



A Preliminary Study: The Destination Imagination Challenge Experience and the Emergence of (Workforce) Agility

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Abstract: This study explored the Destination Imagination Challenge Experience of students, grades 3-12 and university, participating in the 2024 Destination Imagination Global Finals in Kansas City, Missouri, and highlighted the importance of the improvisation experience leading to workforce agility. The research question was: To what extent does the Destination Imagination Challenge Experience lead to workforce agility? Data were collected by means of a survey from the 27 Destination Imagination experts who served as Team Managers of the Destination Imagination Challenge Experience. Data analyses revealed that 1) collaboration and communication were rated as the highest-important skills resulting from the challenge experience, serving as a foundation for other skills; 2) trust and psychological safety were identified as essential for collaboration for team effectiveness; 3) problem-solving and decision-making were linked to collective critical thinking; and generating creative solutions was tied to collaborative processes; and 4) the byproduct of the experience was workforce agility. The Destination Imagination Challenge Experience demonstrates that workforce agility is not developed through isolated skill instruction, but through intentionally designed, experiential environments that prioritize collaboration, communication, trust, and psychological safety as foundational conditions for performance.

Keywords: Destination Imagination Challenge Experience, Destination Imagination Global Finals, Improvisation Skills, Workforce Agility, Storytelling, Collaboration, Psychological Safety and Trust, Collective Critical Thinking, Creative Solutions.

INTRODUCTION

Political, Economic, Social, Technological, Legal, and Environmental (PESTLE) factors (Aguilar, 1967) are part of a strategic management technique that can be effectively used to identify external elements. According to Khalid and Singh (2023): "Understanding the effect of these factors is key for nations to manage risks, control outlays, exploit, and benefit from opportunities" (p. 246). As PESTLE factors continue to affect learning and business ecosystems, it is essential to prepare all students, starting at an early age, for improvisation which encompasses crucial skills leading to workforce agility, defined as being able to respond effectively to survive and flourish in the new ecosystems.

The Destination Imagination (DI) Challenge Experience is based on *experiential learning* (Kolb, 1984), which promotes skills such as collaboration, communication, team effectiveness, engagement, creativity, adaptability, responsiveness, and practical

application of these skills. In addition, storytelling serves as a powerful tool as it enables participants to connect personally with the material, fostering emotional engagement and deeper understanding through narratives. This connection is strengthened by participants engaging in hands-on experiences which allow them to practice their improvisation and storytelling skills in real-world contexts. These interrelated elements create a dynamic learning environment where participants explore concepts creatively and practically, enhancing their retention and application of knowledge and responsiveness. As a result, immersing in such an active learning process, the aforementioned improvisation skills equip participants with adaptation to changing circumstances, and being able to respond to unknown circumstances which is defined as the capability of responding swiftly to new challenges and opportunities in disruptive environments.

The significance of this study stemmed from the limited literature on improvisation skills and their impact on workforce agility. As indicated in *Table 1*, the previous five studies on DI collectively examined creativity, creative problem solving, collaboration, communication, teamwork, leadership, workforce entry, friendship, coping skills, perseverance, mental health, and divergent thinking. These studies involved childhood education, children at risk, alumni perspectives from DI, and middle school students.

Table 1: Summary of Published Pre-Existing Peer-reviewed Research on Destination Imagination

Study	Summary
Ward, J.G., Dalat Ward, Y., Wells, J., & Bejot, K. (2023). Superior Performance Competencies Achieved Through Destination Imagination Experiences. <i>Archives of Business Research</i> , 11(9). 219-235	Students who participate in DI activities are more likely to be better prepared for the workforce. They possess a set of skills and behaviors that can expand their adaptability, enhancing their future job roles.
Keisel, K. (2021). Project-based learning: Helping students thrive socially and emotionally. <i>Childhood Education</i> , 97(5), 6-13.	Creativity, collaboration, and communication are key skills that will prepare students for the future. Through engagement in real-world problem-solving, students can hone these skills while learning that their voice and actions matter. This was the first fieldwork study where the researcher observed the global finals in its natural setting.
Greenberg, E. B. (2016). Destination Imagination: An examination of highly creative children's experiences on their journey through imagination (Order No. 10188739) [Doctoral Dissertation, William James College]. Retrieved from https://www.proquest.com/dissertationtheses/destination-imagination-examination-highly/docview/1906329262/se-	An independent evaluation of the program's effectiveness in relation to creative problem solving, creative and critical thinking, teamwork, and leadership.

Missett, T. C., Callahan, C. M., & Hertberg-Davis, H. (2013). Evaluating the impacts of Destination ImagiNation on the creative problem-solving skills of middle school students. <i>The International Journal of Creativity & Problem Solving</i> , 23(2), 97-111.	Examined creative problem solving, divergent thinking, critical thinking, and teamwork with middle school students in 2009-2010.
Kovalesky, S. (2020). Exploring Destination Imagination alumni perceptions of 21st-century skills and workforce readiness. [Doctoral Dissertation, Walden University]. Proquest Dissertations and Theses.	Gathered alumni perspectives on how their experiences influenced their entry into the workforce.

The authors would like to point out that the 2023 study by Ward et al. (see *Table 1*) served as the starting point and complemented the current study by means of adding the perceptions of the DI Team Managers on the DI Challenge Experience. The 2023 study collected data directly from the field at the 2023 DI Global Finals by means of observations, conversations with participants and their parents; and informal interviews by the first author. The two findings of this study revealed that 1) participating in such meaningful real-world activities cultivated distinctive behaviors that drove superior performance, positioning participants to stand out among their peers; 2) this involvement also equipped the participating students with the capabilities to excel upon entering the workforce, ensuring superior performance in their roles (p. 221). While the previous study addressed the issue of workforce preparation and concluded that workforce skills were enhanced during the DI Challenge Experience, this current study collected data directly from the DI Team Managers who were considered experts in the DI Challenge Experience and served as leaders of the DI Challenge Experience.

The purpose of this study was to explore the DI Challenge Experience and the development of skills such as communication, collaboration, problem solving, storytelling, creative solutions, and decision making which led to the development of workforce agility. The research question of the study was: To what extent does the Destination Imagination Challenge Experience lead to workforce agility?

Conducted at the 2024 DI Global Finals in Kansas City, Missouri, data were collected by means of a survey completed by 27 DI Team Managers who were the direct individuals to observe the process of the DI Challenge Experience as teams immersed in experiential learning.

Regarding limitations, this study is limited in that the sample of the study was small and based on the perceptions of the DI Team Managers. In addition, the observed students were grades 3-12 and university level and were not categorized as the focus was on the DI Challenge Experience. As a result, the findings can only be generalized to similar contexts. Additionally, research can be influenced by various biases, including selection bias, confirmation bias, and publication bias. Environmental or contextual variables (e.g., cultural, social, or economic factors) can influence research outcomes. A lack of control over these external factors may limit the applicability of the findings to different settings or populations.

REVIEW OF LITERATURE

The definitions of terms were included in this section as these terms required detailed explanations, starting out with the Destination Imagination (DI) Global Finals, where the study took place. DI is a 501(c)(3) non-profit organization and is considered a public charity (Destination Imagination, 2023). DI currently has twelve board members, including the CEO. According to the LinkedIn profiles of each board member, the majority are consultants, one is an affiliate director at the California Creativity Association, and another is a special projects administrator at the Omaha Performing Arts Center, who is also an actor. In describing its impact, DI, as a global community, currently has 30,000 students in 40 US states, six Canadian provinces, and is active in 27 countries (DI, Our Impact, para. 2.). According to the DI Annual Report (2023), the number of teams attending the Global Finals increased by 24.5 percent and established new strategic partnerships with three more organizations (Procter & Gamble, Children's International, Inc., and ReAlign Education)(p. 3). Children's International (n.d.) focuses on ending global poverty for good (para. 1). ReAlign Education (n.d.) focuses on college admission (para. 1). In addition, Lumen Technologies Inc. (2025), a global data company, announced a collaboration with DI to expand its educational programming.

The mission of DI (2023) is to “inspire and equip youth to imagine and innovate through the creative process” (p. 1) and the message is: “We believe in the power of creativity and collaboration to shape the future” (p. 4). As cited by the annual report the 2023 Ward et al., which indicated that these superior performance competencies acquired through DI challenge experiences “not only help students stand out among their peers but also prepare them for success in the workforce. The research affirmed that hands-on, real-world activities like DI foster the behaviors and skills necessary for superior performance in future careers” (p. 6.) DI (2023) also launched two free *Creative Process Guides* with ten-STEAM-based activities “aimed at fostering collaboration, creative problem solving, and resilience in students of all ages” (p. 7). In fact, to empower future leaders, DI (2023) “took a team on a community service project to construct a water station at Community First! Village, a 51-acre community in Austin, Texas, that offers affordable, permanent housing for individuals transitioning out of chronic homelessness” (p. 8).

As described in *Table 2*, the four DI Challenge Experiences (DI, n.d.) involve participating students in grades 3-12 and university level.

Table 2: Summary of the Four Destination Imagination Challenges

The DI Challenges	The Description of the DI Challenges
<i>Challenge Experience</i> (for grades 3-12 and university students), a team-based creative project competition. (Which program is right for me? (para. 1).	The challenges are open-ended, allowing teams to express themselves creatively and take full ownership of their solutions. “Challenges are designed to teach the creative process of learning that is at the root of innovation and a child’s ability to bring an idea to life.” The Challenge Experience. The challenge categories include Technical, Scientific, Fine Arts, Improvisational, Engineering, Service Learning, and Early Learning. The Challenge Experience: How it works (para. 1-3).

<i>Early Learning</i> (non-competitive for pre-K-2 students), with a focus on STEM. (Which Program is right for me? (para. 1).	Our STEM & Literacy Curriculum for Early Learners (Pathways) is designed to prepare 3- to 6-year-olds with a jump start in literacy and STEM concepts, as well as engage their interest in the arts. The curriculum includes 18 chapters, complete with engaging activities for the classroom and at home” (Pre-K Through 2 nd Grade, p. 1).
<i>Film Challenge</i> (for grades 3-12) (Which Program is right for me? (DI, 2024, para. 1).	Teams create and present an epic fantasy story, include at least two opposing factions who are in an ongoing conflict with each other, include a “big bad” that the opposing factions must join together to attempt to overcome, integrate at least one use of color symbolism into the film, use at least one sweeping shot and at least one close-up shot to enhance the film and create and present one element of your team’s choosing that shows off your team’s interests, skills, areas of strength, and talents (The Film Challenge: Against All Odds, para 1).
<i>Skill Fire</i> for camps, classrooms, and clubs (for any age group) (Which Program is right for me? (para 1).	The vision of DI is to ignite the power of creativity in all people. SkillFire builds on real-world skills of collaboration, critical thinking, communication, and project management. Supports STEM learning and has a flexible format. Additionally, SkillFire offers activity guides, scheduling tips, and promotes social-emotional learning (DI SkillFire, n.d., para. 3).

All DI Challenge Experiences are team-based, and all require creativity and collaboration. A wide range of subjects from STEM to Fine Arts is covered. For an example, one of the projects of DI was to collaborate with the Walt Disney company (*Get Creative Disney Challenges*, 2022), are a series of STEAM (Science, Technology, Engineering, Arts, Math) activities created for children to develop crucial skills earlier. Regarding these activities the DI website states to the learners: “Destination Imagination is all about inspiring the next generation - yes, YOU- to become the world’s next innovators and leaders! Unlock your creative process and learn how to think out of the box, solve problems in new ways, and spark your creativity” (para.1).

The six-step of the DI Creative Process is defined as 1) identifying the challenge; 2) taking time to understand the problem; 3) using imagination to explore ways to solve the challenge; 4. partnering with friends to exchange ideas and solve problems; 5) trying out different ideas to see how they work; and 6) reviewing results and celebrating success. The six-step creative process is aligned with “high-impact learning” (HIL). Analyze the situation, design a solution, create it, and then try it out” (Brinkeroff & Apking, 2001, p. 148).

Regarding improvisation, the DI Challenge Experience (n.d.) is where improvisation challenges take place. Conducted from August to May, the DI Challenge Experience competition is based on teams' scoring and ranking from a set of the following challenges: 1) Technical, 2) Scientific, 3) Fine Arts, 4) Improvisational, 5) Engineering, 6) Service Learning, and 7) Early Learning. While the *Fine Arts Challenge* has a technical element to it, the *Engineering Challenge* has an artistic or storytelling component. The *Instant Challenge* is supported by the Education Foundation of the Project Management Institute.

As part of a DI Challenge Experience, the *Casting Shadows Improvisation* experience concerns research, spontaneity, and storytelling. Teams receive topics and are required to rapidly produce skits. The following is an example of this DI challenge (DI, n.d.):

Bright and dark, young and old, many and few...the world is full of opposites. Explore opposing themes while telling a story based on an inciting incident. Include a resolution trope and a random setting. Don't get lost in darkness as you use a shadow screen and shadows to enhance your story! Get ready to step out of the shadows and into the spotlight in this season's Improvisational Challenge!

- Create and present an improvisational skit based on an inciting incident.
- Research pairs of opposing themes and incorporate a pair into the skit.
- Include a randomly selected setting.
- Research resolution tropes and incorporate one of them into the skit.

Use a shadow screen and a box of materials to enhance the skit. Preview of Challenges. (para. 5)

Moreover, all DI Teams are supervised and led by DI Team Managers according to the DI Challenge Experiences (n.d.):

[an] adult (often a parent or teacher) who teaches the creative process and helps keep the team on track, but does not assist or interfere with the team's solution. Team Managers get access to valuable resources to help them along the way— a Team Manager Roadmap, as well as a catalogue of online learning modules they can access at their own pace. Each DI Affiliate may also offer in-person or virtual training for Team Managers in a specific geographic area....A Sterling Background check is conducted for each team manager in the US, and other organizations are used outside of the US. (para. 2)

Workforce Agility

Workforce agility is described as "an enterprise-wide strategy for responding to a competitive and changing business environment" (Muduli, 2016, p. 56). The key qualities of an agile workforce include "adaptability, flexibility, development, innovation, collaboration, competence, and informative" (Muduli, p. 55). Similarly, conducted a systematic literature review to analyze the academic articles within the workforce agility topic, Tessarini and Saltorato (2021) and found four interrelated and interdependent dimensions of workforce agility: "proactivity, flexibility and adaptability, resilience, and competence. These attributes can be promoted through strategies related to i) learning and training, ii) forms of work organization, iii) human resource management; and iv) culture and organizational structure" (p. 155). Hormozi (2001) also researched the concept of agility when industries observed the rapidly changing environments and concluded that traditional styles would no longer work. While an agile work environment is made competitive by people skills, knowledge, and experience (Goldman et al., 1995), other researchers focused on the psychological and behavioral dimensions of workforce agility.

Dyer and Shafer (2003) focused on the human resources aspect of agility and concluded that an agility-oriented mindset and behaviors are related to the ability to initiate and improvise, assume multiple roles, rapidly deploy, spontaneously collaborate and learn, and educate. These authors further explained how “drive, autonomy, accountability, growth, and continuity each support different aspects of workforce and enterprise agility” (p. 26). In addition, Muduli and Pandya (2018) emphasized the psychological empowerment as critical for fostering workforce agility;. Among empowerment variables, impact was the most influential: “impact is the most influential variable followed by self-determination, meaning, and competence on workforce agility” (p. 276) followed by self-determination, meaning, and competence: “Our result supports the conceptualization implicit in the literature and suggests that psychological empowerment must be considered as an important aspect of an organization’s effort to foster workforce agility” (p. 276).

Additionally, regarding sector-specific areas, Hosein and Yousefi (2012) conducted a 225-person survey of 22 food companies in Iran and concluded that social competence “empathy and relations management” had a major role in the development of workplace agility” (p. 48). Junior and Saltorato (2021) examined the manufacturing and service industries to determine their suitability for the use of cross-trained (flexible) workers and Hopp and Van Oyen (2004) developed an Agile Workforce Evaluation (AWE). The evaluation included how the AWE framework approached strategic assessment (cost, time, quality, value, and variety). The authors developed a strategy matrix template to help identify direct and indirect mechanisms by which cross-training can support workforce agility (p. 7). Agility within Japanese corporations was also researched, proposing three pillars: agility, adaptability, and leanness, all driven by resource efficiency and high performance, with customer requirements driving agility (Katayama & Bennett, 1999, p. 49). At an international level, Hatunoglu (2024) studied workforce agility and noted how proactivity, adaptability, and resiliency stood out: “These studies highlight the influence of emotional intelligence, organizational structure, and digital transformation on agility” (p. 101). The author postulated 16 types of agility, ranging from supply chain and organizational to social media and value creation.

Moreover, organizational and environmental influences have also been studied. Yusuf et al. (1999) identified agility’s main driving forces as “automation, expanding customer choice and expectations, and competing priorities” (pp. 34-35). Muduli and Pandya (2018) also noted that “unpredictable, dynamic, and constantly changing environments” require organizations that can adapt continuously (p. 276). Lastly, some researchers have focused on theoretical frameworks and emerging areas of research. Alviani et al. (2024) in a systematic review of literature on workforce agility, argued that the literature reveals four general theories: 1) Organizational and Management Theory, 2) Communication and Social Interaction Theory, 3) Behavioral and Learning Theory, and 4) Economic Theory. They also note that “no research has specifically explored workforce agility at a team level” (p. 1). Alavi and Wahab (2013) argue that interrelated and interdependent factors related to workforce agility include proactivity, flexibility, adaptability, resilience, and competence. These competencies are promoted via learning and training, workforce organization, human resources management, and cultural and organizational structure. Furthermore, Kukunda-Onyait (2019) also distinguished between two types of agility, operational adjustment: “the ability of a firm in its internal processes to devise coping strategies to deal with changes in market or demand”, and market

capitalization, the ability of a firm to capitalize on changing environments in order to improve on their products and services to meet the needs of customers” (p. 17).

Improvisation

The skills developed through the DI Challenge Experience align closely with key competencies that support business continuity, leadership, and emergency management. Research consistently demonstrates that improvisational training strengthens adaptability, rapid decision-making, and effective communication—capabilities that are critical in uncertain and high-pressure environments. For example, Weber and Grasty (2025) found that improvisational activities enhanced “adaptability, quick decision making, and clear communications” (p. 268), underscoring the relevance of improvisation for organizational resilience.

At a foundational level, improvisation is deeply connected to communicative competence. Temezhnikova (2022), in a five-session taped improvisation study involving psychology majors, examined changes in anxiety, coping strategies, communicative skills, imagination, and spontaneity. The study concluded that communicative skill development was inherently creative and inseparable from improvisation; and as explained, effective communication required responding to others in real time, attending closely to reactions, and adapting accordingly. In this sense, communication involves “accepting all the incoming data and elaborating from it—creating a coherent personal story out of a set of words, ideas, concepts, or situations” (Temezhnikova, p. 966). This framing directly supports the role of improvisation as a core mechanism for developing adaptive communication skills.

Building on this communicative foundation, organizational scholars have explored improvisation as a strategic and leadership capability. Crossan (1998) examined improvisation in action across six organizational dimensions: interpreting the environment, crafting strategy, cultivating leadership, fostering teamwork, developing individual skills, and assessing organizational culture. The study concluded that “improvisation plays a critical role in strategic renewal by enabling organizations to respond effectively to change” (p. 593). Similarly, Cedercreutz (2024) expanded on the work of Weber and Grasty (2025), and examined improvisation in leadership contexts and defined it as the creation of spontaneity without preparation. This research emphasized the multifaceted nature of improvisation and concluded that leaders who can strategically improvise are better equipped to respond to dynamic challenges while maintaining purpose and direction. Importantly, the study also highlighted that effective improvisation requires discipline, training, and an organizational culture that “values experimentation and learning” (p. 3).

Defining strategic improvisation as “an impromptu deliberate action stream, combining unplanned responses with intentional actions, sustaining the convergence of strategy and operation, to integrate and reconfigure resources at the strategic level,” Mamedio et al. (2021) concluded that the ability to improvise is expected “not only to solve problems but also to equip managers with the expertise to seize the opportunities that will move their organizations forward as a result of fast strategic decisions” (p. 25). The idea of disciplined spontaneity is further reinforced by Vera and Crossan (2004), who argued that theatrical improvisation was not unstructured creativity but instead operated within established frameworks. Improvisational actors relied on “ready-mades”—stored repertoires

of successful routines, techniques, and domain-specific knowledge—which they recombined spontaneously to address novel situations. Vera and Crossan identify three key lessons:

(1) improvisation is inherently unpredictable, (2) improvisational theatre has gained traction in business because it emphasizes the process rather than the outcomes of improvisation, and (3) techniques such as agreement, awareness, use of ready-mades, and collaboration are directly applicable to organizational improvisation capacity. (p. 727)

Beyond theory and leadership, applied research further demonstrates the value of improvisation in educational, organizational, and crisis contexts. Dufresne (2020) presented a classroom-based case study on improvisational comedy that examined volatility, uncertainty, complexity, and ambiguity (VUCA). The study found that students who developed improvisational skills were better prepared to lead in environments where both problems and solutions were unclear, as they could “test assumptions and tap into collective abilities of those around them” (p. 124). The workshop’s objectives included increasing “self-awareness through unfamiliar and uncomfortable experiences and strengthening collaboration skills” (p. 125). Empirical evidence from organizational settings reinforces these findings. A study by Essuman et al. (2023) studied 259 firms in Ghana, supported by a United States Agency for International Development grant, found that creative improvisation was positively related to operational excellence, particularly under conditions of high supply chain disruption.

Finally, improvisation has also been applied directly to community safety and disaster preparedness as illustrated by Tint and Mcwaters (2015) who identified improvisational theatre as an effective tool for training humanitarian workers and communities to respond to crises, noting that it “enhances decision-making and collaboration under pressure” (p. 73). Additionally, according to Rankin et al. (2013) “common characteristics of crisis situations are ambiguous and unplanned for events. The need for improvised roles can therefore be an imperative factor for the success of an operation” (p. 79).

Narratives and Storytelling

Storytelling, as described by Benjamin (2006) is “a way to transfer knowledge from a storyteller to others; or a way to help people look at reality and formulate ideas and ideals” (p. 159). In his study, Benjamin concluded that “as the world experiences rapid and continual change, it is more important than ever to identify and expand the forms and applications of storytelling to help people and organizations prepare for evolution and survival in an unfamiliar future” (p. 159). On the other hand, Ficher-Appelt and Dernbach (2023) distinguished between storytelling and narratives, focusing on narratives in the strategic positioning of organizational change: “Narratives, understood as contextual factors, play a crucial role in developing organizations’ and corporations’ strategies in organizational change situations” (p. 86). The authors defined a narrative as “a pattern...used to explain, justify or represent aspects of a discourse present in stories” (p. 86). In addition, Denning (2006) postulated eight different storytelling patterns that comprise “an array of tools, each suitable to a different business purpose” (p. 42) and organized the eight different narrative patterns in terms of objectives, including a

description of the story in terms of what needs to be done, and provides a set of interrelated phrases. The eight objectives are (a) sparking actions, (b) communicating who you are, (c) transmitting values, (d) branding (communicating who the business is), (e) fostering collaboration, (f) taming the grapevine, (g) sharing knowledge, and (h) leading people into the future. According to Denning one example illustrates the meaning:

If the objective is to spark action, also known as a springboard story, the story will describe how a successful change was implemented and allow the listener to imagine how the implementation might work in their own situation. They will need to avoid excessive detail that takes the story off their own situation. Phrases such as ‘Just imagine...’ and ‘What if...’ can be so effective. (p. 43)

Moreover, Kemp et al. (2023) provided concrete examples for all sizes of companies of how "to embed storytelling throughout the organization for marketing and overall organizational functionality" (p. 313). On the other hand, edited by Soares de Cunha et al. (2014), the proceedings of *Interactive Narrative, New Media Social Engagement* contain 14 articles, and collectively, the authors argue that by allowing customers to participate in the storytelling process (e.g., through user-generated content), businesses create memorable experiences. New media tools enable businesses to share their stories in diverse and creative formats, making them more accessible and engaging for different global audiences. Storytelling that addresses social issues can enhance a brand's purpose, making it more relatable and appealing to customers who value corporate social responsibility. Kampmann and Pedell (2022) investigated storytelling as a means to promote organizational resilience, specifically in the context of risk communication. They concluded that stories "can help promote organizational resilience, as they are a form of communication that effectively meets the needs of resilience management" (p. 696). These findings also align with other research findings (Duchek, 2019; Wieland & Durach, 2021) regarding organizational and supply chain resilience.

Experiential Learning, Learning-by-Doing, and Active Learning

Experiential Learning, Learning-by-Doing, and Active Learning are interconnected concepts that emphasize the importance of engagement and experience in the learning process. *Experiential Learning*, articulated by David Kolb (1984), encompasses both *Learning by Doing* and *Active Learning*, framing them within a cyclical process where learners engage in concrete experiences, reflect on those experiences, conceptualize their learning, and apply it in new situations.

Kolb (1984) argues that there are six characteristics of experiential learning: 1) Learning is a process, not outcomes. 2) Learning is a continuous process based on experience. 3) The process of learning requires conflict resolution. 4) Learning is a holistic process of adaptation to the world. 5) Learning involves transactional action between the person and the environment. 6) Learning can be considered an adaptation to the world. 7) Learning is a process of knowledge creation (pp. 25-36). Kolb also points out that his work is "based on the research of Dewey, Lewin, Piaget, and Vygotsky" (p. xi). According to Kolb both "Lewin and Dewey believed in the democratic values of cooperative leadership, dialogue, and scientific humanism, as well as pragmatism (an experiential approach to

learning) and development toward a purpose or lifelong learning” (p.17). In fact, Lewin’s model was based on observations and experience, leading to the creation of abstract concepts and generalizations, which in turn facilitated the testing of their implications (p. 21). Dewey (1938), on the other hand, indicated that “the intellectual anticipation, the idea of consequences, must blend with desire and impulse to acquire moving force. It then gives direction to what otherwise is blind, while desire gives ideas impetus and momentum” (p. 69). Additionally, Brookfield (1995) warned that “cultural disruption affects how we have, interpret and learn from experiences....while acknowledging the importance of experience, one must also recognize its potential for direction” (p. 193). In the area of medical education, Phillips and Vaughn (2009) built on the concept of the impact of culture, referring to the work of Hofstede (1997) who envisioned “work-related attitudes and values of comparable groups of managers working in a multinational company...IBM” (p. 50) and concluded that “we learn that our education practices, including applied technology, can be even more effective by keeping culture in mind” (p. 49).

Learning-by-Doing, on the other hand, refers to the practice of gaining knowledge and skills through hands-on experiences rather than through passive observation or traditional lectures; it emphasizes the value of direct involvement in the learning activities. Hackathorn et al. (2011) found that “active techniques do aid in increasing learning.....In-class activities led to higher overall scores than any other teaching method while lecture methods led to the lowest overall scores of any of the teaching methods” (p. 40). Reese (2011) defines *Learning by Doing* as “learning from experiences resulting directly from one’s own actions, as contrasted with learning from watching others perform, reading others’ instructions or descriptions, or listening to others’ instructions or lectures” (p.1). The researcher posits three major approaches. In the discovery versus instruction approach, a wide array of issues are examined: trial and error versus a) reading a user’s manual and direct instruction. In practical experience versus book learning, Reese examines politics, language acquisition, the role of solid questions, as well as medicine and literature. In the practice-theory-practice approach, he again relates his study to politics. He concludes that book-learning and other kinds of instruction are less effective than learning by direct experience and other kinds of learning by doing. Additionally, Nixon (2003) addresses the issue of business transformation and developing strategic leadership as a learning-by-doing process, focusing on “the power of personal relationships and argues that dealing with the unknown relies on trust” (p 163). In fact, Nixon concluded that “Leadership is best learned by doing, rather than talking about it and then trying it” (164).

Colombelli et al. (2022) studied a short, intensive hybrid course with 39 European Master’s and Ph.D. students from technical universities, as the students engaged in learning-by-doing projects in teams of six and seven. Students were given the theory online and had a set of speakers in class. They were then given the “opportunity to work with a practice-oriented approach” (p. 5) in practice-oriented workshops using technologies patented by the Politecnico di Torino or student-generated ideas. Mentoring sessions were also available. The program concluded with “a ‘demo’ day, during which the teams presented their projects to business angels and business capitalists” (p. 7). According to these sessions “The results show that the entrepreneurial intention and perception of the entrepreneurial characteristics and skills of the students increased after participation in the program” (p. 1). Similarly, Cope and Watts (2000) explored the relationship of experience, critical incidents, and reflection in entrepreneurial learning in a phenomenological case study.

Interviews were conducted with six small business owners, focusing on the developmental history of the businesses and highlighting critical incidents that arose during the conversation:

The findings emphasize the complexity of the concept of “critical incident” and demonstrate that entrepreneurs often face prolonged and traumatic critical periods or episodes, illustrating the emotionally laden nature of these events. Furthermore, the critical incidents described here resulted in fundamental, higher-level learning, and highlight the need for mentoring support programmes designed to help entrepreneurs to interpret critical incidents as learning experiences, in order to increase the power of the learning outcomes. (p. 104)

Tezzele (2020) differed with the concept of learning by doing described above and concluded that the new industrial era makes learning by doing “quietly disappear” because of the demand for flexible workers and “their ability to acquire new and master existing knowledge” (p. 52). The author argues for the need for education and training. “Adult participation in education and training activities has become one of the main drivers that boost labour productivity” (p. 61). On the other hand, Baffoe-Bonnie (2016) analyzed the effect of learning by doing (LBD) in the gold mining industry in a developing country and concluded that:

The contribution of LBD to the firm’s productivity growth is about 5.6%. Another observation is that LBD has a decreasing effect on the firm’s cost of production - a finding which is consistent with the results of many studies. Also, an increase in LBD measured by cumulative production increases the firm’s demand for capital, and decreases the firm’s demand for labor. Lastly, LBD has a significant effect on the firm’s elasticity of scale. A fundamental message derived from the study is the confirmation that the firms should invest in larger capital equipment, embark on new processing techniques, and create an environment that is conducive to on-the-job learning. (p. 550)

Active Learning expands on this idea by encouraging students to actively participate in their learning through discussions, problem-solving, and collaborative tasks, which fosters critical thinking and deeper comprehension; it requires students to do meaningful learning activities and think about what they are doing (Bonwell & Eison, 1991). Together, these approaches underscore the importance of active engagement and personal experience in fostering meaningful learning, ultimately yielding more effective and lasting educational outcomes. Additionally, Doolittle et al. (2023) defined active learning as “a student-centered approach to the construction of knowledge focused on activities and strategies that foster higher-order thinking” (p. 11). This is further illustrated in the research by Abdul and Shukor (2021), who examined a sales course with 42 students enrolled in a professional selling course at a university in Malaysia, which concluded that the students had a positive selling experience and that “selling activities aided in students’ understanding and interest in the course” (p. 9).

According to Kolb’s *Learning Cycle* (1984) the foundational concept of experiential learning has a four-stage process that describes how individuals learn from experiences. The first stage, *Concrete Experience*, involves engaging in a new activity or situation. This is

followed by *Reflective Observation*, where learners think about their experiences and reflect on what occurred. In the third stage, *Abstract Conceptualization*, individuals develop theories and ideas based on their reflections. Finally, *Active Experimentation* involves applying these concepts in real-world scenarios to test their validity and effectiveness. Kolb's Learning Cycle is an iterative process because it features a continuous feedback loop where each stage informs the next, encourages repeated engagement for deeper understanding, allows for adaptation and growth through real-world application, involves dynamic interactions with the environment and peers, and accommodates individual learning styles, fostering a personalized learning journey. role of experience in the learning process. Chen et al. (2025) integrated Kolb's experiential approach to nursing education with case analysis, mind maps, reflective journals, and peer simulations for advanced health assessment and concluded that:

The systematic implementation of the experiential learning cycle through case-based mind mapping, and reflective journaling can facilitate the development of master nursing students' competency in clinical advanced health assessment. This pedagogical approach effectively connects theoretical knowledge and clinical practice while fostering critical thinking and self-directed learning skills. (p. 1)

Collaboration

Collaborative learning focuses on instructional method in which students work together in structured groups toward a common goal (Laal and Ghodsi, 2012; Prince, 2004). According Laal and Ghodsi:

Collaboration is a philosophy of interaction and personal lifestyle where individuals are responsible for their actions, including learning and respect the abilities and contributions of their peers. In all situations where people come together in groups, it suggests a way of dealing with people which respects and highlights individual group members' abilities and contributions....There is a sharing of authority and acceptance of responsibility among group members for the groups' actions. The underlying premise of collaborative learning is based upon consensus building through cooperation by group members, in contrast to competition in which individuals best other group members. (p. 486)

Collaboration involves "a division of labour with participants who are engaged in active discussion, resulting in a compilation of their efforts" according to Scoular et al. (the Australian Council for Educational Research ([ACER], 2020, p. 1). The authors developed a collaboration framework consisting of 1) building a shared understanding, 2) collectively contributing, and 3) regulating. Building a shared understanding involves the following aspects: 1) communicating with others, 2) pooling resources and information, and 3) negotiating roles and responsibilities. Collectively contributing involves 1) participating in a group, 2) recognizing the contributions of others, and 3) engaging in roles. Regulating consists of 1) ensuring that one's own contributions are constructive, 2) resolving differences, 3) maintaining shared understanding, and 4) adapting behavior and contributions for others. In addition, because collaboration is "an action in which two or

more learners pool their knowledge, resources, and expertise from different sources to achieve a common goal” according to Scoular et al. 2020, p. 2), it involves skill levels ranging from high to low. High level skills involve learners engaging in collaborative learning by sharing information, knowledge, and resources to enhance group outcomes while ensuring the quality and relevance of their contributions. They regulate the collaborative environment to maintain group cohesion and assess the constructive nature of contributions. When differences arise, learners explain and justify their viewpoints, which leads to optimal collaboration. They continuously monitor group progress by requesting updates from members and providing their own reflections. Adaptability is key, as learners are flexible in renegotiating roles and strategies and act to repair shared understanding when necessary. Additionally, they identify appropriate behaviors and communication styles that suit their group dynamics, ultimately fostering effective collaboration. On the other hand, regarding low skills, learners engage in communication primarily by responding to requests or questions from others. They share resources and information when prompted, demonstrating a willingness to assist. Furthermore, they accept the roles and responsibilities assigned to them, showing a commitment to their designated tasks and contributing to the group's objectives.

Effective collaboration also requires trust and psychological safety according to Newman et al. (2017): “in the contemporary business world, organizations are increasingly requiring their employees to contribute to the continuous improvement of organizational processes and practices through behaviors that enable learning to occur” (p. 1). Voicing new ideas or experimentation with ideas, both of which “might challenge the established way of doing things and go against the vested interests of other members of the organization” (p. 1). Hence, the importance of feeling safe in collaborative effectiveness:

In a psychologically safe work environment, employees feel that their colleagues will not reject people for being themselves or saying what they think, respect each other's competence, are interested in each other as people, have positive intentions to one another, are able engage in constructive conflict or confrontation, and feel that it is safe to experiment and take risks. (p.2)

Furthermore, Edmondson (2002) also noted the importance of feeling safe “psychological safety facilitates freedom and openness to engage in interpersonally risky behaviors needed for learning....and an effective team learning process is structured and guides learners” (p. 19). When it comes to outcomes and impact of collaboration, Kim and Mauborgne (2000) developed a systematic approach to reducing the uncertainties associated with business innovations, making it a good idea. These authors posited three tools: the buyer utility map (the likelihood customers will be attracted to the new idea), the price corridor of the mass (what price will unlock the greatest number of customers), and the business model guide (a framework for determining how a company can profitably deliver the new idea at the targeted price)(p. 130). Shinkle et al., (2023) also developed a systematic model, which they termed the *Bullseye Framework*, based on eleven strategic lenses, adding “both structure and multi-perspective collaboration into the decision-making process to reduce decision bias as well as overcome many of the weaknesses in existing evaluation approaches” (p. 2). Furthermore, regarding critical thinking and what makes a good idea, Jessop (2002) argued that the idea must have both intellectual merit as well as

a broader impact; the *intellectual merit* involved “New knowledge and understanding; creative and original concepts; and a well-conceived and organized plan” (p. 7.5411.1).

George and Brief (1992) posited that a positive mood at work is a positive antecedent to organizational spontaneity. In another research George and Jones (1997) also argued that helping coworkers includes “all voluntary forms of assistance that organizational members provide each other to facilitate the accomplishment of tasks and attainment of goals” (p. 154.) This includes helping when workloads are great, sharing resources, calling attention to errors and omissions, and providing instruction in new technology (pp.154-155). Liao et al. (2023), through an onsite survey of firm managers and 196 valid responses, found that trust and support had a positive impact on Chinese firm spontaneity. “Action promotion, trust, and support demonstrate substantial positive effects on the creativity of a firm” (p. 2671).

METHODOLOGY

The purpose of this study was to explore the DI Challenge Experience of participating students of grades 3-12 and university, with an emphasis of (workforce) agility at the 2024 *Destination Imagination Global Finals* in Kansas City, Missouri. The research question of the study was: To what extent does the Destination Imagination Challenge Experience lead to workforce agility?

The participants of this study were the DI Team Managers and were purposefully selected based on their experience and expertise on the “DI Challenge Experience” and their role as Team Managers. Data were collected by means of a survey with open-ended questions as well as the DI Challenge Experience skills ratings. The survey was distributed by means of email to 107 DI Team Managers by the DI Directors of Educational Alliances and Training and Education, accompanied by a cover letter explaining the study. Of the 107 surveys distributed, 27 completed surveys returned.

Preliminary data analysis included rating the DI Challenge Experience skills based on importance. Collaboration and communication were ranked as the highest-rated, serving as a foundation for other skills. Trust and psychological safety were identified as essential for collaboration for team effectiveness; and problem-solving and decision-making were linked to collective critical thinking; and generating creative solutions was tied to collaborative processes. Analysis of the textual responses to the survey questions revealed that workforce agility was the byproduct of the improvisation challenge experience. This study highlighted the importance of the improvisation skills fostering collaborative environments in educational programs as it resulted in workforce agility.

Once the data were analyzed, the authors also checked and verified the responses and themes for *accuracy* resulting in “fair and representative” interpretations (Creswell, 2019, p. 259). In addition, *member checking* (Creswell) was completed the Director of Educational Alliances and Training and the Director of Education.

Data Collection and Analysis

The 27 surveys returned from the Team Managers (hereinafter managers) made up the data. The survey questions were developed by the first author as a result of reviewing of literature

and DI podcasts as well as participating in five of the DI training modules including *Tournament Data Forms*, *Understanding the Service-Learning Challenge High Stakes*, *Understanding DI Challenges*, *Understanding the Service Learning Challenge*, and *Understanding the Engineering Challenge*; and attending the DI Global Finals. The five basic questions of the survey focused on six core skill areas of improvisation based on the review of literature: 1) thinking critically, 2) generating creative solutions, 3) collaborating with others, 4) storytelling, 5) communicating with others, and 6) being spontaneous. The data from the survey included ratings of these skills of importance ranging from highest to lowest followed by responses to open-ended questions on six core skill areas of the DI Challenge Experience.

The DI Challenge Experience Skills Ratings

The managers rated the six core skill areas including 1) thinking critically; 2) generating creative solutions; 3) collaborating with others; 4) storytelling; 5) communicating with others; and 6) being spontaneous. The importance of the skills demonstrated a noteworthy consistency with almost identical scores across as follows: 1) communicating with others: 114; 2) collaborating with others: 113; 3) generating creative solutions: 109; 4) being spontaneous: 108; 5) thinking critically: 105; and 6) storytelling: 94 as illustrated in *Figure 1*.



Figure 1: Team Manager Ratings of the Improvisational Skills

The most critical finding across all questions was the concept of "prepared spontaneity"—the paradox that successful teams "spend time preparing to be spontaneous." Managers emphasized that psychological safety and trust must be established before performance expectations, with listening emerging as the most frequently mentioned and capitalized skill ("THEY LISTEN"). The "Yes, and" principle appeared repeatedly as fundamental to collaboration, creativity, and communication, explicitly connecting

improvisation practice to workplace effectiveness. Managers consistently advised a developmental sequence: Building trust and safety first, providing extensive practice opportunities, implementing structured reflection processes, and finally achieving performance that feels "effortless" but results from "hard work." The advice emphasized process over outcomes, reframed failure as essential learning ("If we're not wrong, we're not learning"), and stressed that workforce agility requires distributed participation rather than dominance by one or two members, with every team member contributing according to their strengths.

Analysis of the Survey Responses and Findings

Once the aforementioned skills were rated, the managers responded to five questions listed as follows:

1. What other Improvisation skills do you see as beneficial to workforce agility?
2. How do you perceive the role of teamwork and collaboration in the success of your Improvisation team?
3. How do teamwork and collaboration relate to fostering workforce agility?
4. Have you noticed any recurring patterns or strategies among teams that excel in the DI Challenge Experience?
5. What advice would you offer to teams aiming to maximize their development of workforce agility?

The analyses of the responses are as follows:

- **Responses to Question 1:** Responses emphasized the skill *adaptability* and *rapid problem-solving*. One Team Manager noted the importance of "rapid problem solving, divergent brainstorming, 'yes...and'" and another highlighted "working under pressure, adaptation" as critical workforce skills. The "yes...and" principle appeared three times across responses, connecting collaboration, creative solutions, and communication as interconnected competencies. Active listening emerged as foundational, with managers emphasizing "listening to one another and acceptance of peers ideas and feelings" and the ability to "listen and build off of other's ideas." The concept of "prepared spontaneity" first appeared here, with one manager advising "prepare for what you can. Thinking on your feet is associated with improv, but preparation is important too," highlighting the paradox that effective improvisation requires both practice and flexibility. Storytelling's notably low score and near-absence from written responses provided the first indication that it functions as a vehicle for conveying other skills rather than as a discrete workforce competency worthy of separate development.
- **Responses to Question 2:** The ratings and responses indicated that managers viewed teamwork and collaboration as absolutely essential for the improvisation challenge success. One Team Manager emphasized that "feeling part of a team is what retains employees and makes them feel valued and heard. A team atmosphere keeps productivity up," while another noted "it means everything- a team without it can

fail at a moment's notice," underscoring collaboration's critical nature. Trust and psychological safety were identified as foundational prerequisites, with managers explaining that teams must be able to "acknowledge and sometimes accept other suggestions in problem solving" and work together where "thinking together and acting together develop simultaneously." The responses consistently emphasized that effective collaboration enables rapid decision-making under pressure, with one team manager noting that "agile work teams do not have time to strategize / they need to just act. Having smooth ability to collaborate reduces time to action." Notably, despite maximum numerical ratings for storytelling, it remained absent from written responses, reinforcing that while valued theoretically, it is not consciously articulated as a teamwork element but rather embedded in the collaborative process itself.

- **Responses to Question 3:** The Team Manager responses revealed four key mechanisms linking collaboration to workplace agility: *psychological safety*, *adaptive capacity development*, *knowledge integration*, and *efficiency enhancement*. Managers identified psychological safety as foundational, with one stating "just as there is physical strength in teamwork in a tug of war, there is intellectual and creative strength when a team of thinkers can come to an agreement and work toward a common goal." Another emphasized that "in the workforce it is imperative that employees encourage and share ideas, build new skills, and work on projects in a positive manner," connecting improvisation teamwork directly to workplace effectiveness. The responses highlighted that successful teams demonstrate "structured flexibility," balancing preparation with spontaneity, and emphasized distributed leadership rather than hierarchical control. One manager noted that "If we operate in silos, we miss out on some opportunities and ideas that only come from cross pollination.... You come up with a better solution when you are able to see the problem from lots of different points of views," emphasizing how diverse perspectives and inclusive participation lead to better outcomes and enhanced organizational agility.
- **Responses to Question 4:** The observations of Team Managers revealed that patterns align perfectly with their theoretical understanding of important skills. Collaboration received the most extensive and detailed responses, with managers emphasizing role definition, trust-building, and distributed participation rather than dominance by one or two members. The concept of "prepared spontaneity" emerged prominently, with one manager noting, "Sounds contradictory, but the best teams spend time preparing to be spontaneous. Also divide the work...many teams fall in line behind one or two strong members. I find the teams are better when everyone steps up." *Listening* was identified as a critical differentiator, with one manager capitalizing for emphasis: "THEY LISTEN. Yes, they have ideas, but they need to listen in order to react to changes." Another Team Manager observed that "Teams that excel are the ones where the members are most in tune with one another," emphasizing real-time observation and understanding of teammates. The responses provided concrete, actionable strategies including early identification of team strengths and weaknesses, self-assigned roles to increase ownership, structured reflection processes moving from "good/bad" judgments to objective criteria, and

the importance of trust bonds that enable risk-taking, with one manager noting "Teams that have this bond are much more adept at risk-taking."

- **Responses to Question 5:** The responses demonstrated an alignment between managers' theoretical understanding, observed patterns, and prescriptive advice. Psychological safety emerged as the most critical foundational element, with one Team Manager emphasizing "Team building at the start of the season is important to build trust and comfort. If a team feels safe and trusts one another in turn they feel comfortable to try new ideas and concepts with one another." The "Yes, and" principle was explicitly recommended as transferable to workplace contexts, with one manager advising "'Yes, and' moves things forward. 'No, but' stops things in their tracks. This is true for work as well as improv." *Listening* again received emphasis with capitalization: "THEY LISTEN. Yes, they have ideas but they need to listen in order to react to changes," while multiple Team Managers stressed reframing failure as essential learning, with one stating "especially in the beginning, assume positive intent. Ensure that the motto is, 'If we're not wrong, we're not learning.'" The advice revealed a clear developmental sequence, with managers emphasizing process over outcomes and noting that apparent "magic" in performance comes from sustained hard work, as one manager reflected: "There was a moment on our team when everything they practiced finally came together, and the story felt effortless. It felt magical! But we knew it was the result of a lot of hard work." One Team Manager explicitly connected DI to workforce preparation, stating "DI does this naturally. It mirrors many work projects in corporate America - gives an end goal, with constraints, and asks a team to figure it out as quickly as possible. The failures in DI - in teamwork, product, or process, teach kids how to work productively and behaviors in a team setting that work and don't."

Findings Regarding Patterns

The analyses of questions revealed key patterns across six core skill areas in the DI Challenge Experience. In *thinking critically*, the strongest emphasis appeared in Questions 4 and 5, focusing on management and strategy. This skill is consistently linked to problem-solving and decision-making, showing an evolution from individual to collective critical thinking. A key trend emerged showing that critical thinking is enhanced through team diversity and multiple perspectives, with a notable progression from basic evaluation to structured analysis methods.

For *generating creative solutions*, prominence peaked in Questions 1 and 3, emphasizing skills and teamwork focus. The analysis showed strong connections to collaborative processes and building on others' ideas. The key trend identified that innovation emerges from team interaction rather than individual brilliance. The "Yes...and" thinking concept appeared repeatedly as crucial, appearing in three specific contexts: as a beneficial skill for workforce agility, as a pattern in successful teams, and as practical advice for implementation.

Collaborating with others emerged as the consistently highest-rated category, receiving unanimous maximum ratings in Question 2 and serving as a dominant theme across all questions. This skill proved foundational for all others, with trust and psychological safety

identified as prerequisites for success. The analysis showed it was essential for workplace agility and team effectiveness. While *Storytelling* ranked as the lowest-rated category overall, it showed most relevance in Questions 4 and 5 regarding practical application. Rather than standing alone, storytelling often integrated with other skills and served as a vehicle for them rather than an end in itself. The analysis revealed its value in conveying complex ideas and solutions.

Communicating with others maintained a strong presence across all questions, showing close links with collaboration. It proved essential for team functioning, with active listening emerging as a crucial component. The analysis emphasized both verbal and non-verbal communication aspects. Being Spontaneous appeared more prominently in early questions but less in management advice, highlighting the balance between preparation and flexibility. The concept of "prepared spontaneity" emerged as important, requiring a foundation of trust and team cohesion.

CONCLUSION

This qualitative study provided insights into the critical role of improvisation skills within the context of the DI Challenge Experience, particularly in relation to workforce agility. Through the analyses of the survey responses from DI Team Managers at the 2024 DI Global Finals, several key themes emerged, with *collaboration* identified as the cornerstone of effective teamwork and a prerequisite for other essential skills. The findings underscore the importance of fostering trust and psychological safety within teams to enhance problem-solving, decision-making, and the generation of creative solutions. In addition, the role of storytelling demonstrated that it functions as an integrative skill with other competencies rather than as a standalone skill. This challenges traditional perceptions of storytelling in workforce contexts and underscores the need for educational programs to adopt a more holistic approach to skill development. By emphasizing collaboration and the interconnectedness of various improvisation skills, this study suggests that workforce development initiatives should focus on cultivating supportive environments that enable teams to thrive.

The implications of this research extend beyond the DI framework, offering a pathway for educational and workforce development programs to enhance agility, creativity, and effectiveness in collaborative settings. The findings suggest important implications for educational programs, workforce development initiatives, and organizational training design. Specifically, the DI Challenge Experience demonstrates that workforce agility is not developed through isolated skill instruction, but through intentionally designed, experiential environments that prioritize collaboration, communication, trust, and psychological safety as foundational conditions for performance. The consistent emphasis on "prepared spontaneity" highlights a transferable model for education and training: teams must be given structured opportunities to practice, reflect, and build shared understanding before they can respond effectively under pressure. For educators and trainers, this suggests a shift away from outcome-only assessment toward process-oriented learning where failure happens as part of skill development that emphasizes active listening, shared leadership, and inclusive participation. For organizations, the results reinforce the value of improvisation-based training as a means of cultivating adaptive, resilient teams capable of successfully dealing with uncertainty, rapid

change, and complex problem-solving—core demands of today’s dynamic workforce environments.

RECOMMENDED FURTHER RESEARCH

The following three areas should be considered for future research: 1) The Service Learning Challenge, 2) the Film Challenge, and 3) the use of AI by teams, by team members, and the Team Managers.

1. The Service Learning Challenge. Possible research questions are: What factors influence student engagement and motivation in the Service Learning Challenges that incorporate DI principles? How does DI facilitate collaboration among students in service learning projects, and what are the implications for teamwork skills?
2. The Film Challenge. The following are possible research questions. Where do teams fit within the skill development framework as defined by Scoular et al. (2020) for the Australian Council for Educational Research (ACER)? How does participation in the Team Film Challenge influence students' collaboration skills and team dynamics across different educational levels? In what ways does the Team Film Challenge foster innovative problem-solving among participants, and how do these skills translate to real-world applications? Can the Team Film Challenge be measured beyond the awards, considering factors such as personal growth and skill development? What are the long-term impacts of participating in the Team Film Challenge on students' engagement in the arts and their further educational pursuits?
3. The use of AI by teams and team members, and the Team Managers as it relates to the *Guiding Principles for Generative Artificial Intelligence in Destination Imagination* (DI, 2024). Possible research questions include the following. How do assistive technologies impact student engagement and learning outcomes in hands-on educational environments? What are the perceptions of team members regarding the integration of AT technologies in enhancing collaborative learning experiences?

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