ways, but it was nice, because I feel like it was more natural it wasn't like, ‘I can’t wait to be out of here.’

(Interview - Kristen)

While the series happened later in the semester, a couple students shared that they wished they had experienced the CLDS earlier because of the positive energy and good feelings that emerged from the series.

**Learn the Format: Design Studio Application**

**Defining the Design Project:** “This series isn’t just going to be playing games—though, honestly, I could watch your improv scenes all day—they were so funny! My hope with our time together is that we will identify an issue facing your residence hall and work together to create a couple of different solutions. When I met with your CD earlier this month, she shared that she really wanted you all to pick the direction of our design studio. So, what we are going to be doing is spend some time identifying some possible things you might be able to address through our challenge. Think about what you might like to see improved about the hall. And please don’t worry about things like money and
reality—at this moment in time, everything is fair game! Each of you has a stack of post-its in front of you. I am going to give you 3 minutes to identify 5 different things we could address. One idea per post-it.” After the time was up, I asked the groups to start combining similar ideas and then gave them 2 minutes to vote by putting hash marks next to their top two choices. From there, each group reported out what they talked about. In both groups, there were themes of minimal student engagement in the halls and a lack of community. As such, I spent a break synthesizing this into our “How might we” question which I asked them to give feedback on and agree to tackle. The question we landed on was “How might the Resident Assistant staff create an active and involved dorm community?”

The process of storyboarding and creating a pitch was a notable experience for the RA students. While students saw the value of the improv activities in preparing them for the design elements, it was the creative and collaborative process of generating a solution to their design challenge that was the primary outcome from the series. In my coding memos, I wrote how students were more focused on the design studio activities than the improv games. Kristen noted that her biggest takeaway was the storyboard and pitch creation activities:

I think what stood out to me the most and I walked away feeling the most beneficial from that [storyboard and pitch creation] because it was a time period where we were able to reflect with the different sessions, but also say okay we’ve done all this work, like, it wasn’t just random activities that were throwing together, this is kind of why we’re doing it, and now you have this thing that is created. (Interview - Kristen)
The integration of playful activities alongside exercises that required them to brainstorm, collaborate, and create a solution to a problem in their dorm was more valuable to them than just the improv games alone. Amy noted:

[The CLDS was] not like a typical like [...] meeting where we are going to do this, like, this process [...] to teach us about teamwork” it’s, like “okay well that’s boring.” But you made it into a fun way where it doesn’t really feel like I’m being lectured [...] due to all the activities. So I think it’s not your typical seminar, it’s very much engaging and, actually, I think helpful to the end goal of solving a problem. (Interview - Amy)

Students viewed the CLDS as different from previous team building workshops they had participated in and appreciated the intentional effort to focus on an issue that had immediate relevance to their dorm.

Get a Prompt: Group Goal

To ensure students had buy-in and control over the direction of the design sprint, I engaged them in a couple of activities where they individually and collaboratively brainstormed possible issues they could address through the design sprint. The question they ultimately landed on, “How might the Resident Assistant staff create an active and involved dorm community?” was designed to be broad enough to allow students to identify a lot of potential solutions but narrow enough to ensure students felt like they had a clear direction to pursue.

The value of a common group goal emerged in the first set of student reflections where responses included: “I learned we are all interested in building a community with residents,” “Surprised that as a group we all want more engagement with residents & programming...seemed like as a group we were feeling less motivated for programs.
Interested to see ideas.” For Amy, this purpose helped her feel more invested in the outcome, recognizing that she was not the only one impacted by the issue:

I think with the creative designs to do it wasn’t about needing help is just about you know you all have this issue so it’s like it doesn’t just affect me individually anymore, it affects all of us and affects the people, the residents, that we serve and so I feel like understanding that it’s a teamwork is in everyday life, obviously it’s like you can’t always escape it so how do you make the best of it? (Interview - Amy)

The identification of a problem that had been plaguing the RA team for the year helped the group feel more buy-in to the process and helped them see the series as more valuable than previous team building workshops.

**Know your Role: Equal Participation**

One of the group flow concepts we covered was equal participation in which all members are invested and play an active role. Interestingly, for the RAs, equal participation went beyond equal involvement; it also included the identification of specific roles held by members of the group. Students shared that teammates organically fell into roles aligned with their strengths. For example, in one of the groups, I observed two students immediately jump at the opportunity to draw pictures because of their love of art, while others assumed the role of clarifying the storyboard process and making sure everyone was onboard with the direction (Research Journal 2).

The element of time put additional pressure on the students to quickly jump into roles. For example, one of the groups was initially struggling to get started with their storyboard and were rushing to create their pitch. This pressure catapulted the group into action with everyone pulling their weight to either draw a picture, create a script, or clarify ideas (Research Journal 2). As a result, multiple members from this group
identified this moment as one where they felt in flow. The image below (Figure 11) from a student’s reflection showed how this group all played an active role in the pitch process.

**Figure 11**

*Snapshot Reflection of a Time When the RA Staff Was in Group Flow*

![Image of a student's reflection showing roles and contributions]

*Note: Eight participants gathered around a table and in front of their storyboard with roles outlined including “narrators,” “prop,” “actors,” and the statement “everybody finding their role & contribution in the pitch”*

The identification of strengths-based roles was reinforced by Amy:

For our pitch it was kind of everyone finding a role and where they fit in. And what their strengths are that can help so like [the Community Director] and [another team member] are really, like, public speakers, are really good at it. So, they are okay with selling the product and talking to people, whereas us who are a little bit more shy, kind of, don't take on an acting role in it, but still support it in a smaller way. So yeah, overall, I think everyone kind of fit in naturally where [...] their strengths lie best. (Interview - Amy)
Recalling that the RA staff had experienced previous group challenges, particularly around equal participation, the CLDS showed what it would look like when the group actively coalesced around a common goal. Seeing how each staff member contributed during the design studio helped Kristen identify what it would look like when a group got into flow:

Just like in comparing it to the previous semester, where there was a really disproportionate teamwork, I think this definitely helped us maybe even out, or allowed us to all contribute in some way, shape, or form. Obviously, there are still people that had maybe some bigger parts compared to others, but I think it still allowed everyone to feel like they were an important member in that they were able to help out. (Interview - Kristen)

For the Resident Assistant staff, equal participation was closely aligned with assuming roles on the team. Even when those roles were perceived as being more vocal in the process, they were not elevated in terms of status or power. Each group member felt that their contributions were equally important and relevant to the success of the group.

**Start Acting: Generate Ideas & Solutions**

**What If Challenge.** “I’ve been thinking since we last met about your pitches. I think they are heading in the right direction—having a giant calendar in the hall is a great idea, same with a big event. But I can’t help but wonder how we might be able to push our ideas even further to come up with something that has never been done in our dorms before. To do that, I am proposing the ‘What If Challenge.’ On these pieces of paper, I have a number of prompts that say something like, ‘What if, blah, blah, blah’ and you are going to have 5 minutes to come up with as many possibilities as you can. Like, if your prompt said, ‘what
if you must include celebrities?’ then you will come up with as many ways to include celebrities in your solution. Does that make sense? You will think about your solution—like the calendaring system or getting out into the community—and consider what if this solution was constrained or elevated in some way by your ‘What if’ prompt. You have 5 minutes on the clock. Turn your paper over and begin!”

The three prompts I gave to students were: What if your solution had to spend $1 million dollars? What if your solution could only use technology that was available 100 years ago? And What if your solution had to include technology that hadn’t even been invented yet? After the time was up, I got the students into their groups and they started sharing what they brainstormed such as “get everyone a goldfish,” “build dining halls in every building,” “holographic, interactive signs in the courtyard.” In their small group sharing, I heard multiple students reference that this was really hard to come up with a lot of unique ideas.

**Initiate the Scene: Solo Idea Generation**

After warming up with improv games, I got the students to start brainstorming solutions to their problem. I gave students individual time to come up with ideas first, writing them down in the “Crazy 8’s” activity and then combining them with their peers to identify commonalities and themes. The rationale for this sequence was to help students generate ideas as individuals before being influenced by their peers. I noticed after the first session that a lot of the generated ideas were rather limited program ideas, or things that may already exist in the dorms (Research Journal). I wanted the CLDS to help students think bigger and push their thinking. As such, I added in the “What if
Challenge” described above which showed up a few times as an activity that was difficult for students. Sarah said:

It was a little difficult at times coming up with things. So, especially, again with kind of the improv stuff just coming up, coming up with things just kind of on the fly, and it was also difficult letting myself think of the big things. Especially, like, I know, one of them was if you had a million dollars, you had to spend it. For me, that was difficult because there’s always such a money constraint, so just kind of letting us out and, kind of, that we can think of anything we want, I think that was a little difficult. (Interview - Sarah).

This same sentiment was echoed by Amy who struggled to come up with ideas with technology that has never existed before (Interview - Amy). Similarly, Kristen shared that the design activities that pushed her thinking were interesting:

I’m a very analytical person. I think ‘okay what’s the product and then, how do we get there?’ [...] The design made me flip my thinking and say ‘Okay, what are the million and one possibilities, if you don’t have to think about finances, the real value behind anything, what could you do?’ and that’s not how I just naturally think with, like, anything I do. So, it was really interesting. I honestly really liked [...] just [having] all these possibilities and then seeing, “Okay, these are actually like something that I can actually do. I’m less limited than I originally thought I was in that way.” (Interview - Kristen)

The “What If Challenge” prompts came up in almost every interview I had with students and, according to them, was an important part of helping them break outside of their comfort zones and to expand their thinking.
Heighten the Scene: Collaborative Idea Generation

Storyboards & pitches. It was time to present their final pitches. The hustle of activity towards the end as I gave the five minute warning was palpable. Everyone in the two RA pitch teams jumped into action by creating final slides for their storyboards, grabbing costumes, portable speakers, and doing a fast practice round of their pitches.

One of the groups coined themselves the “No Caps” (‘no cap’ being contemporary slang that means ‘no lies). Wanting some team solidarity, they all ran to their rooms to grab baseball caps so they could have a similar costume. The “No Caps” also latched onto my explanation of the pitch activity as their “Shark Tank moment” (referencing the popular TV show where entrepreneurs pitch their ideas to investors). When it was their turn to present, all seven members walked into the room to the Shark Tank theme song and made-believe that their audience were the investors ready to take on a financial stake in their plan of a giant bonfire and concert on the campus mall.

Meanwhile, second group took the idea of improv to the next level, preparing an improvised skit to introduce “FRANK” (aka the “Futuristic Resident Assistant Network of Knowledge”), a robot RA that used artificial intelligence to communicate upcoming reminders, events, and information about the dorm to residents. The combination of narration and role play perfectly showcased how the group envisioned FRANK taking a central role in their dorm.

At the end, the groups had the opportunity to give each other feedback, though it was mostly effusive praise for the creativity presented by the teams. As we headed back to the table to debrief the exercise, I heard one member of the
No Caps say, “[The other team’s] idea was definitely more creative, but our pitch had way more energy!”

Once the RAs had formulated individual ideas, it was time for them to combine them and build their storyboards (Figures 12 and 13). The CLDS helped the RAs see value in collaborative idea generation, recognizing that the collective brilliance of the group could go beyond what any one individual could accomplish. In the interviews, students shared how they became better at generating ideas with their peers. Jordan drew important connections between the “yes, and” improv tenant and how that helped his group’s process:

I think it’s similar to what we were talking about earlier, like how we throw around ideas and see what others thought of it and then as we are talking more and more about the idea, people in my group were starting [to be] more excited about the idea. And like, “I like the idea,” like the concept that you’re talking about during the workshop, “yes and,” like “yes, I like the idea, here we can throw this” and that’s when we started flowing together and coming up with more ideas for the program. (Interview - Jordan)

Throughout the series, this generative process was on display. I noted that there were a lot of ideas being combined and encouraged and very few instances where ideas were discounted (Research Journal). Students felt that the collaborative process helped ideas take on a bigger form as was the case when students shared their “What If Challenge” responses and identified ways to take their original ideas into new territory by combining ideas. One student wrote in their final reflection, “My understanding of group creativity increased to include ‘unrealistic’ things that can be altered to be realistic.
This experience opened my thoughts on how to approach group/team work with an opened & excited mind in work & school” (Student reflection).

**Figure 12**

*Resident Assistant Staff Storyboard 1*

*Note: RA Storyboard 1 shows the storyboard for FRANK (The Futuristic Resident Assistant Network of Knowledge), an interactive platform where residents get information about the dorm, events, how to do laundry, submit a maintenance request and more.*
Note: RA Storyboard 2 shows the “No Cap’s” groups solution which involved students being invited to a large campus event with a bonfire, marshmallow roasting, and open mic performances that happens outside the dorm in the middle of campus.

**Build the Scene Together: Blending Egos**

Beyond generating ideas, the design studio helped students make decisions as a group by combining ideas and building consensus. This required students to relinquish their hold on individual ideas and make decisions that benefitted the whole group. In each interview, I asked students to share with me how they felt decisions were made in their group. For many of the RAs, decision making happened organically, with groups implicitly deciding to move forward. In this way, the creative process evoked the group creativity concept of collaborative emergence in which a groups’ decision making becomes a function of the whole rather than any one person deciding. Kristen explained:

I think there was a general consensus that would happen. If there was a really good idea, we would all kind of agree on it, but it wasn’t like okay we’re going to take a vote on like new things, it was just something that, in a way, naturally just happened. We would all just start talking about it and so it’s kind of like an
unspoken agreement that that was what we're going to work through. (Interview - Kristen)

Students saw decisions being made as a collective with ideas building upon one another and affirmed through consensus-building. Aidy shared how this decision-making process looked to her:

I believe the way [decisions] got made, it was like [...] one of us would mention something, we’d try to put it into practicality and if it worked, we would incorporate it. If it didn’t, we’d scrap it, as well if it was a really good idea, we would all be very much enthusiastic and be, like, ‘Yeah let's incorporate this! Let's do this!’ [...] So it just depended on both practicality and enthusiasm. (Interview - Aidy)

Evoking the group flow tenet of blending egos, Amy expressed that prior to the CLDS, she identified as a student who preferred to do things independently, putting forth her idea and attempting to persuade others to go along with it. She identified that the CLDS challenged this mindset and helped her see a value in combining ideas:

It crossed my mind that I don't always have the best idea, and so kind of listening to everyone is very important, even if I don't necessarily think it's the best way or the best solution in the moment, it could be the best and it may be a short-term solution working up to the long term solution. [...] So if I think there's two really good ideas, then why not just combine them and utilize both of them? (Interview - Amy)

The experiences of these students mirrored what I observed throughout the series as groups worked together to generate ideas. I noticed that in both design teams, there were students who played a more dominant role in vocalizing and asking questions, though every member was participating through non-verbal head nods and body
language (Research Journal 2, Video Observation 2). Kristen noted this in her interviews too, saying that her group had loud students who seemed to push decision making forward, but that she ultimately felt everyone was involved in consensus making (Interview - Kristen). Students such as Aidy and Jordan who shared that they were more reserved throughout the process felt that they were still able to actively contribute to the group and felt their ideas were valued (Interviews - Aidy, Jordan).

**Take What you Learned: Reflect and Apply**

One of the goals of the *Creative Leadership Design Studio* was to help students see the longer-term relevance of creative collaborations. To this end, I spent time sharing current data about collaboration in the workforce and helping students frame what they learned about group creativity in a mock interview response. Students were asked to share about a time they successfully collaborated on the creation of a product, process, or service. In their responses, several group flow elements came up, particularly the idea of building upon other’s ideas, which referenced the “yes, and” tenet and keep moving forward component of group flow (Appendix D).

Jordan, a senior double majoring in molecular cellular biology and psychology, shared that he was planning on attending medical school and, hopefully, specializing in pediatric oncology. He noted that communication and teamwork would be essential to his success in that he would need to work with other physicians, office assistants, and nurses and would need to effectively communicate with patients and their family members. One of Jordan’s major CLDS career connections was with the “yes, and” improv tenet which he saw as a useful strategy that could be used in helping an office team create a friendly and welcoming environment. He shared how would lead his team with a spirit of “yes, and:”
I’d say like sitting down with the team, like, getting their ideas while also proposing mine, too. And I like from what I learned from this workshop, like combining ideas, like saying “yes, and we can include this.” And, you know, just facilitating so that way people can be able to get their ideas out and hopefully incorporate the ideas of everyone in the team. (Interview - Jordan)

Kristen was able to see immediate applicability in her future career within higher education administration. As a senior graduating with a B.S. in leadership, learning, and literacy and a B.A. in francophone studies, her next step was to pursue a master's degree in higher education student affairs administration. In fact, she had recently accepted a graduate assistant position as an Assistant Hall Director at her next institution. She shared that one of her future responsibilities would be advising the hall council students and she would need to help them troubleshoot ideas and think outside the box. Kristen astutely noted that there were times during the CLDS where she would step in to help the team’s process by asking a question or clarifying a prompt but did not specifically give the direction. As a future organization advisor, Kristen observed this as a strategy she would want to implement in the future:

[I want to make] sure that within my role, I am not volunteering and overstepping but I’m just offering wide questions, which I think was a really good example in the design studio. Like, that's how we all started off with just like these overall prompts. And then [...] if you saw that we were kind of struggling or kind of stuck with something, you'd ask us a question and kind of go off on that road and get to the end result. So I think just kind of going through that example and making sure not overstepping and more doing like the advising aspect and, like, being that guiding question. (Interview - Kristen).
Sarah, a sophomore systems engineering major, identified a future goal of getting a PhD in biomedical engineering and saw a lot of connections between her career goal and the CLDS. She shared that biomedical engineering requires collaboration in order to create innovative solutions. As such, she saw a lot of career relevance with the CLDS. Specifically, the idea of thinking outside the box and creating big ideas was important to her. “I think being able to think big is going to help, especially with medicine, it's always ever changing and there's always things that can be discovered. So, I think just the concept of thinking big and not really limiting your ideas is definitely pretty cool. (Interview- Sarah). One of the tenets that really resonated with Sarah was, “yes, and” which she viewed as a tool to help groups develop big ideas:

I think a lot of times with myself and others, we tend to be, like, ‘Yes, but I'm not sure about that.” We kind of stop the ideas. And I think the concept of trying to build upon or even redirect but still keep some of the original concepts, I think is a really big one that I think I will try to continue on with. (Interview - Sarah)

Amy’s future goal involves becoming a nurse, specifically a travel nurse or nurse practitioner. She identified the importance of communication and having “people skills” as requisites for success in the future. While Amy didn’t believe that she would be directly creating new innovations in the future, she did see the importance of collaborating on future processes and advocating for changes within their workspaces:

I think as a nurse and working in a hospital or a clinic setting, there's always the chance for improvement. I don't know if it’d necessarily be, like, on a team, like, ‘Okay let's create something,’ but more of like, ‘Oh, if we had this in our hospital or in our clinic it would help the patients so much more.’ So, I don't know if it’ll necessarily be like creating something and designing it, but more of like creating
that pitch, for this is why we need it, this is how it will help, this is how it’d be used, etc. (Interview- Amy)

Aidy, a psychology and Spanish double major with minors in criminology and music, shared her aspirations to become a forensic or criminal psychologist and work for the FBI. Aidy identified being a good listener as a critical skill for success within her chosen field. Furthermore, she noted that she would need to be able to collaborate with many different people as a criminal psychologist:

If I want to be a criminal psychologist, or anything like that, I have to work with not only subjects, but with other partners. [I’ll] have to work with either a medical team, a court team, like, different cases and all that involves different people. And so it’s not just me in those cases, it’s others and [...] we all have a common goal, and that is either to help or to reach the end of the line of our goal. (Interview - Aidy)

Aidy, who had indicated that she had initially been very hesitant to participate in the CLDS, noted that one of her biggest takeaways from the series was to speak up more and value her contributions, saying that in the future, “I might speak up just a little bit more. As I said, the only time I ever speak up is when no one is speaking up, so I think I’ll just speak up when I want to speak up instead of like when it's required (Interview - Aidy).

Throughout the Creative Leadership Design Studio, the RA students showcased the importance of group creativity in their future careers. All students that I interviewed noted the importance of collaboration in the future and had at least one tangible takeaway from the series regarding something they would want to do differently in the future or how they would apply a concept that was covered.
Resident Assistant Staff Case Summary

The RA staff expressed many positive feelings and experiences about the CLDS. While some RAs were initially apprehensive about the series, everyone shared that the CLDS ended up being a fun, engaging, and worthwhile leadership development experience. Playing the improv games and participating in the design activities helped the RA staff feel more connected as a team. It also created a more relaxed and enjoyable environment where students felt comfortable participating in the activities. The design studio application was especially valuable for the RA staff as they enjoyed tackling the problem of community and engagement in the dorm. Throughout the series and subsequent interviews, the RA staff identified how the group flow concepts and improv tenets supported their creative process. Looking to their futures, all the RAs I interviewed made connections between the CLDS and the ways in which they would be collaborating in their careers.
CHAPTER 5
DISCUSSION

All I can tell you today is what I have learned. What I have discovered as a person in this world. And that is this: you can’t do it alone. As you navigate through the rest of your life, be open to collaboration. Other people and other people's ideas are often better than your own.

- Amy Poehler (2011)

In a rapidly changing economy, the ability to collaborate on creative and innovative solutions will continue to be a highly sought after skill by employers. As such, higher education is challenged to ensure that graduates are equipped with the transferable skills they need to succeed through both curricular and co-curricular approaches (Finley, 2021; Peck, 2017). The purpose of this action research case study was to explore the impacts of a co-curricular workshop series, the Creative Leadership Design Studio, that used the playful practice of improv comedy to develop students’ group creativity skills.

Aligned with the practice of multiple case study methodology, in Chapter 4 I presented both the Arizona Arts Ambassadors and Resident Assistant cases to showcase the unique experiences had by both groups (Yin, 2018). While there were distinct differences in the composition, size, and goals of the groups as well as differences in the ways they experienced the CLDS, there are also a number of key findings that can be drawn by synthesizing the experiences of the students in both cases (Campbell, 2010; Yin, 2018). In this chapter I share the “emergent themes and explanations” that were revealed through the case analysis and connect them to the existing literature on play, improv, and group creativity (Campbell, 2012, p. 175).

I organize my discussion of the themes as they relate to my research questions:
**RQ1:** In what ways does the *Creative Leadership Design Studio* facilitate the development of undergraduate students’ group creativity skills?

**RQ2:** How do undergraduate students perceive and experience the *Creative Leadership Design Studio* as a leadership development program?

**RQ3:** How do undergraduate students describe the career relevance of the *Creative Leadership Design Studio* within their future careers?

I end this chapter with a discussion of the study’s limitations, implications for professional practice and future studies, and my own personal lessons learned as an educator and action researcher.

**RQ1: How does the *Creative Leadership Design Studio* facilitate group creativity skills?**

The first research question guiding this study explored how the *Creative Leadership Design Studio* facilitated the development of students’ group creativity skills. Two overarching themes highlight how the CLDS impacted the students’ understanding and application of group creativity: 1) the playful and collaborative setting of the CLDS facilitated group creativity and 2) purposeful play supported by tenets of group flow and improv comedy facilitated group creativity.

**The Playful and Collaborative Setting of the CLDS Facilitated Group Creativity**

The playful and collaborative setting generated by the CLDS facilitated students’ group creativity skills by creating a fun environment where they felt more connected to their peers and challenged to think outside the box. As an approach to playful pedagogy, the use of improv comedy evoked and minimized feelings of vulnerability and tension, improved group dynamics, and enhanced students’ creative and collaborative processes.
Play Evoked Feelings of Vulnerability

While play through the use of improv games eased tensions and created a comfortable and engaged learning environment in both cases, it did not come easily for all players. For some students, letting loose, thinking on the spot, and performing for their peers was an inherently vulnerable act. While only a couple of students explicitly named what they felt as “vulnerability,” a few others shared concerns about feeling put on the spot or being judged. Brene Brown (2012), a noted researcher on vulnerability, defines vulnerability as “the feeling we get during times of uncertainty, risk, or emotional exposure” (p. 35). She writes that for many of us, play is an inherently vulnerable act because it holds a stigma within society (Brown, 2010). Linked to these feelings are concerns about being creative enough, compared to others, and judged by peers (Brown, 2010; James, 2022). These same emotions show up in the literature on play in higher education where Loudon (2019) noted that students frequently express self-doubt and self-criticism when encountering creative challenges.

In the CLDS, a few students expressed feeling vulnerable when we played some of the bigger improv games in front of their peers (e.g., Dr. Know-it-All). Students’ feelings of vulnerability stemmed from concerns about being put on the spot and being judged by others. The discomfort experienced by some CLDS students is consistent with other studies of improv and play in higher education (Dufresne, 2020; James, 2019, 2022) where students felt some level of psychological distress, even if play ended up being a beneficial learning experience for them.

Play Eased Tensions & Created Comfort

As evidenced throughout the CLDS, play and improv comedy helped students feel more comfortable and confident expressing their ideas without feeling judged by their peers (James, 2022; Loudon, 2019). Indeed, one of the values of play is that it
“diminishes consciousness of self” wherein players are less concerned about how they look or act, they are just free to be present in the moment (Brown, 2009, p. 17). Both CLDS groups felt some level of apprehension coming into the series and voiced concerns including uncertainty of what to expect and fears about being judged by others. And, in both cases, students explained how the improv games helped to quickly ease those pre-existing tensions by loosening them up, generating positive feelings through laughter and fun, and creating an environment where they felt comfortable to be silly in front of their peers.

The experiences of the students in the CLDS aligns with the literature on play in higher education where students who encountered playful classrooms felt more comfortable, less stressed, and more engaged in the classroom compared to non-playful classes (Forbes & Thomas, 2021; Whitton & Langan, 2018). Furthermore, the use of improv in the CLDS mirrors the literature where improv as a playful pedagogy helped students feel more present, positive, engaged, and comfortable (Dufresne, 2020; Higgins & Nesbitt, 2021; Huffaker & West, 2005). Throughout the cases, students who initially seemed tired, unengaged, or preoccupied quickly jumped into the activities and reflected on the fun, engaged, and positive experiences they had through the CLDS.

**Play Improved Group Dynamics**

The combination of play and vulnerability improved the team dynamics of both groups. Similar to Gagnon et. al (2012), the positive impacts of play and improv on group dynamics experienced through the CLDS helped participants build relationships by encouraging them to be in the moment, listen wholly, and take care of their partners. Play is known to deepen social relationships by breaking down power balances, helping students feel part of something, and improving communication with others (Forbes, 2021; James, 2022). These findings were replicated in the CLDS where students felt that
playing through both the improv games and the design studio activities provided a low-risk space for students to try something new and generated positive feelings in the group that extended after the conclusion of the series

**Play Improved Creativity**

While some of the students in CLDS acknowledged that thinking on the spot and generating wild ideas was challenging, they ultimately shared how it helped them be more creative. Like previous research, the CLDS provided opportunities for students to “create possibilities that have never existed but may in the future” (Brown, 2009, p. 34) and be more comfortable generating ideas and thinking outside the box (Boesen et. al., 2009; Kelley & Kelley, 2013). Even the students who focused on “real life” constraints said that they were able to let go of those thoughts and allowed themselves to think more creatively. In this regard, acknowledging that they were just playing encouraged students to think of more wild ideas (e.g., the robot RA created by the RA group) than they might otherwise have if the stakes had been higher.

**Purposeful Play Using Group Flow Concepts and Improv Comedy Tenets**

**Facilitated Group Creativity**

The activities and debriefs in the CLDS helped students draw connections between the improv games, group flow concepts, and the intended learning outcome of developing group creativity skills. Moving from the improv games to the design studio application allowed students to first practice then apply the improv tenets and group flow concepts in the design studio.

**Play with Purpose**

The value of “purposeful play” in the design studio follows the trend in higher education to use engaged learning strategies to facilitate learning (James, 2019, 2022; Whitton & Langan, 2018). Allowing students to work through a rapid, collaborative, and
iterative process using design studio practices (Ioannou, 2018; Sullivan, 2016) was an engaged learning strategy that moved the series from just a bunch of fun and goofy improv games to one that held increased value for students. Students in both cases talked about how putting together a storyboard and pitch to solve a local problem of practice—how to connect graduating seniors to Arts alumni or how to improve community engagement in dorms—provided a real-life context to apply their group creativity skills.

Purposeful play such as this addresses a common concern that students will get nothing out of the curriculum when play is embedded (James, 2022). Addressing a problem within their local context was a valuable addition to the CLDS, according to the students, distinguishing it from previous professional development experiences they had participated in. Multiple students referenced how the CLDS was “more than just teambuilders,” and that they appreciated learning and applying group creativity skills through the combination of the seemingly purposeless play of improv (Brown, 2009) and the more purposeful play of the design studio.

**Play with Peers**

The CLDS introduced students to the conditions of group flow and tenets of improv to help students identify how groups could quickly maximize their collaborative and creative processes. As defined in Chapter 2, Sawyers’ (2017) conditions of group flow were evident in both cases. These conditions, as he posited, may have contributed to the CLDS groups’ ability to get into a flow state, or the moments when a group is operating at its peak by seamlessly building off each other’s ideas and creating a novel product (Sawyer, 2017). Throughout the series and follow up interviews, all ten conditions of group flow were experienced or discussed. Furthermore, students identified how some of the improv tenets including “share the stage” and “yes, and” were mirrored in the group
flow conditions. The six conditions for group flow that held the most resonance with students were: group goal, familiarity, blending egos, keep moving forward, complete concentration, and equal participation. All are explained below.

**Group Goal.** To get into a state of flow, groups must have a clearly defined and commonly held goal driving their work (Sawyer, 2017). This goal must be broad enough to allow for problem-finding creativity to emerge. Through the CLDS, both groups were given some level of autonomy to create the direction of their design studio. The process of identifying, clarifying, and agreeing on the direction of the design studio helped students get into a state of group flow. In discussions, students observed that in prior negative collaborations, not having a group goal led to feelings of frustration. As such, spending time to make sure everyone got on the same page was an important component of the design studio process.

**Familiarity.** In both cases, familiarity, or the idea that group members know each other well and have a shared set of guiding principles to follow (Sawyer, 2017), emerged as a top theme. The students reflected that the CLDS helped them feel more comfortable with each other, which improved familiarity. It was noted that pre-existing relationships set the stage for this component of group flow. However, strong relationships did not exist across the board at the start of the CLDS, either because some members were just meeting for the first time (as in the AZ Arts Ambassadors) or because of pre-existing interpersonal tensions (as in the RA case). Therefore, while the activities in the CLDS were not designed as “getting to know you” exercises like traditional icebreakers or team builders, the students reflected that they still helped them feel more familiar with each other.

**Blending Egos.** Throughout the CLDS, students shared that they experienced the condition of blending egos in which group members relinquished individual ideas to
advances the group’s process (Sawyer, 2017). In the end, students didn’t recall which ideas were theirs or someone else’s. This group flow condition intersects with the improv tenet “share the stage” which encourages actors to give as much time to others’ ideas as their own. When debriefing the improv activities, students named the challenge of relinquishing control because they had an idea of where the games or activity was going and were reluctant to get on the same page as their peers. Blending egos was a reminder for individual students that the end outcome was more important than stubbornly holding onto an idea because it was theirs, therefore putting the goals of the group ahead of the individual.

**Complete Concentration.** Group flow happens when groups are fully immersed in the task and not distracted by anything else (Sawyer, 2017). In the CLDS, both groups experienced moments of feeling completely invested in the activities and tasks at hand such as in the “same word” game or in developing their storyboard and pitches. Sawyer (2017) writes that “group flow is more likely when a group can draw a boundary, however temporary or virtual, between the group’s activity and everything else” (p. 55). While some students expressed apprehension about attending the series because of other competing demands on their time such as schoolwork and sleep, my observations were that students remained fully engaged and present throughout the series once we jumped into the activities.

**Equal Participation.** The CLDS students shared that they felt all members of their groups were equally invested in the process and that everyone played a role during the design studio. Sawyer (2017) identifies effective collaborative teams as self-organizing and contends that creative teams do not require a vocal leader to guide the process; rather, roles will emerge out of necessity. In both CLDS cases, students noted that team members contributed productively and assumed roles that aligned with their
strengths. For example, good visual artists took the lead on drawing the graphics for the storyboards and confident public speakers narrated the pitches. This self-organizing process helped students feel like everyone was equally participating in the design studio.

Keep Moving Forward. The group flow condition of keep moving forward connects to the improv tenet of “yes, and” in which group members keep building upon each other’s ideas by “listen[ing] closely to what’s being said; accept[ing] it fully; and then extend[ing] and build[ing] upon it” (Sawyer, 2017, p. 63). Every student identified how the CLDS helped them build, combine, and clarify ideas. For example, during the improv games, students saw how using “yes, and” moved the action forward rather than halting it with a “no” or a “yes, but.” And, in the design studio, students applied the “yes, and” tenet by building on the ideas of others which Sawyer (2017) explains is key to moving idea generation forward.

RQ1 Summary

The Creative Leadership Design Studio facilitated group creativity skills through the use of purposeful play as students participated in improv games to come up with solutions of a common agreed upon problem. In reflecting on the value of the series, the AZ Arts Ambassadors Stephen perfectly summed up the connections between improv, group camaraderie, and the power of play on creating more efficient group creativity:

And that’s what, you know, we did. We hung out and play[ed] the games and laughed and had a good time and that’s important because I think, too, if we hadn’t played games, we probably could have gotten to the same result with the proposal, as we did. It probably would have taken three more sessions though because we wouldn’t have been nearly as connected as we were. So, I think group creativity and this improv thing, it just makes everything more fun and efficient. (Interview - Stephen)
**RQ2: How do undergraduate students perceive and experience the Creative Leadership Design Studio as a leadership development program?**

The undergraduate students in this study perceived and experienced the *Creative Leadership Design Studio* as a fun and engaging embedded leadership development experience. Co-curricular leadership experiences are important to transferable skill development, but are also challenged by many competing factors such as academic commitments, a crowded extracurricular field, and job and personal responsibilities (Peck, 2017). The CLDS was designed to address some of these challenges by being embedded in an already existing experience rather than asking students to find additional time to participate. Additionally, my observations and the feedback I received directly from the students indicated the CLDS was a positive leadership development experience that they would recommend to their peers.

**Engaging and Having Fun**

Students who attended the CLDS associated positive feelings with the series. These feelings again evoked the literature around play in higher education where play generates enjoyable experiences, improves the learning environment, supports relationships and group cohesion, fosters innovation and creativity, and many other benefits (James, 2022).

Furthermore, the CLDS reinforced the use of improv comedy as a tool to teach the concepts of group creativity. Not only did the improv exercises and games serve the purpose of loosening up the groups and creating a playful environment, but they were also useful in simulating the conditions of group flow, required for groups to experience group creativity. Improv has many tenets (e.g., “yes and,” “share the stage,” “there are no mistakes, only opportunities,” etc.) which paralleled the group flow conditions and set
the students up for success in the design studio. For instance, playing improv games prior to the design studio activities helped students see the improv tenets and group flow conditions such as “yes, and” (keep moving forward), “share the stage” (blending egos), and “there are no mistakes, only opportunities” (potential for failure) in action.

Play as a learning tool is not new and has an extensive community of scholars and practitioners who have explored the value of play primarily in K-12 settings. But the presence and acceptance of play as an engaged pedagogy in higher education settings is a newer and developing field (Forbes, 2021; James, 2019, 2022; Loudon, 2019; Whitton, 2018). The results of my study support other efforts to legitimize play within higher education and corporate settings (James, 2022).

**Embedding Leadership Development**

One of the values of the CLDS as a leadership development program was that it was embedded into an already existing experience and facilitated by a professional staff member. This practice is consistent with newer efforts by Leadership Programs to bring leadership development to groups rather than expecting individual students to RSVP. While involvement and engagement anywhere on campus will support transferable skills growth, Swan and Arminio (2017) contend that the “structure of the activity matters” (p. 23). Highly structured activities led by an experienced facilitator, faculty, staff member, or student will yield better outcomes such as skills growth and campus retention (Swan & Arminio, 2017). Providing structure and meaning to existing experiences such as clubs, campus jobs, research experiences, internships, and more will help skill building be more accessible and intentional (Jackson & Bridgstock, 2021; Swan & Arminio, 2017).

From a logistical standpoint, embedding leadership development into an existing experience made it easier for students to attend. There were a few students in the RA case that shared that they would not have attended the CLDS had it not been built into
their existing staff meeting due to competing demands on their times. For the same reason, the vast majority of students indicated that the three-hour workshop held over two days was preferable to an hour and a half session held over four days. The students in both cases suggested that it was easier on their schedules to block off just two days rather than the four that I initially proposed. The challenge of an ideal time of day was also brought up across the interviews. Some students expressed displeasure at the times their CLDS was scheduled (9am-12pm for the AZ Arts Ambassadors and 7:30-10:30pm for the RAs) while others said they liked the time it was held. Overall, efforts to minimize scheduling barriers by integrating into an existing meeting and scheduling two longer sessions was brought up by students in all the interviews as ways to make the CLDS more accessible.

Finally, the greatest value of embedding the CLDS within an existing structure was my ability to tailor it to the unique needs of the groups. As noted above, the focusing the design studio components on an issue facing their group helped the students see greater value to the CLDS. Generating a solution to a problem specific to their organization allowed them to find common ground and had the potential to create a solution that could be implemented in the future.

**RQ 2 Summary**

Students had primarily positive perceptions and experiences of the CLDS. While some concerns and apprehensions were initially present, students shared that the use of purposeful play through the improv games and design studio generated a myriad of positive feelings throughout the series. One of the facets that set the CLDS apart from other similar learning experiences was that it was embedded into an existing leadership experience. Rather than bringing a bunch of strangers together for a 6-hour series, the embedded nature of the CLDS allowed for students to build upon existing relationships
and for me to situate the context of the design studio within their immediate setting. Embedding intentional skill building into existing activities is a way for leadership educators to elevate co-curricular experiences in order to ensure undergraduates are developing essential transferable skills. One of the AZ Arts Ambassador students summed up their CLDS experience by sharing:

This whole experience has changed the way I see and how I should approach group work/projects in the future. The “Yes, and” principle is not just for improv games, it is a tenet that I will continue to remember and integrate in the way I live my life. The way we all connected as a group mind today was magical. This creative workshop will have been a formative experience for me. (Student reflection 1)

**RQ3: How do undergraduate students describe the career relevance of the Creative Leadership Design Studio within their future careers?**

The demands of the Fourth Industrial Revolution require college students to be equipped with the transferable skills of collaboration and creativity to help them drive new innovations and succeed in their careers (Cross et al., 2021; Peck, 2017). Given the needs of this rapidly changing workforce, the final research question explored how students described the career relevance of the CLDS. Every student I interviewed identified a lesson they learned from the CLDS and how they would apply it to their futures. For the most part, those lessons revolved around group creativity, but in a few instances, students shared insights ranging from how they would facilitate group processes to how they might communicate with others in their future workplaces.

**Group Creativity & Career Relevance**

Students who attended the CLDS were able to articulate ways that they would be required in their future careers to collaborate on the creation of some sort of process,
product, or service. Examples included working with different stakeholders to deliver a photoshoot or partnering with multiple agencies to help solve a crime as a criminal psychologist. In these responses, students pointed to the importance of having a common goal in order to be on the same page as their collaborators.

The ability for students to think creatively and effectively work in a team has been identified as top skills needed for workforce success (Finley, 2021; Peck, 2017). As such, students drew relevant connections between the CLDS and the ways in which they would be required to collaborate and create in their future careers. Students pointed to elements of group flow and how to work with others by using the “yes, and” principle to build upon others’ ideas. Students saw how their ideas were transformed by working with others, ultimately creating something that was more creative than had they worked by themselves. Furthermore, students identified that they would not be working in isolation in their futures. Students shared how they would navigate future creative collaborations and expressed having a positive mindset about teamwork.

**Transferable Skills Growth**

Beyond group creativity, students identified many other transferable lessons from the CLDS to their careers. Students shared how they felt the CLDS in general, and improv specifically, helped them develop public speaking, confidence, and adaptability skills. A couple of students indicated that they experienced some fears about public speaking, including doing the pitch at the end of the series. One reflected that she felt more comfortable because of her level of familiarity with the group and suggested that continuing to practice in settings like the CLDS would bolster her confidence for the future.

In line with the group flow idea of “keep moving forward,” students noted how important it was to go with the flow and be receptive to new directions. Being adaptable
and trusting the process of group creativity was a valuable lesson learned through the CLDS. These findings reinforce the literature in which the use of play and improv comedy has been used as a teaching tool for a diverse array skills including empathy, communication, leadership, adaptability, creativity, and collaboration (Bayne & Jangha, 2016; Boesen et al., 2009; Dufresne, 2020; Higgins & Nesbitt, 2021).

**RQ 3 Summary**

Students who attended the CLDS were able to identify how the group creativity skills they learned through the series could be applied in their future careers. All students shared that collaboration would be a central feature of their futures and learning how to navigate group creativity was beneficial. Furthermore, while the use of play and improv in the CLDS was used primarily to explore group creativity, students referenced many other transferable skills that had career relevance including adaptability, communication, and confidence. Indeed, the career relevance of the CLDS was one of the major selling points of the series and students appreciated the intentional focus on future career application. As Jordan, one of the RAs shared:

[I would let others] know the workshop focuses heavily on teamwork and that's like one aspect that you need for any career field that you go into because you're usually working in a team with other individuals and, if not, sometimes you gotta practice, like, communicating as well. [...] You're going to communicate with other people in your future career because you're always going to interact with someone. (Interview - Jordan)

**Discussion of Limitations**

There are several limitations present throughout this action research study. These limitations include 1) my role as the participant-observer and its subsequent
impacts, 2) lack of inclusion of demographic criteria, 3) video data collection challenges, and 4) time of implementation.

As the creator, facilitator, and primary researcher of this study, I acknowledge that I was uniquely tied to the topic which may have posed a challenge to my objectivity (Mertler, 2020). While I endeavored to let the data speak for itself and engaged in triangulation and member checking, it is impossible to remove my interpretive lens from the mix. Furthermore, students who I interviewed may have experienced some level of hesitation to share their true feelings about the series given my role as the facilitator and researcher. To combat this, I did provide anonymous ways for students to provide their responses such as writing their final thoughts after the end of each session. In hindsight, I would have liked to include some more purely evaluative questions for students to share their opinions anonymously such as “what could be improved for future iterations of the CLDS” or “what would you tell others about the CLDS?”

A second limitation is that I did not include demographic data in my study which may have exposed some findings regarding the way that the CLDS was experienced along identity lines such as gender, race, ethnicity, and others. While the population that attended the CLDS appeared to be visually diverse in regard to race and gender, the interviews were not fully representative of the CLDS attendees, especially around gender. Though I did undergo efforts to recruit interviewees of different racial and gender identities, I was limited by time and response and scheduled with those who responded to my outreach. While the focus of this study did not explicitly look at differences along identity lines, it is critical to acknowledge that students’ experiences and perceptions will always be shaped by their identities and naming those intersections more explicitly may have showcased some different and important findings.
A purely logistical limitation to this study was the use of video recordings as a data source. The video recording data was not as fruitful as my original plan had hoped. This was mainly due to technical difficulties including batteries dying frequently throughout the series and video files that were damaged in the download/upload process and rendered unusable. Furthermore, the size of the group and space limitations posed a challenge to the recordings. The video recordings from the AZ Arts Ambassadors were useful because the smaller size of the group meant that group discussions were picked up on the audio recordings and we were together in one room the whole time. In the RA case, however, the group was split into two connected spaces for most of the design studio which meant that I was only able to capture part of their conversations. There was also much more noise on these recordings because of the size of the groups and sound generated by their conversations which made it difficult to pick up what was being said. Ultimately, the observations I gathered from the video recordings were duplicated in my research journal and showed up in the interviews as well, demonstrating the importance of data triangulation. In future studies, should I use this method again to capture student data, I would use multiple audio recording devices embedded in small groups to pick up more details of those conversations. I should note, however, that the video recordings were incredibly helpful in piecing together the vignettes as I was almost always able to hear what I was saying and pulled direct dialogue to present my findings which ended up being a valuable use for the recordings.

A final limitation of the study was the time of implementation. Though the CLDS was designed to be a short-term innovation, I do believe it would have been beneficial to implement it earlier in the academic year in order for longer term impacts to emerge as well as to provide more time for the groups to enact elements of their designs, if desired.
Implications for Future Practice

Our ever-changing world of work requires creative and collaborative innovators ready to tackle contemporary challenges. The literature is clear that the secret to successful groups is spending the time to equip them with the skills needed to operate effectively (Duhrigg, 2016; Sawyer, 2017). As Google’s head of People Operations summarized, “You can take a team of average performers, and if you teach them to interact in the right way, they’ll do things no superstar could ever accomplish” (as cited in Sawyer, 2017, p. 16). In this regard, there is a significant role for collegiate leadership educators to play in developing and facilitating innovative experiences that improve students’ ability to create in collaborative settings.

Given the crowded co-curricular landscape of higher education, a useful strategy for leadership practitioners to consider is how they might embed intentional transferable skills development into already existing experiences (Peck, 2017). Connecting the CLDS with already established groups allowed me to tailor the design studio experience to the specific needs of the group. While students in both cases benefited from the lessons they learned through the series, the groups also experienced improved team dynamics and positive feelings generated from the experience. Situating experiences like the CLDS within settings such as campus jobs, clubs and organizations, internships, and research experiences will provide additional professional development for those student groups and improve team outcomes.

The findings of the CLDS reinforce the extensive value of play within higher education settings. Students in the CLDS experienced many of the noted benefits of play including a more relaxed and comfortable environment, a willingness to experiment with new ideas, and experienced a flow state in which they lost their sense of time (Brown, 20019; Forbes, 2021; James, 2022; Whitton & Langan, 2018). The parallels between
effective facilitation strategies and play cannot be overlooked. Leadership educators who capitalize on play will be able to create joyful environments, display enthusiasm and humor, model commitment, and communicate effectively (Forbes, 2021; James, 2022; McRee & Curran, 2016). The co-curricular environment is especially aligned with the use of play as the out-of-classroom context removes concerns about grades and provides facilitators with different authority than faculty members, which may allow for more students to feel more receptive to play (Hill & Cebulski, 2022; McRee & Haber-Curran, 2016).

Furthermore, the findings from this study have application beyond a co-curricular setting. The literature indicates that the use of play and improv as teaching tools has relevance in classroom and corporate settings as well (Dufresne, 2020; Forbes, 2021; Gagnon et al., 2012; James, 2022; Vera & Crossan, 2005). The combination of play and design studio employed by the CLDS has applicability in any number of settings. I can see the CLDS being successfully implemented in groups that are interested in improving their team dynamics and tackling a problem through a creative and playful lens. I hope in the future to offer the CLDS to groups in non-profit and corporate sectors as I believe strongly in the value of improv and design as a professional development tool.

Related to the situated context and problem of practice guiding this study, I recommend that Student Engagement and Career Development (SECD) at the University of Arizona scale their leadership development offerings to include a variety of playful and applied learning experiences. The CLDS is a unique experience at the University of Arizona and offers an approach to leadership development that is not available elsewhere on campus. As SECD works to provide transferable skill building experiences through multiple delivery methods such as asynchronous online modules and short-term in-
person workshops, extended and embedded offerings such as the CLDS that utilize playful learning strategies to help students grapple with in-demand skills can be a way to distinguish their trainings from other competing workshops and experiences.

Finally, in order to scale this innovation both at the University of Arizona and beyond, I believe there is ample space to create a “train the trainer” experience to prepare future facilitators of the CLDS. Because of my years of improv and teaching experience, I brought unique positionality and insight into the facilitation of the series. While it is not required that facilitators have an improv background, familiarity with improv would certainly help facilitators impart the lessons of the CLDS. A “train the trainer” model would introduce improv, play, and design studio approaches to a new cohort of instructors and prepare them to implement iterations of the CLDS in new contexts, therefore expanding the reach of the innovation.

**Implications for Future Research**

In keeping with the reflective tradition of action research (Mertler, 2020), I have identified a number of directions for future research including considerations of a mixed method study, longitudinal measures of impact and career relevance, demographic considerations, and critical perspectives.

I believe there is great potential in creating a mixed method study that incorporates quantitative measures of students’ understanding of group creativity concepts. Specifically, creating a pre-and post-survey that asks students to identify the components of group flow and measures how successfully they felt they were able to implement them through the design process could be especially useful in assessing how the CLDS impacts students’ ability to identify the conditions of group flow required for effective group creativity.
Given the findings about group dynamics and career relevance, there is potential
to investigate the long-term impacts of the CLDS. I would be interested to see how
running the CLDS at the beginning of an academic year and building in checkpoints to
see how students are using these concepts in their groups would explore the prolonged
impacts on group dynamics. Furthermore, checking in with students once they have
entered their careers to investigate how they are using group creativity skills would be
fascinating to see if there are long-term career impacts to this co-curricular program.

Additionally, this study did not explore how academic disciplines and prior
experiences of the students impacted their participation in the series and their ability to
collaborate. Investigating contextual variables such as students’ majors, disciplines, and
prior collaborative experiences could reveal how these characteristics impact a student’s
ability to engage in creative collaboration.

Finally, there is value in exploring how the CLDS was received along identity
lines. How might students’ identities including race, ethnicity, gender and more
influenced their experience of the CLDS? In the growing scholarship around play in
higher education, this appears to be a gap in the literature that is essential to fill. James
(2022) notes that play is used in cultures all around the world, but how play is
experienced may look different based on cultural identities. As such, exploring
perceptions and experiences of play with an intentional focus on identity would expand
the literature and perhaps evoke critical perspectives on play that could ensure its use
remains inclusive.

Lessons Learned

Lessons as an Educator

As the creator and facilitator of the CLDS, it was my responsibility to create a
responsive and tailored experience for the two cases featured in this study. In order to be
nimble as well as respond to the constraints presented by time and physical space, the two cases were adjusted slightly to accommodate the groups’ needs. In this respect, the two cases were not identical, nor should they have been as the groups themselves were very different in terms of size, makeup, familiarity, and goals. My preliminary plan for both cases was identical, but as I got into the flow of facilitating, I made adjustments to make sure that students had enough time to participate in the more time-intensive design studio. Adjustments included cutting activities or shortening the amount of time planned. For example, with the RAs, I did not have enough time nor enough space to do the “attacker/defender” or “orbits” activities. The RA group was also substantially bigger, so it reasonably took more time to get through warm-ups and improv games like “Dr. Know-It-All,” meaning that I had to eliminate activities on the fly.

I also learned as a facilitator of this series to make sure that I left enough time for debrief and reflection to get at the important learning outcomes about group creativity and leadership. There were moments throughout the RA case especially where I felt rushed with debrief and did not get to all the points that I would have liked to make during our conversations. While I believe students still learned many valuable lessons, I would have liked to have drawn stronger connections between the concepts of group creativity and the process of leadership so students could see how, regardless of their role in future groups, they could help foster the conditions needed for group flow.

Most critically, I was reminded throughout this process how much I love facilitating and teaching in playful ways. I often joke with my improv friends about how I am a better improv teacher than an improviser, and while I have developed a comfort on the improv stage, nothing fuels me more than those moments in an improv class where I see students have “aha moments.” Throughout the creation and facilitation of the CLDS, I felt so many moments of joy and gratitude for the role that improv has played in my
life. To introduce this art form to new people and to help them draw meaningful connections has been professionally rewarding in ways I struggle to express. Merging my passion for leadership education and my love of improv comedy through this dissertation helped broaden my professional identity and helped me find community amongst other college educators who value play, humor, and creativity as legitimate and meaningful pedagogies.

**Lessons as an Action Researcher**

As a researcher, my greatest learning on this journey has been in improving my self-confidence and skills around action research. Because action research is situated within our local contexts, it affords practitioner researchers incredible opportunities to drive change (Mertler, 2020). I found this especially relevant to my role as a leader within Student Engagement and Career Development where I felt challenged to adequately showcase the impact of our leadership programs or justify the playful practices we used in our programs. Through action research and my work on the CLDS, I have learned how to legitimize my case for play and games which I knew, anecdotally, held value to our students. As a qualitative researcher, I have become more comfortable digging into students’ experiences to pull out insights that drive my practice. Identifying patterns through the process of coding and analysis was affirming and raised additional questions for me as a researcher that I will perhaps one day be able to dig into, such as how I could measure long term impacts of experiences like the CLDS.

Towards the end of this dissertation process, I accepted a new role as an Assistant Professor of Practice in our General Education program at the University of Arizona. While this new role takes me away from the co-curricular leadership education world, all of the lessons I learned throughout the CLDS and my research process are carried with me. I have already built in play and improv into my Introduction to the General
Education courses and have seen the benefits presented in this dissertation in regards to engagement, comfort, and fun in my classroom. Furthermore, my role as a faculty member within a new General Education program will allow me to use an action research approach to investigate the impact we are having and to make rapid, iterative, evidence-based changes to the experience.

**Conclusion**

In this chapter, I discussed the results of my study in relation to the research questions and made connections to existing literature. Additionally, I identified the limitations, reflected on my lessons learned, and shared recommendations for future practice and research. The results of this study suggest that there is value in the co-curricular use of play and improv to help students develop the transferable skill of group creativity they will need in their future careers. Through the series, students identified how the use of play through improv comedy improved group dynamics, helped them think more creatively, and provided a low-risk way to practice group creativity. As an approach to co-curricular leadership education, the CLDS was a unique and fun experience. The students expressed appreciation for the opportunity to apply their skills through the design studio which made the series relevant to their situated contexts. Finally, students saw the importance of group creativity skills in their future careers and shared lessons they learned from the CLDS that they could implement in said careers. As we look to the future, the Fourth Industrial Revolution will require college graduates to be prepared with a plethora of transferable skills in order to meet the demands of a rapidly changing economy. Prime among those skills is the ability to collaborate on the creation of innovative products, processes, and services. As higher education grapples with how to close the transferable skills gap, there is space for co-curricular leadership
educators to create and implement unique experiences grounded in play, improv, and
design such as the Creative Leadership Design Studio.
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through cocurricular experiences in postsecondary education (pp. 19-38).
NASPA - Student Affairs Administrators in Higher Education.


Session 1: Intro to Improv & Building the Team

Goals of Design Studio 1:
The objective of the design studio is to introduce the tenets of improv comedy and set a foundation for the design studio. This first studio aims to develop the team and get them comfortable with each other.

Learning Outcomes: Participants will:
- Identify key tenets of improv comedy
- Establish interpersonal connections with peers
- Practice improv tenets through improv warm ups and games
- Collaboratively determine the focus of their design project

Materials Needed:
- White board markers
- Large post-it paper
- Improv tenets on a large post-it note or whiteboard
- Markers
- Large post-it stickers

Introductions: (10 minutes)
Facilitator introduction:
- Share purpose of the series: importance of collaboration in today’s work environment (85% of workers time is spent in collaborative endeavors), employers are looking for students who are ready to collaborate and create together.
- Explain: this series is going to explore what it takes to effectively collaborate - and we’re going to do it in a fun way: through improv games
- Why improv? Share personal experience of improvising and collaborating - “yes, and”

Superhero Names:
- (Purpose: building community, learning names)
  - Ask participants to stand in a circle
  - Ask each student to Share name, pronouns, and alliterative superhero name & action (ex. “Jackhammer Jess”)
  - Introduce the concept of passing energy around the room
  - Ask each player to say their name and “pass the energy” to another player by first saying their own name followed by the name of their peer (ex. “Jackhammer Jess” to “Jubilant Justin”)
Fundamentals of Improv: (10 minutes)

- Share the primary commitments I am asking for throughout the series. (If possible, write them on a white board or on a large post-it note)
  - **Yes, And:** Seeking areas of agreement - doesn’t mean in life you always say “yes,” - respect what your partner has said and start from an open-minded place. And - you build up
  - **Make Statements:** don’t ask questions (this puts the burden of having to create on someone else). Be declarative
  - **Share the stage:** Don’t hog the air time. Give as much time to others’ ideas as your own.
  - **There are no mistakes, only opportunities:** Don’t worry if you “mess up” - just keep moving forward. Your “mess up” might become the opening for a great scene.
  - **Ultimate Commitment:** Give it your 100% effort. Lean into any moderate discomfort you have about looking silly. Amy Poehler quote: “There is power in looking silly and not caring that you do.”
  - **Don’t worry about being funny:** the funny will happen! Focus on being present, connecting with your peers, and “yes, anding”

Warm Up Games: (10 minutes)

- **Zip Zap Zop:**
  - (Purpose: Sharing the energy, failing forward, thinking fast)
    - Have participants form a circle around the room.
    - **Instruct:** You will pass the energy around the room by pointing at a person around the room and saying “Zip,” the next person will continue the pattern by pointing at another person and saying “Zap,” then the next person will continue by saying “Zop.”
    - Encourage participants to speed up as they get more comfortable with the pattern
    - Note that if they make a mistake, they should continue to go on without stopping the game
    - **Quick Process:** Fail forward. There are no mistakes, only opportunities: In life, we are going to make mistakes. The objective is to not dwell on it, but to just keep going and keep on building energy.

- **Chase:**
  - (Purpose: building momentum, idea generation)
    - The objective of this game is to create momentum and group energy.
    - Each player will take turns creating a sound and motion. Each consecutive player will mimic the first player and pick up speed until
they have gone around the circle (sort of like “the wave” at a sports arena)

- **Quick Process**: Note that part of this game is building collective team energy, each person honors the idea of the person who came before and builds upon it.

- **Whoosh/Bong**:
  - Have the group stand in a circle and explain that this next game is an energy passing game and there are a few ways that energy can be passed:
    - **Whoosh**: Making a “whoosh” sound, use both arms to pass energy to the right or to the left.
    - **Bong**: Make a hammer motion with your arm and say “Bong.” This serves as an energy wall and stops the energy by passing it back in the opposite direction.
    - **Tron**: With your whole arm point at a person anywhere else in the circle and say “Tron” to pass the energy to the person you point to.
  - Play the game with the top three moves and when it feels like the group is getting it, pause them and add on the next two moves:
    - **Ramp**: Make a ramp motion upwards and downwards with your arm and say “Ramp” to pass the energy, skipping the person standing next to you.
    - **Bowl of Cherries**: Make an imaginary bowl by cupping your hands together and say “Bowl of Cherries.” Everyone in the circle will make a goofy noise as if you were a cherry that had fallen on the ground and move chaotically to another spot in the circle.

**Improv Games: (30 mins)**

- **“Yes, Let’s!”** (Purpose: paying attention, yes, and-ing, building the reality together)
  - Tell participants that they are going to be asked to move around the room pantomiming actions related to the environment that they are given. For the first couple of ideas, the facilitator will call out an environment (ex. “Let’s go to the beach!”) and participants will respond, “Yes! Let’s!”
  - After a couple of suggestions, tell participants that they will be the ones naming the new environments and have them randomly shout it out with participants again responding “Yes! Let’s!”
  - Do this 3-4 times

  - **Process**
    - What did you observe? How did you feel?
    - What improv concepts did you see play out in this activity?

- **Plan the Party**
  - Get the group into pairs and give them the objective of planning a party.
First, each pair is instructed to have each idea met with a “No” from their partner. (Ex. “I think we should have a petting zoo at the party” met with “No! I am allergic to goats.”)

After going back and forth like this for 1-2 minutes, switch it up and ask what the parties are looking like. Then, ask the group to do the same thing, but respond with a “yes, but” (this suggests that there is something of value with the original idea, but it’s not being fully embraced).

Finally, do the exercise again asking the group to “yes, and” the ideas by taking the idea and advancing it with their own (ex. “We should have cake at the party.” Response: “Yes, and, it should have rainbow sprinkles”) - have the group keep yes, and-ing each other’s ideas and see what wild ideas are generated.

- **Process**
  - What did you observe? How did you feel?
  - What improv concepts did you see play out in this activity?
  - What can be challenging about using a “yes, and” mindset?

### Dr Know It All

- Get 3 volunteers to participate tell everyone else to turn off their camera on their cameras and everyone else to turn theirs off
- Create a response to a question posed by the audience, one-word-at-a-time. When you feel like you have gotten to a good solution, you will all do a virtual bow
- Repeat 3 times, or until time

### Debrief:
- What was easy about this? What was hard?
- What does this game have to do with collaboration?
- **Define Collaboration:** There is a good likelihood that your current or future job will require you to interact successfully with others - you will need to be able to build upon others’ ideas and advocate for your own. Good leaders are able to identify the strengths of others and harness them for the well-being of the team.
- **Improv Connections:** Effective collaborators are able to share the stage which sometimes means giving the small words, giving up control, and supporting your peer’s ideas.

### Takeaways:
- Listening intently, being willing to contribute the small words, letting go of control - sometimes you are giving ideas, and sometimes you are taking them

### What Are You Doing? (if time)
- Get 5 volunteers to play and line up at the front of the room facing the audience.
Explain: For this game, I will get a suggestion of an action for the first player to mime. Then, the second player will ask, "what are you doing?" The first player has to say something completely different from the action. For example, if the first player is pretending to play hockey and is asked “What are you doing?” they might respond by saying, “I’m baking cookies for school.” As soon as the first player answers, the second player starts acting out that answer (ex. Baking cookies). Then the third player asks, "what are you doing?" and the second player answers with a different action, and so on... The game involves going through the lineup 3 times so all players will have acted out something 3 times. To get us started, I need the name of a household chore.

Design Application Part 1: Define the Challenge (30 mins)

Quick Introduction to Design Studio Method:
- Explain: A design studio is simple! It’s a fast process that will allow us to generate ideas together by sketching concepts, critiquing our ideas, and refining a solution to our problem (Sullivan, 2016)
- What are we going to be doing? As a team, we are going to identify something that could be improved in your group’s world - what that is will be up to you (or informed by your group’s advisors/leaders).
- Over the next few sessions, we will establish a direction, sketch some solutions, get feedback, and informally “pitch” your group’s final idea
- The design studio will put into practice all of the collaborative and creative skills we’ve practiced and discussed through improv
- The hope: not only will you rapidly create something to solve in your context, but you will learn some activities and strategies to take with you into your future career.

Defining the Design Project: (20 mins)
- Create an Improv Team Name (5 mins)
  - Tell participants to grab a blank piece of paper and fold it into three columns
  - Instruct them to fold it into three columns
  - In the first column, tell them to write down as many adjectives as possible
  - In the second column, tell them to write down as many unique colors as they can
  - In the third column, tell them to write down all the things that they could find in a backpack or purse
  - Instruct each person to pick a name that is comprised of terms from the three columns and have each person share their favorite combo
  - Have the team vote by hand on the name they like the best
• Identification of a design problem? (15 mins)
  ○ Explain: we will be doing a similar process to identify a focus for the design application
  ○ Give each participant a stack of post-it notes
  ○ If no project has been pre-identified, ask participants to individually identify 5 things that they might be able to address through this design sprint
  ○ After 3 minutes, ask each participant to briefly share what they brainstormed. Ask them to keep their descriptions brief
  ○ Identify one person who will be responsible for grouping together similar concepts
  ○ At the end, give each participant a couple of minutes to individually write down their top choice
  ○ Facilitate a process of voting
  ○ At the end of the voting, write down a guiding prompt that will serve as the design focus (ex. “How might we create a way for students to socialize more on campus?)
  ○ Explain that over the next sessions we will be identifying and sketching solutions to this problem

Reflection Activity: (5 mins)
  • Give each participant two large sticky notes
  • Instruct them to write their response to two questions:
    ○ What was your biggest takeaway from today’s session?
    ○ What is one improv concept that you can use in your everyday life? How will you use it?

Take Home Activity:
  • Yes, And in Real Life:
    ○ Tell participants to pay close attention to how they use “yes, and” in real life. Challenge them to use (safely) “yes, and” at a time when they were leaning towards a no. What happens?
Session 2: Improv & Group Creativity

Goals of Design Studio 2:
The objective of this design studio is to introduce the concept of group creativity, the process in which people collaborate on a creative outcome. Participants will be able to define group creativity and identify conditions that can be met to help a group get into group flow. Participants will play improv warm up games to simulate the concepts of group flow. Participants will end the session by applying their group creativity strategies in a design studio activity to generate ideas about a previously agreed upon objective.

Learning Outcomes: Participants will be able to:
- Define group creativity, the process in which people collaborate on a creative product
- Identify the conditions of group flow that leads to effective group creativity
- Produce solutions to a design problem through sketching
- Collaborate on identifying a final solution to a problem

Materials Needed:
- Improv Tenets on large post-it note or white board
- Group flow condition on a large post-it note or white board
- Butcher paper or white board
- Post-it notes
- Markers
- Dot stickers
- Blank paper

Take Home Activity Application: (5 mins)
- Ask participants to get in pairs and share their “yes, and” in real life example. What did they do? What was the reaction? What was easy? Challenging?
- Have 1-2 participants share their response in the large group.
- Ask: why is it sometimes hard to use “yes, and” in real life? What opportunities arise when we do?

Introduction to Group Creativity: (5 mins)
- Introductory questions:
  - Silent Reflect: What is a time that you worked on a group that felt really good? What happened in that group that made it productive?
  - Ask for a couple of responses.
- Group Creativity Definition: is defined as how “groups of individuals collectively generate a shared creative product” (Sawyer, 2017). As we talked about last week, our world of work and society are in search of new graduates who are comfortable working and generating ideas with others. Many employees spend the majority of their day
engaging in some sort of collaboration. So we need to be comfortable with this process and understand how we approach group creative processes early.

- **Group Flow:** Explain: In order to be a productive group, there are a few components that have to happen. Group creativity researchers call these components “group flow” and, actually, they were identified by watching how improv comedians work together to create their art. The components of group flow are: (Put these on a white board or large butcher paper)
  
  ○ **Group goal:** Groups must have a clearly defined and commonly held goal driving their work. However, that goal must be broad enough for problem-finding creativity to be used.
  
  ○ **Close listening:** Group members engage in deep listening and do not prepare their responses ahead of time.
  
  ○ **Complete concentration:** Group flow happens when groups are fully immersed in the task and are not distracted by anything else.
  
  ○ **Being in control:** Group flow increases when groups feel that they have autonomy over key decisions or the ability to effectively execute plans.
  
  ○ **Blending egos:** Group members relinquish ideas, giving them up to the whole of the group so that, at the end, group members don’t remember which ideas were theirs or someone else’s’. Group members experience group sync.
  
  ○ **Equal participation:** All group members play an equal role in the process and all bring similar levels of skill and knowledge to the group.
  
  ○ **Familiarity:** Group members need to know each other fairly well and have a shared set of guiding principles to follow.
  
  ○ **Communication:** Group flow necessitates constant communication, always talking to generate fresh ideas and hear new perspectives.
  
  ○ **Keep it moving forward:** Harkening back to the “yes, and” tenet, group flow happens when group members are always building upon the others’ ideas. “Listen closely to what’s being said; accept it fully; and then extend and build on it” (p. 63)
  
  ○ **The potential for failure:** Innovations require frequent failure, and group flow happens in an environment where failure is acknowledged as a facet of creativity. Failure is not viewed as a negative, but as a reality that should be accepted in order to achieve a great final product.

**Warm Up Games: (10 minutes)**

- **Attacker/Defender:**
  
  ○ Ask each participant to pick another student in the group to be their “attacker” and one to be their “defender.” Instruct them to move around the room keeping their attacker physically between themselves and their defender
  
  ○ Debrief Notes:
    ■ What did you observe? How did it feel?
- Point out the chaos and inherent animosity.
- Group Flow Connection: Group goal (lack of). Goal of improv & group creativity is to work together and to develop group mind/group flow.

- Orbits (Purpose: complexity of issues, paying attention)
  - Ask students to pick two participants to be their orbits. Instruct them to move around the room keeping themselves equidistant with the two orbits. Allow the group to silently move around the room until it seems like it has come to a natural endpoint (group is moving in an “orbit”)
  - Debrief Notes:
    - What did you observe? How did it feel? How was it different from an attacker/defender?
    - Group Flow Connection: Group goal (clearly defined and common goal), Complete concentration (fully immersed in task)

- Same Word:
  - Ask participants to stand in a circle. If there is a large group, get them into two smaller groups (no more than 10/group).
  - Instruct students that their objective is to try to psychically connect by having two participants say the same word at the same time.
  - Instruct two participants to look at each other and count down from 3 and say a word at the same time (Ex. the two players might say “beach” and “vacation”)
  - One of the players from the first round will turn to the next person in the circle and do the same thing, trying to find some sort of connection between the two words (3-2-1 “Florida”). Continue going around the circle until two people say the same word at the same time.
    - Quick debrief of warm ups:
      - Group flow connection: Close listening, complete concentration, familiarity

**Improv Games: (20 mins)**
- Conducted Story
  - Have 4-5 participants get in a line facing the audience. The facilitator will serve as a “conductor” by kneeling in front of the storytellers. Instruct the group that they can only talk when the conductor is pointing at them. As soon as the conductor moves their finger away to another person they must immediately stop talking and the next person will pick up where the last person left off. The game ends when a “logical” conclusion to the story happens.
    - Debrief:
      - How did this feel? What did you observe?
● What connections can you make between this exercise and working in a group?
  ○ Group Flow & Improv tenets connections: Close listening, blending egos, keep it moving forward, yes and, share the stage

● Yes, And Picture Pairs
  ○ Have participants get into groups of two
  ○ Give each pair a piece of paper and marker
  ○ Ask participants to draw a picture one line at a time, taking turns with who is drawing the line
  ○ Instruct participants to not talk in the process
  ○ After progress has been made, instruct participants to pause and give a name to their picture by writing one letter at a time.
  ○ After each picture has a name, have groups show the picture and name and describe the process they took to create it

■ Debrief:
  ● How did this feel? What was your experience?
  ● How did you work together? How did you get on the same page?
  ● Group flow connections: Being in control, blending egos, equal participation
  ● Group creativity concept: collaborative emergence - not knowing what we are creating until it has happened

Design Application Part 2 (40 mins): Sketch Solutions & Decide
● Review of design question: Have the group reiterate what they are hoping to generate through this quick design studio
● Explain: the first activity we are going to do involves generating ideas to tackle this problem. As you do this work, keep the improv tenets in mind and be sure to “yes, and” yourself and don’t worry about making mistakes - it’s all a part of the process. There are no mistakes, only opportunities.

● Crazy 8s: (15 mins)
  ○ Give each participant a piece of paper and ask them to fold it in half three times creating 8 boxes.
  ○ Round 1: 8 ideas in 10 minutes - Give participants 5 minutes to generate 8 possible ideas that could be part of an approach to their design challenge. Remind them not to self edit and go for quantity not quality
Round 2: 1 big idea in 5 minutes. Give participants a fresh piece of paper. Each participant has 5 minutes to build on a previous idea or combine components from an earlier round.

Present and vote (15 mins)
- Have each participant share their big idea. (Note: if you are facilitating for a large group over 10 people, break the groups into 2 smaller groups)
- Ask each member to post their one big idea on the wall
- Give each member 2 minutes to talk through their ideas and 1 minute to field any questions. Hold tight to this time. Assign a time-keeper if breaking up into smaller groups
- Remind participants to keep in mind how well an idea may respond to the question/issue trying to be addressed not you
- After each member has gone, give each member three dot stickers to vote on the three most compelling ideas of any of the sketches. Members can put all three of their dots on one idea if they think it is truly the most valuable idea

All-in-one vs. Rumble Group decision: (10 mins)
- Decide as a group if we want to combine the winners into one single prototype (All-in-one) OR develop two different ideas and test them against each other (Rumble)
- Facilitator note: have each member write down their decision before they vote so as to avoid groupthink.
- Have participants hold up their “voting placard” to decide
- Remind participants that when we pick up again at our next session, we will start building out the prototypes created here

Reflection Activity: (8 mins)
- On a large post-it paper or white board post up the following reflection prompts:
  - Head symbol: What did we do?
    - What images or scenes do you recall?
  - Heart symbol: How did you feel?
    - What were your feelings during the experience?
    - What was the collective mood of the group?
  - Brain symbol: What did you learn?
    - What was your key insight?
    - What have you learned from today’s experience?
  - Feet symbol: How will you apply this?
    - How, if at all, has this experience changed your understanding of group creativity?
    - What was the significance of this experience to your life?
- Ask participants to generate a response to each of the symbol prompts on individual post-it notes and stick them up on the corresponding sheet
- If time allows, ask a couple of participants to share a response to one of the prompts

**Take Home Activity: Group Flow in “Real Life” (2 mins)**

- Find the (Group) Flow:
  - Group goal
  - Close listening
  - Complete concentration
  - Being in control.
  - Blending egos
  - Equal participation
  - Familiarity
  - Communication
  - Keep it moving forward
  - The potential for failure
• Ask participants to pick one of the components of group flow and ask them to pay close attention to that one factor the next time they are working in a group. What can they do to help the group better realize that component of group flow?
Part 3: Group Creativity & Generating Ideas

Goals of Design Studio 3:
The objective of this design studio is to continue the exploration of group creativity by having participants practice generating ideas in a team. Participants will play improv games to simulate the concepts of group flow and how to generate ideas in a team. Participants will end the session by applying their group creativity strategies to generate a storyboard based on the solution the team has identified to solve their problem.

Learning Outcomes: Participants will:
- Apply group creativity concepts in a final improv show
- Present a storyboard as a team to show their solution to their identified problem
- Reflect on how they will use improv and group creativity concepts in their lives

Materials Needed:
- Group creativity and improv tenets on big butcher paper
- Paper
- Markers
- Post-it notes

Take Home Activity Discussion: (5 mins)
- Ask participants to get in pairs and share how they saw conditions of group flow being met in an organization they are a part of? What did they do to create that condition?
- Have 1-2 participants share their response in the large group.
- Ask: What are some barriers that group members experience when trying to effectively collaborate in a team?

Improv Tenets & Group Flow Conditions Review: (5 mins)
- Remind participants that one of our major objectives for this series is to get our group into peak flow - we want to be able to get to the point where we are effectively and enthusiastically working together to solve our problem.
- The guiding principles that are helping us get to that place of effective group creativity are our Improv Tenets and Group Flow Conditions. Refer to the posted documents that outline these concepts:
- **Improv Tenets:**
  - Yes, And: Seeking areas of agreement - doesn’t mean in life you always say “yes,” - respect what your partner has said and start from an open-minded place. And - you build upon what they said.
  - Make Statements: don’t ask questions (this puts the burden of having to create on someone else). Be declarative
- **Share the stage**: Don’t hog the air time. Give as much time to others’ ideas as your own.

- **There are no mistakes, only opportunities**: Don’t worry if you “mess up” - just keep moving forward. Your “mess up” might become the opening for a great scene.

- **Ultimate Commitment**: Give it your 100% effort. Lean into any moderate discomfort you have about looking silly. Amy Poehler quote: “There is power in looking silly and not caring that you do.”

- **Don’t worry about being funny**: the funny will happen! Focus on being present, connecting with your peers, and “yes, anding”

- **Group Flow Conditions:**
  - **Group goal**: Groups must have a clearly defined and commonly held goal driving their work. However, that goal must be broad enough for problem-finding creativity to be used.
  - **Close listening**: Group members engage in deep listening and do not prepare their responses ahead of time.
  - **Complete concentration**: Group flow happens when groups are fully immersed in the task and are not distracted by anything else.
  - **Being in control**: Group flow increases when groups feel that they have autonomy over key decisions or the ability to effectively execute plans.
  - **Blending egos**: Group members relinquish ideas, giving them up to the whole of the group so that, at the end, group members don’t remember which ideas were theirs or someone else’s’. Group members experience group sync.
  - **Equal participation**: All group members play an equal role in the process and all bring similar levels of skill and knowledge to the group.
  - **Familiarity**: Group members need to know each other fairly well and have a shared set of guiding principles to follow.
  - **Communication**: Group flow necessitates constant communication, always talking to generate fresh ideas and hear new perspectives.
  - **Keep it moving forward**: Harkening back to the “yes, and” tenet, group flow happens when group members are always building upon the others’ ideas. “Listen closely to what’s being said; accept it fully; and then extend and build on it” (p. 63)
  - **The potential for failure**: Innovations require frequent failure, and group flow happens in an environment where failure is acknowledged as a facet of creativity. Failure is not viewed as a negative, but as a reality that should be accepted in order to achieve a great final product.

**Warm Up Games: (15 mins)**

- **Shake Down**: Have participants stand in a circle. Ask them to raise their right arm and shake it eight times in the air. Repeat with the left arm, then right leg, and left leg.
Repeat this series but count down each time (7, 6, 5, 4, etc...). Encourage participants to look each other in the eye as they are shaking down. Speed up as you go through the countdown. (Purpose: generate energy)

- **We Demand!** Ask participants to stand in a circle and raise their imaginary signs in their hands. Tell participants we have some demands that we are expecting to be met. We will form those demands one word at a time. Have the first four participants say one word at a time (1 - Cats 2 - Love 3 - Soggy 4 - Muffins). Everyone around the circle will then chant that phrase two times over. Have the second person in the line start the next chant and go through all the participants as time allows. (Purpose: Yes, and; Equal participation)

- **Thunderdome:** Keep participants in a circle and instruct two volunteers to step into the “Thunderdome.” All participants on the outside of the circle will chant “Thunderdome” three times. The two participants in the circle will face off against each other going back and forth identifying as many unique responses to a category (ex. “Ice cream flavors”). When someone repeats a response or can’t come up with another one, they are immediately out and the crowd will chant “Thunderdome” again as a new person takes the open spot. The most recent “out” person will identify the next prompt.

**Improv Games: (25 mins)**

- **Freeze:**
  - Have participants stand next to each other, forming a line at the front of the room
  - Explain that in this game, participants will be creating a scene and when the facilitator calls “freeze,” someone from the back will come forward, tap out one of the players, and take on the physical position of one of the two players and start a new scene
  - Get two participants to the front and give them an instruction to assume the position of some sort of sport. Tell them that they need to be talking about something other than the sport (such as what they are going to make for dinner, etc.).
  - Frequently freeze the participants and encourage them to generate new ideas based off the physical position they take on
  - Debrief:
    - How did this feel? What was challenging about this exercise?
    - Thinking about the group flow concepts we discussed, what did you experience in this exercise?
    - Group flow connections: Being in control, keep it moving forward, potential for failure

- **New Choice**
Get two people to volunteer for this game.

Explain: In this game, you and your partner will be having a conversation. At any point in that conversation, the facilitator will yell out “New Choice” and whatever the last statement was made will need to be said again, coming up with something different.

For example, if someone were to say “I can’t wait to go to class,” and I yell “New Choice,” you might say “I can’t wait to go to the movies” and if I were to yell it one more time, you might say “I can’t wait to go to the moon!” Whatever the last thing said becomes the new reality for the scene.

Play the game a few times and coach players to come up with new options.

Debrief:

- How did this feel? What helped this game succeed?
- Thinking about the group flow concepts we discussed, what did you experience in this exercise?
- Improv & Group flow connections: Yes, and; Ultimate commitment; Communication; Keep it moving forward; Potential for failure
- Purpose of these exercises are generating ideas and being okay just putting an idea out there, even if it is not the “best” idea, it can be something for a peer to build off of

**Design Application Part 3: Storyboard Creation (35 minutes)**

- Sketch refresher: remind participants about the sketches that generated the most “heat” from our last session and identify a starting point for
- (If possible, show a picture of the previous sketches or post the earlier sketches up in the room prior to the start of this session)
- Review the heat map from the previous session to identify the sketch/components of the sketch that won
- Journey map/Storyboard
  - Explain: We are going to be creating a visual depiction of this sketch from start to finish so you can “pitch” it in our final session
  - Create a grid of 15 panels (this can be on a white board or by posting 15 pieces of paper on the wall).
  - Identify 2 sketchers and storyboard artists who will be responsible for visualizing the idea. Reinforce that it is not expected that we are producing a masterpiece. Rough sketching is totally appropriate and expected.
  - Have participants think about an “opening scene” - the first time a user of the solution will come across the product/service/event. How do they find out about it?
  - From there, build upon the user’s experience through to a concluding moment. (This may take less than 15 panels, but should not take more)
- Narrate the Storyboard:
- Once the storyboard is done, have 1-2 volunteers (who were not the sketchers) step up to give a final narration of the board from start to finish.
- Ask: is there anything missing that needs to be added?

**Reflection Activity (5 mins)**
- **Quick Snapshot:**
  - Ask participants to think about a mental “photo” that they might remember from the workshop - a moment that they felt challenged, or felt that they were working in sync with the team.
  - Ask participants to quickly draw or write down that moment
  - Have them post their reflection on the board

**Take Home Activity: Free write/talk (5 mins)**
- Find 5 minutes this week to tell a stream-of-consciousness story to yourself. You can do this by writing or just talking for 5 minutes straight, non stop. Let the story take you wherever it wants to go. Don’t self edit - don’t erase anything and don’t start over. Just create. (Purpose: creative confidence, practice generating ideas, not editing).
Part 4: Putting on the Show

Goals of Design Studio 4: The objective of this design studio is to put all the concepts from the previous group creativity workshops together. Participants will put on their final “improv show” and share their storyboards in a final design pitch.

Learning Outcomes: Participants will:
- Apply group creativity concepts by playing improv games
- Create a presentation that showcases the storyboard idea they generated
- Present their final idea pitch
- Reflect on how they will use improv and group creativity concepts in their lives

Materials Needed:
- Group creativity and improv tenets on big butcher paper
- Reflection prompts and post-its notes
- Note cards

Take Home Activity Application: (5 mins)
- Review the stream-of-consciousness activity. How did it go? What was easy? Hard? Did you do it more than once? How can something like this help you in the future just having the confidence to generate ideas?

Warm Up Games: (10 mins)
- Zip, Zap, Zop:
  - Have participants form a circle around the room.
  - Instruct: You will pass the energy around the room by pointing at a person around the room and saying “Zip,” the next person will continue the pattern by pointing at another person and saying “Zap,” then the next person will continue by saying “Zop.”
  - Encourage participants to speed up as they get more comfortable with the pattern
  - Note that if they make a mistake, they should continue to go on without stopping the game
- Group Counting:
  - Have the group stand in a circle, as close together as possible. Have them all look down
  - The objective of the game is to see how high the group can count to as a group
  - Students take turns saying numbers (1, 2, 3, etc.)
  - Rules:
    - Group cannot just go around the circle in order
    - Group cannot plan the order ahead of time
If two people speak at the same time, they have to start back to one

- Group Flow: group goal, complete concentration,

- Bunny bunny:
  - Explain that this game is going to be really weird. Lean into it.
  - Have each participant begin chanting “mmmm bop” while moving their hands up and down (as if they were hitting an invisible table in front of them)
  - Instruct that we will be passing energy around the circle by means of the “bunny bunny” - have one person use “bunny fingers” pointed towards their face and say “bunny bunny.” Then, they will turn their bunny fingers towards and other person, make eye contact with them, and say “bunny bunny” towards them.
  - Participants will continue to pass the energy around the circle. As the facilitator, you will speed up or slow down the activity when it appears they are getting into the groove.
  - Group flow conditions: complete concentration

**Improv Show! (20 mins)**

- Park Bench Scenes:
  - Put two chairs at the front of the classroom
  - Instruct: In this game, one person is going to be sitting on the park bench. Another person is going to come into the scene with a strong character intuition (ex. An accent, physical movement, strong point of view, etc.)
  - Once the person coming in initiates the scene, the person on the bench is going to “yes, and” by taking on the same characterization. (Ex. if one person comes in as an astronaut, they are both now astronauts).
  - Once you end the scene, the person on the bench will return to the end of the line and the person who just started the scene will move over to make way for a new initiation
  - Remind participants of the improv rules of only making statements - don’t ask questions. Be declarative.
  - As the facilitator, don’t let the scenes last too long (1-2 mins, max). Provide side coaching: if someone asks a question, ask them to rephrase it.
  - Once everyone has gone, end the show.
  - Debrief:
    - How’d it go? What did you observe from your scene mates? How was it “yes, and-ing” your peers?
    - What felt comfortable/challenging?
    - Why do you think we did this? (purpose: bringing all the concepts together!)

**Prepare to Pitch: (30 mins)**
• Instruct: Your task is now to creatively represent your storyboard in an interesting pitch to your group’s leader. (note: The group size should be no more than 10, if you have a larger group, break into 2-3 smaller groups)
• It’s up to you what you want this to look like - but you are encouraged to make this a dynamic presentation (could you consider role play?)
• Every person in the group must participate in the presentation.
• You will have 5 minutes to present your pitch (note: you can offer more time if there is only one presenting group)

Design Application Part 4: Present the Pitch (20 mins)
• Give each team 5 minutes to present their pitch. (If you only have one group, you can give them more time)
• After each presentation, ask the group what they liked about the pitch and identify anything that they might be able to change for the future.
• After all the groups have presented, ask them how they can take this idea from their pitch stage to implement. What needs to happen to make this idea a reality?

Final Reflection Activity (10 mins)
• Post-it Reflection:
  ○ On a large post-it paper or white board post up the following reflection prompts:
    ■ Brain symbol: What did you learn?
      • What were your top insights?
      • What have you learned from this series?
    ■ Feet symbol: How will you apply this?
      • How, if at all, has this experience changed your understanding of group creativity?
      • What was the significance of this experience to your life?
      • How can you apply this learning in your everyday life?
    ○ Ask participants to generate a response to each of the symbol prompts on individual post-it notes and stick them up on the corresponding sheet
• Interview Response:
  ○ Give each participant a large notecard and have them write down how they would answer the interview question:
  ○ Share a time when you had to work in a group to create a product? How did you work together towards the end outcome?
  ○ Once done, pair them up and have them practice their response. Collect the notecards when done.
• Final debrief:
○ Ask for 1-2 interview responses from the group. Ask what they think their major takeaway was.
○ One-word whip: Have each participant identify one word that they will take with them to explain their learning from the session. Go through the circle to have them share their word.

● **Wrap up:**
○ Share: the need for collaboration and creativity are the top skills that employers are looking for in today’s workplace. Being able to articulate how you can work with others towards a common goal and showcase the ways that you can create the conditions for teams to excel will set you apart from others.
○ Next steps: continue to seek out experiences that allow collaboration. Recognize that in order to create an innovative team dynamic, you need to be prepared to create the conditions in which group flow can happen.
○ Your challenge as a leader is to consider the role you play to make these situations effective. How do you “yes, and” others’ and build towards a productive end outcome?
○ End with a collective: “Go Team!”
Activity References:


Rumble or all in one. (n.d). Design Sprint Kit. https://designsprintkit.withgoogle.com/methodology/phase4-decide/rumble-or-all-one


APPENDIX B

OBSERVATIONAL VIDEO RECORDING: FIELD NOTES INSTRUMENT
Field Notes

Setting:
Observer:
Time and Date:
Length of recording:

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APPENDIX C

POST-INNOVATION SEMI-STRUCTURED INTERVIEW PROTOCOL
Welcome to the Interview:

Thank you for being here and for attending the Improv and Leadership workshop. Before we go too far, I want to make sure that it is okay to record this interview so I can review it for my research later. If you are okay with me recording this, please verbally let me know. [Hit Record on Phone App or Zoom]

Thanks again for meeting me today. I am really excited to talk to you about the Creative Leadership Design Studio and get your perspectives on what you learned. As we talked about in the workshop, the purpose of my research and this workshop is to explore the intersections of improv comedy and leadership, specifically how groups work and create together. I am interested in hearing your honest perspectives about the workshop and the content. This interview is going to be pretty informal and I'll be asking some questions to guide our conversation and I will ask follow up questions as needed. Please know, there are no right or wrong answers - I truly want to hear your thoughts. At the end of the interview, I will ask you where you would like for me to send you a digital gift card from - Starbucks, Target, or Amazon. If at any point you want to stop the interview, please know that I will still send you the gift card as a thank you for your time.

General Review of Creative Leadership Design Studio:

- If you had to use one word to describe how you felt during the workshop, what word would you pick? Why?
- During the series, what did you find easy? What was challenging?
- How would you describe the series to someone who didn’t attend?
- Please describe the activity that you gained the most from. Why did it make an impact on you?

Group Creativity:

- Describe for me the process your group used to create your [insert description of pitch]?
- What role did you play?
- How did decisions get made?
• Thinking about the activities you experienced in the series, can you tell me about a time that you felt the group got into a state of flow (aka: a moment where things just seemed to be clicking and working well?)

• Can you describe any moments during the creation of your pitch that felt challenging?

• What connections did you make between the improv activities we participated in and the practice of group creativity?

Career Relevance:

• What are you currently studying and what is your future career goal?

• What skills are necessary for your future career?

• What skills, if any, do you feel you developed through the CLDS?

• Describe a situation in your future work life that you think might require you to collaborate on the creation of some sort of process, product, or service?

• Answer the following as if you were in a professional interview: Please share a time that you worked with a team to develop a new process, product, or service.

• Is there anything you might look to do differently in the future in regards to group creativity/collaboration?

Evaluation Questions:

• Thinking about your friends or acquaintances who didn’t attend this series, what would make them want to attend?

• Anything you would change about the series?

• Impact on staff dynamics?

• Is there anything else you would like to bring up or ask about before we wrap up this interview?

Wrap Up:

Thank you so much for your time and thoughts throughout this interview. Your insights will help me strengthen this series for future participants and help me better understand how the concepts of improv comedy can be used to teach group creativity. Now that we have reached the end, I would like to ask you where you would like a digital giftcard from - Starbucks,
Amazon, or Target? I will send you the gift card to the email address you prefer. If you have any questions or follow up comments after we conclude, please do not hesitate to reach out to me via email. Thank you so much again for your time!
APPENDIX D

GLOSSARY OF TERMS: IMPROV TENETS AND CONDITIONS FOR GROUP FLOW
Conditions for Group Flow (Sawyer, 2017):

**Being in control:** Group flow increases when groups feel that they have autonomy over key decisions or the ability to effectively execute plans.

**Blending egos:** Group members relinquish ideas, giving them up to the whole of the group so that, at the end, group member’s don’t remember which ideas were theirs or someone else's'. Group members experience group sync.

**Close listening:** Group members engage in deep listening and do not prepare their responses ahead of time.

**Communication:** Group flow necessitates constant communication, always talking to generate fresh ideas and hear new perspectives.

**Complete concentration:** Group flow happens when groups are fully immersed in the task and are not distracted by anything else.

**Equal participation:** All group members play an equal role in the process and all bring similar levels of skill and knowledge to the group.

**Familiarity:** Group members need to know each other fairly well and have a shared set of guiding principles to follow.

**Group goal:** Groups must have a clearly defined and commonly held goal driving their work. However, that goal must be broad enough for problem-finding creativity to be used.

**Keep moving forward:** Harkening back to the “yes, and” tenet, group flow happens when group members are building upon the others’ ideas. “Listen closely to what's being said; accept it fully; and then extend and build on it” (Sawyer, 2017, p. 63)

**Potential for failure:** Innovations require frequent failure, and group flow happens in an environment where failure is acknowledged as a facet of creativity. Failure is not viewed as a negative, but as a reality that should be accepted in order to achieve a great final product.
Improv Tenets

Don’t worry about being funny: The funny will happen! Focus on being present, connecting with your peers, and “yes, anding”

Make Statements: Don’t ask questions (this puts the burden of having to create on someone else). Be declarative.

Share the stage: Don’t hog the air time. Give as much time to others’ ideas as your own.

There are no mistakes, only opportunities: Don’t worry if you “mess up” - just keep moving forward. Your “mess up” might become the opening for a great scene.

Ultimate commitment: Give it your 100% effort. Lean into any moderate discomfort you have about looking silly.

Yes, And: Seeking areas of agreement - doesn’t mean in life you always say “yes,” but it means you respect what your partner has said and start from an open-minded place. And, you build upon your partner’s ideas to create something new
APPENDIX E

MAXQDA CODE BOOK – ARIZONA ARTS AMBASSADORS
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APPENDIX F

MAXQDA CODE BOOK – RESIDENT ASSISTANT STAFF
Code System

- Career Application
  - Future career goal
  - Academic major

- Application of CLOS
  - Talking about CLOS in interview question
  - Collaborating with people in future career (+)
  - Talking about collaboration in interview question (+)
  - Value a positive environment
  - Career relevance of CLOS
  - Application of yes, and in future
  - Application in other campus roles (+)
  - Group creativity in future job (+)

- Transferable skills development
  - Future skill: Teamwork
  - Future skill: Well-rounded skillset
  - Future skill: Listening
  - Future skill: People skills
  - Future skill: Communication (+)
  - Future skill: Leadership

CLOS Logistics

- Suggestion for improvement
  - Improve rapid feedback process (+)
  - Role of facilitator
  - Space was a challenge
  - Length of series (+) (+) (+)
  - Time of semester (+)
  - Barriers to attending (+) (+)
  - Time of Day (+) (+)
  - The improv to leadership more
  - Design Studio name was not clear
  - Adjusting activities (+) (+)

- Things to continue
  - Value of pro dev on building leadership skills
  - Evaluation: three hours was actually fine (+)

Improv

- Concerned about saying the wrong thing
- Improv was difficult

- Activity Reflections
  - Activity reflection: what are you doing?
  - Activity reflection: zip, zap, zap
  - Activity reflection: Dr. Know It All
  - Activity reflection: Same Word
  - Activity reflection: Yes and
  - Activity reflection: Warm up activities

- Impacts of improv Activities
  - Improv helps communication
  - Impact of improv game on mindset (+)
  - Improv helps with thinking on the fly (+)
  - Improv impacts on group dynamics
  - Improv requires teamwork
  - Improv making people more comfortable (+)

- Improv Tenets
  - Improv tenet: Make statements
  - Improv tenet: Share the stage
  - Improv tenet: No mistakes, only opportunities
  - Improv tenet: Ultimate Commitment
  - Improv tenet: Yes, And

- Value of Design Studio Format (+)

- Design Studio Activities
  - How might we question challenge
  - Design activity: storyboarding reflection
  - Design activity: creativity prompts
  - Design activity: sticky notes of what we can improve
  - Design activity: crazy 8s
  - Design activity: Storyboard & Pitch Creation (+)+
  - Challenges creating storyboard & pitch (+) (+)
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**Note:** Quotes 36

**Sets:** 0
APPENDIX G

IRB APPROVAL
EXEMPTION
GRANTED

Josephine Marsh
Division of Educational Leadership and Innovation - Tempe 480/727-4453
josephine.marsh@asu.edu

Dear Josephine Marsh:

On 12/8/2021 the ASU IRB reviewed the following protocol:

<table>
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<th>Type of Review</th>
<th>Initial Study</th>
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<tr>
<td>Title</td>
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<tr>
<td>Investigator</td>
<td>Josephine Marsh</td>
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<tr>
<td>IRB ID</td>
<td>STUDY00015050</td>
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<tr>
<td>Funding</td>
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</tr>
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Documents Reviewed:
- Consent Form, Category: Consent Form;
- Creative Leadership Design Studio Workshop Plan, Category: Other;
- Hill IRB Protocol - Updated 12-7-21, Category: IRB Protocol;
- Hill_Reruitment .pdf, Category: Recruitment Materials;
- Interview Protocol, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);
- Letter of Support - Site Supervisor, Category: Off- site authorizations (school permission, other IRB approvals, Tribal permission etc);
The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 12/8/2021.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

If any changes are made to the study, the IRB must be notified at research.integrity@asu.edu to determine if additional reviews/approvals are required. Changes may include but not limited to revisions to data collection, survey and/or interview questions, and vulnerable populations, etc.

REMINDER - All in-person interactions with human subjects require the completion of the ASU Daily Health Check by the ASU members prior to the interaction and the use of face coverings by researchers, research teams and research participants during the interaction. These requirements will minimize risk, protect health and support a safe research environment. These requirements apply both on- and off-campus.

The above change is effective as of July 29th 2021 until further notice and replaces all previously published guidance. Thank you for your continued commitment to ensuring a healthy and productive ASU community.

Sincerely,

IRB
Administrator

cc: Jessica Hill