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A Framework for Introducing and Sustaining Play at Work

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By

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* The Synthesis can take a variety of forms, from a position paper to curriculum or professional development workshop to an original contribution in the creative arts or writing. The expectation is that students use their Synthesis to show how they have integrated knowledge, tools, experience, and support gained in the program so as to prepare themselves to be constructive, reflective agents of change in work, education, social movements, science, creative arts, or other endeavors.

ABSTRACT

This paper presents a framework for introducing and sustaining play at work, focusing on its impact on creativity, problem solving, team performance, psychological safety, and organizational change. The author explores the concept of playfulness in a work setting and its potential to foster divergent thinking. Drawing on a real-life scenario involving a team of high school students participating in a Destination Imagination challenge, the paper highlights the role of play and risk-taking in problem-solving processes. The study emphasizes the importance of creating an environment that encourages play and experimentation while maintaining a sense of safety and support. The findings suggest incorporating play into work environments can enhance creativity, team collaboration, and innovative problem-solving approaches. This framework offers valuable insights for individuals and organizations seeking to cultivate a culture of play in various domains, including work, education, and social movements.

Keywords: play, playfulness, creativity, creative problem solving, team performance, psychological safety, organizational change, divergent thinking

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Introduction

"Thirty seconds left, hands off," the team's timekeeper calmly announced with just a bit of concern in her voice. Seven high school level Destination Imagination students were furiously working to add one more section to the tower they were building. Hands in the air, the team stepped back, except for one. They had come to recognize that this was a tacit vote for whether or not they had confidence that this last section could be completed in time to contribute to their solution. "I got this," said the one still fiddling with the section. He knew he was the only one who thought it was worth the risk. The team gave him 10 seconds of leeway before calling his name. Disappointed, he carefully disconnected the section while another team member checked the stability of the rest of the structure. "Time!" called the adult Head Appraiser in charge of the Instant Challenge.

"Part two," read the appraiser, "is to pick up the board that your tower is built on and flip it upside-down." The team held their collective breath as the board was turned over. The tower stayed firmly attached to the board and the two appraisers measured the tower from the bottom of the board to the top of the tower that was now pointing at the floor. The tower was returned to its upright position and placed on the table. Then the Head Appraiser broke the bad news, "Your team will be assessed an illegal procedure deduction for this tower because you used the mailing labels to attach the tower to the board." Panic swept through the team, and all eyes turned to one member, the one responsible for reading the challenge. "Hold on," he said. "Can you show me where in the challenge it says we can't use the mailing labels to attach the tower to the board?" The team waited nervously while the appraisers reviewed the written challenge and conferred with one another. It was common practice in Instant Challenges to restrict certain applications of the provided materials to add difficulty and encourage teams to find more creative solutions.

Both the adult appraisers and the experienced high school team knew that mailing labels were usually not permitted to be attached to anything other than the materials provided to the team. The adults had intended to write it into the challenge, but the team caught it, and recognized it as an opportunity. The Head Appraiser looked up and announced, "Yup, you are correct. It doesn't say that you can't. No deduction." The team members let out a collective sigh, then grabbed each other, laughing nervously, in a collective group hug. At stake was a trip to the Destination Imagination Global Finals, and the team was confident that they were ready to compete with the best in the world. The last 10 minutes just confirmed it.

It can happen in an Instant (Challenge)

What can seven people accomplish in just ten minutes? Ask most people that question and they won't be able to give you a good answer. They might say, "not much" or "that depends." Ask an experienced Destination Imagination team and you will get a wry smile, followed by "Just watch us." Destination Imagination (DI) is a global creative problem-solving program for school-aged children. As a team manager for DI, I had the privilege of accompanying my teams into their Instant Challenge (IC) rooms during tournament competition. Unlike their Main Challenge solution, which is performed in front of an audience, Instant Challenge is only seen by the appraisers and one Team Manager. The Main Challenge is one of six possible challenges from which the team can pick and includes a written description of the requirements of the challenge and how it is scored. Teams review the challenges they most enjoy working on and pick one that they feel their team is well equipped to take on and solve over several months. Instant Challenges, on the other hand, are not known to the team ahead of time and must be solved at the tournament in a very limited time, typically fifteen minutes or less. While both types of challenges are open-ended, allowing for a wide range of solutions, solving

them applies a variation of the creative problem-solving (CPS) process first developed in 1953 by Alex Osborne and taught by the DI program. Following the steps of Recognize, Imagine, Collaborate and Initiate, Assess, and Evaluate and Celebrate, teams breakdown and clarify the problem, generate ideas, evaluate and select promising ideas, test them, assess and adjust their solutions, and present them. This is essentially the same process used by adults in the workplace to solve complex problems and innovate for growth. Helping a team learn and apply the CPS process to their Main Challenge over several months is tremendously rewarding as a volunteer. Watching a team use every step of that same process to solve an Instant Challenge in 10 minutes will leave you speechless.

What *did* happen in those ten minutes is difficult to capture completely, but here are some of the skills and abilities the team demonstrated:

- Creativity (use of materials, design, imagination)
- Convergent thinking (understanding the challenge, focusing on a solution)
- Divergent thinking (idea generation, reframing the challenge, innovation)
- Development (rapid prototyping, testing, failing, adapting)
- Evaluating (measuring, assessing risk, decision-making)
- Performing (teamwork, communication, roles, planning, leading, encouraging)
- Celebrating (reflecting, learning, building confidence)

But the team's success wasn't just a matter of following the steps of CPS. Before they entered the room, the team already knew their roles. They knew who would keep track of the time they had, who would re-read the challenge to make sure they didn't miss anything, who their builders were if it was a construction challenge, and who would work on the story if they had to do a performance. They were all good at pushing the limits of the challenge and

maximizing the points they could get from each section of the challenge. The decision to stop building with 30 seconds left had been made while the challenge was being read to them, even before their building time started. In reality, that decision had been made months before, following more than five years of experience with similar challenges where epic failures had taught them painful lessons about knowing when to stop adding more things to their solution. The decision of which materials they would use came from endless practice with different materials. Straws work well for building tall towers, but not as well for bridges that must hold weight. String is rarely helpful in building for height, but for this challenge, they knew that the short piece of string could be attached to the top of the tower and would hang down once the tower was flipped upside-down. Extra Points!

What can seven people accomplish in ten minutes? In that Instant Challenge room, like thousands of others like it at tournaments around the world, a team of seven students put play to work. Applying everything they had learned and practiced through the Destination Imagination program, they had run through the complete creative problem-solving process and developed a successful solution. They reviewed the challenge to clarify the problem, generated ideas using divergent thinking skills, evaluated and selected their best solution using convergent focusing tools, developed their plan of action, and implemented their solution, learning and adapting their solution as they worked. They evaluated the limited materials they had and prioritized them based on the requirements of the challenge. They demonstrated teamwork and collaboration that would make many adult leadership teams jealous. They assessed the risks of their decisions as they sought to maximize the points they could earn for each section of the challenge. When faced with adversity, they advocated for their decision to use the mailing labels to attach the tower to the board, noting that the requirements of the challenge did not exclude their use in that way. The

team did all of this, and more, not by learning it formally in a classroom, but through hands-on play. Oh, and did I mention the part about ten minutes?

If this sounds like the skills companies are looking for in their applicants, it is no accident. DI's mission is "To inspire and equip youth to imagine and innovate through the creative process" (2023) and their vision is to "Ignite the power of ALL youth to be the creative and collaborative innovators of tomorrow." The Destination Imagination challenge experience uses play-oriented activities to teach and practice the creative problem-solving process and enables kids in grades K-12 to put it to work. There is no research or evidence to suggest that the same approach is any less effective when applied in adult workplaces. Even though the process often looks like child's play, it can produce new product ideas, process improvements, and innovation to drive company growth. It is serious fun.

Play is not just for Children

Research has documented many benefits from play during early childhood development. Play has been shown to enrich creativity (Russ, 2014), cooperation (Cheung, 2018), and problem-solving skills (Pepler & Ross, 1981) in children. As we grow older, more structured forms of learning and development begin to replace play. By the time we begin our careers, the pressures of social norms, demands of the job, and the need to be seen as productive and serious in one's work create organizational cultures that consider play inappropriate and unprofessional in the workplace. The forces that establish and perpetuate this bias against play is seen at all levels of the organization. Leadership teams model serious behavior from the top of the organization which permeates all the way through to line workers. A culture of fear develops that can limit risk taking and undermine new thinking.

Yet, with the benefits of play so strongly linked to development in children, why do we

seem to believe that the developmental benefits of play become less effective as we grow older? What are the barriers that prevent play from being considered as serious a learning tool for adults as it is for children? This synthesis looks at resistance to adoption of play as an adult developmental tool in organizations. Play personalities (Brown, 2010) will be used to understand resistance to play-oriented activities that only address one type, such as the competitive play personality. The importance of practice to developing skills will be highlighted along with the concept of using play-orientated activities linked to learning outcomes for adults to practice parallel skills needed in the workplace. Finally, a framework to introduce and sustain play will be proposed at both the employee and leadership levels to allow play-orientated activities to become a serious tool for employee professional development and psychological safety within adult organizations.

Play and Playfulness

Initially it may seem obvious what is meant by play, but there are important aspects of how play is defined and how it relates to playfulness that are worth reviewing. While we don't usually think of adults as playing, according to Bateson & Martin (2013), "Play is a universal human experience that allows people of all ages to experiment with novel ideas without fear of failure." Play is a spontaneous, enjoyable activity that is engaged in for its own sake, rather than for any external purpose or reward. It often involves exploration, experimentation, and the use of imagination. Play can take many different forms, including physical play, creative play, social play, and games.

Bateson & Martin (2013) describe playfulness as a "positive mood state" characterized by a sense of curiosity, openness, and willingness to explore and experiment. It involves having a playful attitude towards life and a willingness to take risks and try new things. Playfulness can be

expressed in many ways, including through humor, creativity, and spontaneity. Initiating playfulness can lead to play activities, but it can also be helpful in solving work problems and challenges by allowing new ways to look at the issue and being open to ideas of others.

Both play and playfulness are important for healthy development and well-being. They can help individuals to learn, grow, and explore the world around them, as well as to relax, reduce stress, and have fun. Allowing and encouraging playfulness is an important part of building a culture of trust and psychological safety in organizations (West, M., 2012).

An important aspect of playfulness is whether it exists as a state or an attitude. As a state, playfulness refers to the subjective experience of being in a playful mood or engaged in playful activity (West et al., 2013). It is characterized by a sense of enjoyment, creativity, spontaneity, and freedom from constraints. Playful states can be triggered by external factors, such as the presence of a fun and stimulating environment, or by internal factors, such as one's mood or level of energy.

As an attitude, playfulness refers to a general disposition or approach to life that values humor, creativity, and play. It is a mindset that is open to new experiences, embraces ambiguity and uncertainty, and is not overly concerned with achieving specific outcomes. Playful attitudes are often associated with traits such as curiosity, flexibility, and resilience.

While playfulness as a state and an attitude can be distinguished, they are also closely related. Engaging in playful activities can foster a playful attitude and vice versa. A person with a playful attitude is more likely to seek out playful experiences and approach them with a playful mindset, which can in turn enhance their playful state. Similarly, experiencing a playful state can reinforce a playful attitude by demonstrating the benefits of playfulness in enhancing one's mood and outlook on life.

Games and activities can establish a state of playfulness, but the research is inconclusive on whether continued exposure to playfulness contributes to establishing or enhancing an attitude of playfulness. It is also unclear whether it is the act of playing or the state of playfulness that contributes more to creativity. What the research does indicate is that creating an organizational culture that encourages play and playfulness must be modeled by leadership, "…until someone senior in the organization actually demonstrates setting the example, and illustrates their playfulness in the working environment, very few other people are going to be brave enough to do it" (West et al., 2013). Getting the most senior person possible in the organization to set the example is critical to establishing permission and the psychological safety to be playful.

Benefits of Play and Playfulness at Work

While many of the benefits of play and playfulness for children are linked to development of skills they will apply later in life, research on adults has focused on more immediate benefits to the individual and the organizations in which they work. This is not surprising given the importance organizations place on productivity and short-term financial metrics. Some of the more compelling research links play to increased creativity and innovation, employee performance (de Beer et al., 2020), higher performing teams, and greater employee productivity (Fluegge-Woolf, 2014). It is important here to define two important concepts. The terms creativity and innovation are often used interchangeably, but Bateson and Martin (2013) make a clear distinction between the process of generating new ideas (creativity) and the innovation of selecting and implementing the most promising options. Separating the problem-solving process in this way allows us to consider the impact of play and playfulness on divergent and convergent thinking.

Other research has focused more on contributions to thinking dispositions such as

openness, intrinsic motivation, and collaboration (West et al., 2013). Additionally, there is evidence that play and maintaining a playful mindset reduces stress (Locke, 1989), increases happiness, improves information retention, improves team bonding (Sørensen & Spoelstra, 2012), and contributes to building a culture of psychological safety within organizations (Hunter et al., 2010).

Scanning the list of benefits, (see summary of research in Appendix A), there is a clear win-win proposition for both the organization and the employee. For companies to continue to be successful, creativity and the products of innovation are critical. Additionally, employee productivity, team performance, collaboration, openness, and team bonding are highly desired in the workplace. Having some degree of overlap, the rest of the benefits (openness, intrinsic motivation, creativity, happiness, reduced stress, information retention, bonding, and trust/psychological safety) are specific to the individual and often determine whether they stay with an organization over the long run.

It is important to recognize that merely offering, encouraging, and modeling play and playfulness does not guarantee improvement in the positive benefits desired across different job tasks and responsibilities. While the research is sparse on the issue, there is evidence to support the idea that play and playfulness have more to offer tasks and processes linked to divergent thinking such as creative expression, intrinsic motivation, and idea generation. Returning to the distinction outlined earlier between creativity and innovation, this indicates that play and playfulness likely provide greater benefits to creativity than to innovation. Figure 1 shows the stages for four of the most used creative problem-solving (CPS) processes. While each of the stages can iterate between divergent and convergent thinking, the distinction Bateson and Martin (2013) make between creativity and innovation is clearly seen between idea generation stages

earlier in the process and idea focusing stages later in the process. The implication is that play and playfulness may be more helpful in the earlier stages of CPS and potentially distracting when selection and implementation is needed.

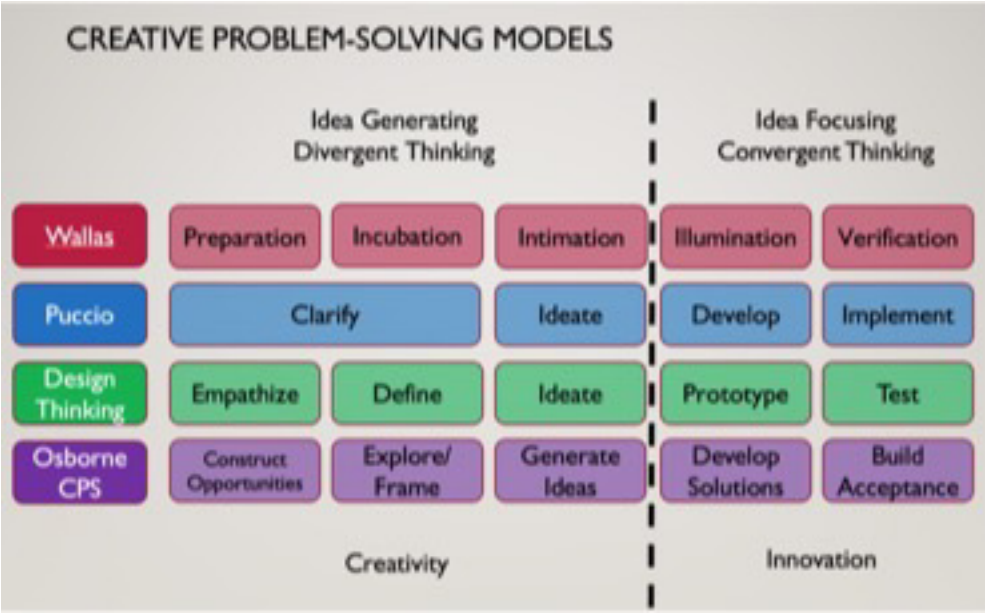

Figure 1: Creative Problem-Solving Models

This does not mean that benefits cannot be gained in idea focusing tasks. In fact, the benefits of play in idea generating phases provide more options and more variety to selecting and testing viable solutions. An example of this is the Plane Crash activity (Appendix C) which covers all phases of the creative problem-solving process. Describing a potential real-life, but not actually life-threatening scenario helps establish a playful state which encourages more diverse and creative thinking around how each of the salvaged items could be helpful to the team's survival. As the team moves from divergent thinking about how they can use the items, to prioritizing them for their survival value, playfulness can carry over into convergent thinking. In groups where I have used this activity it is not uncommon for them to come up with ways to use items that was not considered by the ranking done by survival experts. I've had people suggest

that the plastic covered air map could be turned into a game board to keep people calm and connected. I've also had teams (playfully) suggest that they should just take the gun and shoot everyone and be done with it. That "crazy" idea led to a discussion of keeping people's emotional state in mind as they prioritized the items, not just their physical health.

Discouragers of Play and Playfulness

Play is considered the work of children in many cultures and adult organizations. While play has many benefits, it is not always considered acceptable in a work environment for several reasons. Workplaces often have time constraints and deadlines to meet which can make it difficult to allow time for play. In some workplaces play may be viewed as unprofessional and could be seen as detracting from the seriousness and focus of the work. It would likely be disconcerting for you to see your heart surgeon playing the game "Operation" as you are wheeled into surgery. Play may also be viewed as a distraction from work (which is also one of its benefits) and could potentially decrease productivity. In some workplaces there may be a culture that does not value play or playfulness which could discourage individuals from engaging in playful activities.

One reason leaders resist integrating play into workplaces lies with fear over losing control over their subordinates' productivity (Rafferty et al., 2013). Leaders may believe implementing fun-oriented practices would confuse or distract their staff leading to a decrease in productivity. Leaders might perceive play as wasting time which could be better utilized for other organizational activities. They presume that if subordinates are engaging in play activities they are not utilizing their time effectively on completing assigned tasks (Rafferty et al., 2013). Overcoming resistance to play requires an understanding of the benefits along with effective communication strategies between the employees and management. Additionally creating a

culture where workers can freely interact with each other without fear or judgement will encourage employee engagement.

Play Personalities

Every person is unique and has a complex combination of experiences, traits, beliefs, and values that shape their personality and behavior. Through their personal experiences and educational pathways people develop preferences, interests, skills, fascinations, thinking dispositions, and numerous other attributes that are distinct and inimitable from every other individual. While it is our uniqueness that defines us, it is the things we have in common that connect us. Our need for cognitive organization leads to the development of categorization schemas such as trait theory, behavioral theory, and personality typing. The Myers-Briggs Type Indicator (MBTI) uses an individual's behaviors and traits to identify their personality type from 16 different attributes. The Enneagram is another example using 9 personality types. These classification systems help us understand people's tendencies and preferences, but as with any classification system are only one part of the individual's story.

Play personalities, developed by Psychologist Dr. Stuart Brown (Brown & Vaughan, 2010) refer to different styles of play that individuals naturally gravitate towards and offer a different way of categorizing play activities. Brown, founder of the National Institute for Play (2023), identified eight distinct play personalities based on his research:

1. The Joker: enjoys play that involves humor, teasing, and practical jokes. They enjoy making others laugh and may use humor to diffuse tense situations.
2. The Kinesthete: enjoys physical play that involves movement and body expression. They enjoy activities such as dancing, sports, and other physical activities.

3. The Explorer: enjoys play that involves exploring and discovering new things. They enjoy activities such as hiking, travel, and trying new foods or experiences.
4. The Competitor: enjoys play that involves competition and winning. They enjoy activities such as sports, games, and debates.
5. The Director: enjoys play that involves planning and organizing activities. They enjoy activities such as event planning, strategy games, and leading group activities.
6. The Collector: enjoys play that involves acquiring and collecting objects or experiences. They enjoy activities such as shopping, trading, and travel.
7. The Artist/Creator: enjoys play that involves creating or expressing oneself through art, music, writing, or other creative outlets.
8. The Storyteller: enjoys play that involves creating or sharing stories, whether through oral storytelling, writing, or other media.

As with personality types, people do not typically fit neatly into a single category. Even within a single individual, there may be conflicting or contradictory aspects of their personality. While individuals may identify with multiple play personalities, Dr. Brown (2010) suggests that most people have one or two dominant play personalities that strongly influence their play preferences and styles. Understanding play personalities can help explain why some employees might welcome a ping pong table (The Competitor and/or Kinesthete) whereas a Storyteller or Artist/Creator might see it as a distraction and a waste of time. These types need play activities that appeal to their artistic, creative, and story-focused play personalities. While play personalities are a useful tool, it is important to remember that categories are not always fixed or objective. Different people may categorize things differently based on their own experiences,

perspectives, and cultural background. Additionally, categories can change over time as we learn new information or gain new insights.

Play personalities provide a categorization schema that can be applied to any game or activity as an indication of which personalities may find the activity fun and engaging. The play-activities identified in this thesis have been tagged by the author with one or more play personalities that are expected to enjoy the activity.

Play as Skills Practice

Challenges, games, and playful activities provide opportunities to learn and practice skills while limiting risk. Mainemelis and Ronson (2006) found that "Play as engagement with work tasks allows individuals to improve their domain-relevant skills on the job." Domain-relevant skills refer to a person's expertise within a specific domain, providing "cognitive pathways for the individual to follow in approaching his or her work." Aligning the level of challenge or engagement through play facilitates skill development. When the activities are associative with an individual's domain-relevant skills, the practice of play becomes learning and lower-risk failure during play can accelerate skill development in the related domain expertise.

This describes what happens with DI teams when they practice "instant challenges" week after week as they prepare for tournament season. Although they will not know anything about the challenge they will face until they enter the challenge room, months and years of practice has developed the associative skills and "cognitive pathways" that will be applied in those ten minutes to develop a successful solution. Teams often discover that their collective talents and skills align well with certain types of Instant Challenges. Teams that gravitate to the Improvisational Main Challenge will typically do well on ICs that require a quickly created

performance. Teams that score well on ICs requiring construction of towers and bridges also enjoy the Engineering and Technical main challenges.

However, this does not mean that these teams will perform well when faced with an IC requiring skills that fall within their domain expertise. Performing well as a team when solving never-before-seen challenges in ten to fifteen minutes involves much more than just using domain-relevant skills. Teams can unwittingly devote more time to practicing IC types where they are not as skilled or comfortable, thinking that they will be prepared to handle anything once in the IC room, only to stumble through a challenge in their area of expertise because they gave themselves too little opportunity to practice rapid assessment and selection of materials or division of labor for faster construction. Practice, across all types of challenges, builds the associative skills that are called upon when facing a new challenge. Mainemelis and Ronson (2006) summarized the importance of developing associative skills stating, “The ability to respond creatively to novel problems does not seem to exist in a vacuum; rather, it requires some practice which play provides.” They also found that play as engagement with work tasks “gives individuals the opportunity to practice and rehearse the creation of novelty specifically in the context of their work.”

An example from my personal experience of how quickly this can contribute to improved performance comes from training sessions I attended with Massachusetts Destination Imagination (MADI). One of the training sessions available to team managers was on running Instant Challenges (ICs) for their team(s). The session consists of engaging a group of team managers in four different ICs back-to-back. The intent was to teach the process of conducting ICs with teams and how managers can use them to help their teams fail, reflect, and learn. What was interesting to watch is what happened to the team of adults over the course of the four ICs.

The first challenge that they are presented with typically ended in failure or an incomplete solution to the problem. Frustration was evident, and the room felt very serious. The second challenge showed improvement as the newly formed "team" of trainees began to understand how to work within the limited time and requirements of the challenge. By the third challenge they began to recognize each other's strengths, operate as a team, and fully meet the requirements of the challenge. In the fourth and final challenge domain-specific skills learned in the previous three challenges was being used to develop a new solution.

Addressing the Skills Gap through Play

Despite the recent enthusiasm for adopting play and playfulness in the workplace, research connecting specific activities, behaviors, and dispositions to improving desired outcomes is limited. The studies that have been done (reference Appendix A) are a scattershot across a wide range of enabling factors, organizational structures, and industries. While this dearth represents opportunities for future research, the lack of synthesis of what we do know has discouraged organizations from considering the steps necessary to successfully incorporate play as an individual, team-level, and organizational resource for professional development. Given the broad range of benefits to play discussed above, waiting for definitive proof of value will deprive organizations of potentially groundbreaking creativity, innovation, and employee well-being. The importance of other "soft skills" (e.g. communication, problem-solving, critical thinking, emotional intelligence, and teamwork) has long been recognized by organizations despite their being unable to quantify the exact value of their contribution to employee performance and organizational productivity.

Yet, there is little disagreement that these skills have a tangible impact on the organization's bottom line and are the skills organizations most desire in their employees. A

2019 survey by the Society for Human Resources Management (SHRM) found that 75% of U.S. based HR professionals reported difficulty finding qualified candidates due to a shortage of skills. Problem-solving, critical thinking, innovation, and creativity topped the list of missing soft skills at 37%. The ability to deal with complexity and ambiguity was reported as a gap in 32% of the recruits, followed closely by communication skills at 31%. According to the survey, over 50% of the respondents believed these gaps had gotten worse over the previous two years. Organizations face an increasing need to close these soft skill gaps themselves, and SHRM finds that providing onsite training to employees such as training programs and seminars is one of the most effective approaches. Given that the research on play and playfulness has been found to have positive impact on every one of the "missing" soft skills reported in SHRM's research, it may be time for organizations to add play to their culture. With the difficulty organizations have finding these skills in applicants, developing them in-house is a reasonable approach for human resources departments to undertake.

Designing Play Activities

As my research and synthesis progressed through the semester, I focused on the importance of skill development through practice to bridge the training gap, as well as on mapping activities to play personalities for better engagement. I was feeling good about the games and activities I had connected to desired skills and personalities of the people who might enjoy them. Appendix B includes a sample list of the games, icebreakers, activities, and challenges I categorized as a part of this effort. In the middle of the second full draft of this synthesis, as I was adding to the list, I began to think about the organizations that might use this information as a starting point for bringing play into their own companies and how it might be received. I had always approached this project as a potential facilitator of the process. Thinking

about a company going it alone based on this synthesis, I knew immediately that I had missed a key piece of the puzzle without which success was unlikely. I had an approach for *what* play activities to introduce. What I missed was *how* to introduce play into the workplace, allow its value to be demonstrated, and achieve an organizational culture to sustain it. What became evident through my research and synthesis was that simply creating engaging play activities, identifying the play personalities most likely to enjoy them, and connecting those activities to the practice and development of domain-specific skills would be insufficient even as a starting point. Offering a prescriptive approach to play activities was an incomplete solution. It wasn't the creation of the right activities, for the right people, fostering the desired skills that would allow play to be introduced successfully. As with any effort to alter or extend behavioral and dispositional thinking of the organization, disruption of the established flow of the organization is a concern. Introducing play, regardless of the readiness of the company, involves not only a change of mindset for the individual, but also a change to the organization's culture. To accomplish this, and to keep it working, requires a plan of action.

A Framework for Action

Drawing from my experience as a product development leader, intentional change in organizations is most effectively accomplished with the support of change management models. For this synthesis, I considered three types of frameworks that could be used to manage the process on introducing play: business-focused change management models, Senge's learning organization model (1994), and the Cycles and Epicycles of Action Research (Taylor & Szteiter, 2019).

In the 1950s, Dr. Edward Deming established one of the first ways to look at managing organizational change with the Deming Cycle (Edwards, 2010). His approach focused primarily

on quality management for organizational processes and was based on a simple four-step cycle consisting of Plan, Do, Study, Act (PDSA) that is still widely used today (reference Appendix E, figure E-2). Originally developed as PDCA using Check as the third step, Deming felt that Study was more fitting of the cycle as a learning process. The four steps are a cycle in that Act feeds back into Plan and is especially important in cases where the Plan did not go as expected. PDSA has been challenged recently as focusing more on the process undergoing change without adequately accounting for the impact of change on the employees (Gratiela Dana Boca, 2013).

The ADKAR model for change management (Hiatt, 2006) was developed using the steps Awareness, Desire, Knowledge, Ability, and Reinforcement (reference Appendix E, figure E-3). Haitt's model breaks down Deming's Plan phase to better understand the drivers of change that often become the cause of failure of change management efforts. Identifying the need for change, the desire to make it happen, and knowledge of how to create the change, recognizes that "the process of change is highly personal and individualized" (Bleich & Jones-Schenk, 2019). This inquiry is important to developing the communication plans, highlighting the importance of addressing each person's view of the current state and how the change will impact them.

Models from The Richardson Group and The Everest Group (reference Appendix E, figures E-4 and E-5) follow similar steps in the change management process and highlight the importance of establishing a shared future state or vision for the organization. As with most change management models, they also include elements such as changes to processes and staffing that we would not expect to be part of the goals when introducing play.

Senge's (1994) five disciplines model for learning organizations expanded on the concept of shared vision, stressing the importance of understanding both the *what* and the *why* of proposed changes (reference Appendix E, figure E-6). Senge also recognizes the need for

allowing and creating space for mistakes as an important contributor to new understanding and team learning. Connecting what people know with what they need to know is reflected in the concept of personal mastery. According to Senge, personal mastery contributes to "creating an organizational environment which encourages all its members to develop themselves toward the goals and purposes they choose" (Senge, 1994, p.6).

The Cycles and Epicycles of Action Research (Taylor & Szteiter, 2019) is perhaps the most appropriate framework for the objective (reference Appendix E, figure E-7). Several concepts of the Action Research (AR) framework are important to introducing play including: planning, reflection, building constituencies of support, implementation, evaluation of action plans, and iterative adaptation for improving the following cycles. Incorporating selected tasks and goals from each of these models, I propose an implementation framework (IPLAY™) that allows organizations to begin with the research on play that is known and adopt an action plan that is focused, unique to their organization, adaptive, reflective, iterative, and inclusive of all stakeholders. The framework, called IPLAY™, is a loop cycle that includes five stages: Inquire, Plan, Lead, Adopt, and Yardstick (see figure 2 and 3).

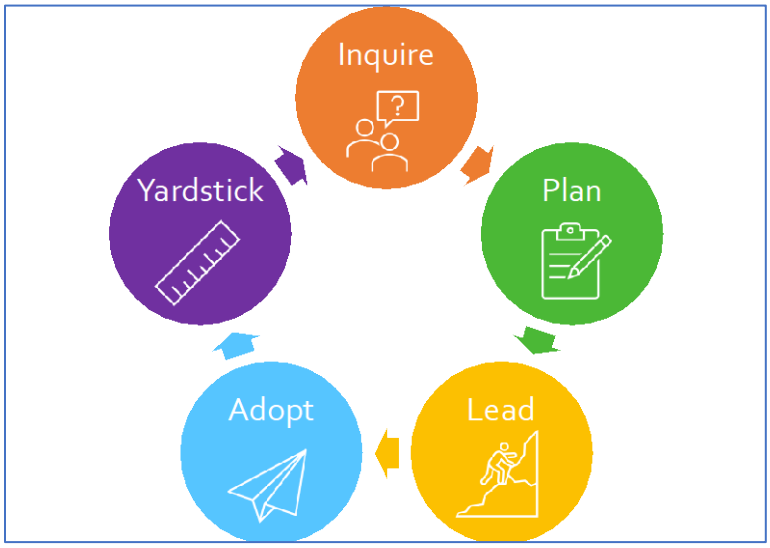

Figure 2: IPLAY™ Change Management Cycle

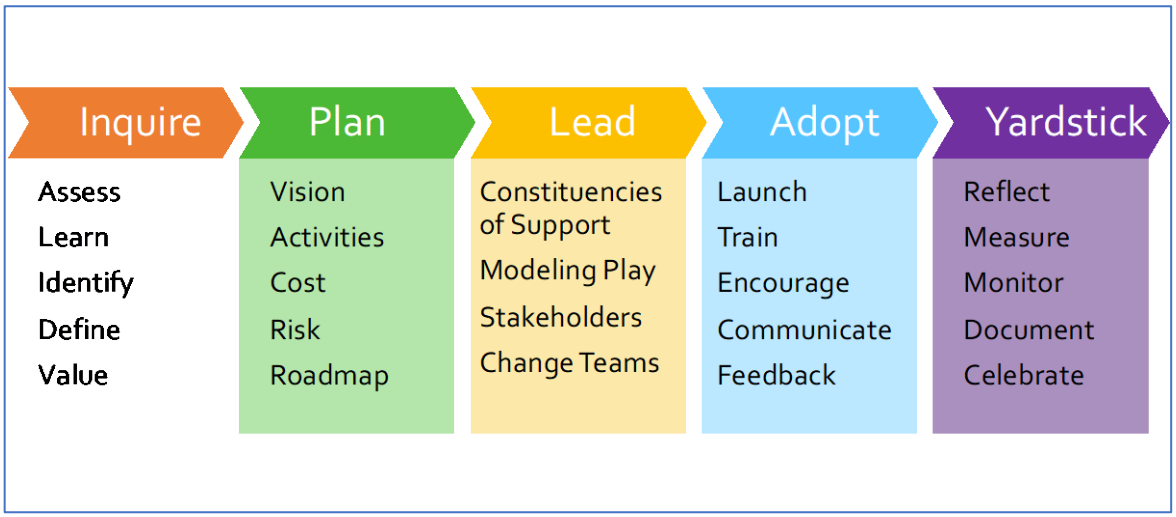

Figure 3: IPLAY™ Change Management Stages

Inquire:

The Inquire stage is the beginning of the cycle and iterative cycles that redefine and adapt additional cycles fed by monitoring and learning in earlier stages. Inquiry begins with taking inventory of, and defining:

- What the organization knows (or has learned) about the factors that contribute to play and playfulness
- Assessments of each employee's traits, capabilities, play personalities, and thinking dispositions
- Definition of skills desired of each person in their domain-specific role
- Starting benchmark for each person's desired skill proficiency
- Goals of the organization of this change management effort
- Current and future desired state
- Inclusion of structured and unstructured play activities
- Value to the organization and key metrics for measuring success

- Assessment of organizational readiness to begin the change process

Plan:

Planning applies the information generated in the Inquiry stage to the development of a roadmap of the change process. A key element at this point is the inclusion of employees at all levels on the organization into the planning process. The employees must feel that they have ownership of the program and responsibility to ensure its success. The roadmap should address:

- The vision for the change process
- Identify/develop play activities aligned to targeted play personalities and desired skills to foster
- Plan for local and remote participation
- Identify activities to be included in the next iteration of the cycle (reference Appendix B)
- Interests and skills being addressed by the selected activities
- Costs, including funding for the activities and time requirements for senior management, change support teams, and employee participation in the selected activities remotely and in-person
- Risk to the organization
- Process changes needed
- What will change and why
- How key metrics will be used
- Communication plan

Lead:

Leading the change management program is essential to its success. Before launching, it is necessary to build the constituencies of support or change teams that will feed and encourage the program while minimizing negative conditions that would reduce the impact of the desired outcomes. The change teams are also key communicators of the program sharing whether the activities are successful or not and the results of post-activity reflection. Modeling the activities through change teams and by direct participation in play activities at the highest level of the organization is important to building psychological safety and a culture of trust. Change teams and senior management ignite the movement, inspire people to participate and align the culture to support the change.

Adopt:

In the Adopt stage, the program is launched by leading the effort to model play and playfulness in meaningful ways to the leadership and organization overall. Allow the program time to develop and take hold. Conduct immediate post-activity reflection discussions to evaluate activities quickly and discard or change ones that are believed to be ineffective, inappropriate, or out of sync with the interests and skills desired by the employees and organization. A list of prompts developed in previous coursework as part of the author's Reflective Practice Plan is provided in Appendix D. Follow-up surveys should be conducted in the Yardstick phase, but immediate feedback is necessary to avoid repeating poorly planned activities. Frequent communication and celebrating small wins is important to keeping interest high and highlighting organizational support for the program.

Yardstick:

Measuring success is crucial to determine whether the organizational change interventions for play have been effective or not. Without clear metrics for evaluating success, it will not be possible to demonstrate whether introducing play has had any impact on the overall goals of the organization, positive or negative. Metrics for success can be obtained primarily from three sources: reflection and dialogue, employee engagement surveys, and quantitative measures of productivity. First, and most importantly, are the reflection and dialogue processes starting from the planning of the activities through their introduction and use. Encouraging reflection enables employees to take stock after playing around with new ideas while allowing teams' insights into what worked and where improvements might be needed. It is important to understand whether the activities and play opportunities provided the benefits anticipated during design for the participants. If the outcome of the reflective process fails to support the intended benefits, there is no reason to seek validation from the other two sources. The process should then cycle back to the Assess and Design phases and seek to identify the disconnect. If there is sufficient evidence from the reflective practice that the activities met or exceeded their intended goals, then it is appropriate to include the employee engagement survey and other quantitative metrics to evaluate the success of the program.

Building an Activity Library

Sustaining a successful program of play at work relies not only on application of the IPLAY™ cycle, but on the creation and enhancement of a library of play activities. Using individual and organizational reflection and feedback, activities must be added, altered, or even retired to ensure currency of the library. New games, ice breakers, challenges, bonding, and celebratory activities should be added on an ongoing basis, being sure to identify the play

personalities and domain-specific skills with which each activity connects. The library should also track the life cycle of the activity including when and with whom the activity was used, post-activity reflections, follow-up surveys, performance metrics, when the activity was adapted or edited and why, and suggested recycle time when the activity could be repeated successfully with the same group. For example, most board games can be weekly or monthly events while team-building activities like bowling or museum night might be monthly or quarterly. Team challenges might be one-off events with the same team (like the Plane Crash example in Appendix C) or may be repeatable with simple changes to materials or requirements.

Developing an inventory of individual challenges like puzzles and riddles, and team challenge activities, like those in Appendix C, is essential to keeping the activities fresh, fun, and engaging. The internet is full of team challenge activities, and there are many published resources on puzzles (Pantera, 2022), ice breakers and innovation activities (Gray et al., 2010), and group games (Ragsdale & Saylor, 2007). In some cases, the best sources for new challenge activities may come within the organization itself. Employees engaging in creative problem solving as a regular part of their jobs, as well as the artist/creator and storyteller play personalities may find creating challenges to be their idea of play.

If the organization is fortunate enough to have employees who participated in a creative problem-solving program like Destination Imagination, not only do they have built in problem solvers with team challenge experience, but they also have employees that recognize the value of these kinds of challenges and would enjoy developing them for others. Experience with dozens, if not hundreds, of Instant Challenges allows DI alumni to recognize the skills needed to successfully complete different types of challenges. Brainstorming sessions with interested employees are an excellent way to generate ideas for potential challenges while also ensuring

that employees at every level and role feel invested in the process (Wang et al., 2022). Frame each brainstorming session with the play personalities and domain skills desired and encourage dialogue about what type of activities would best suit everyone's interests while still meeting the objectives.

While the available time to solve ICs in the DI program is short (5-12 minutes), team challenges for adults at work will likely benefit from a long-term approach as it provides opportunities for sustained engagement and allows participants to apply skills learned in future projects or daily interactions with colleagues. The same ICs used with students can be lengthened, repeated until success is reached, or recycled with different materials and requirements. Depending upon the needs of the team, and the skill-building objectives, more complex challenges can be developed requiring several hours to complete. It's important to ensure that the challenges are not too complex or require skill sets that team members may not possess, leading to frustration and discouragement. Likewise, activities should be engaging without being overly contrived. Facilitation during challenges is key to ensuring all members participate equally (Rajeswari & Jayabalan, 2020) and can often be more effective when conducted by an outside facilitator because they have no personal ties or reputations at stake.

Limitations and Future Research

Despite the recent enthusiasm and focus on play in the workplace, the handful of supporting research studies, spanning more than 40 years, stands in sharp contrast to the body of published research documenting the benefits of play in childhood development. Additional research is needed to bolster the benefits reported in studies done to date. Future research opportunities focusing on employees' perspectives, managerial perspectives, and organizational culture would be valuable for exploring further the effectiveness of using play activities in a

professional setting. Research studies should extend beyond establishing a connection between play at work and skill development or dispositional thinking and look to the impact (directly or indirectly) that play has on quantitative metrics such as employee retention and organizational performance. It is also important to consider how play may differently impact the individual versus teams of employees and how organizational culture contributes to or detracts from the benefits experienced at all levels. The proposed IPLAY™ cycle provides an action research framework for planning, testing, and documenting the introduction of play into organizations. The framework recognizes that individuals and the organizations they work for are unique and require introspective assessment and reflection allowing room to develop a sustainable program of play. By developing a library of play activities and documenting the effectiveness of each activity attempted, a rich database can be developed for more precise future research. Still, an important question to be considered is whether the proposed framework is an effective change management tool for the introduction of play.

From a managerial perspective, future research should focus on identifying ways in which different types of play, duration of activities, and varying degrees to which play creates shared experiences can be effectively incorporated into organizations without hindering employee productivity. These studies could involve recognizing when individuals require breaks from monotonous tasks throughout the day and scheduling time slots during which everyone can participate in these distractions simultaneously.

There are also several specific questions that remain:

- Is it the state of play or the act (trait) of playfulness that contributes more to creativity and divergent thinking?
- How does activity frequency and duration impact desired outcomes?

- What is the time delay between activity and improved outcomes?
- Do different skills require different time periods to develop?
- What types of activities result in shorter skill development times?
- How do leaders model playfulness while still being serious and productive?
- What are the best metrics of success for organizations when introducing play?
- Does organizational structure matter? Are some more resistance to play?
- Is the Destination Imagination program a model that can work for adults?

Conclusion

Play has been creeping into the workplace gradually over the past several decades in different ways. Ping pong and foosball tables are popping up in start-ups and tech companies adding to the employee incentives and allowing them to bond with their coworkers, reduce stress and (hopefully) remain employed with the company. New hire orientation and team building events like scavenger hunts, axe throwing, and escape rooms are becoming more common, bringing play into organizations.

But the full benefits of infusing play into the culture of organizations have yet to be realized. Play activities and team building challenges are an investment in an organization's cohesion, communication skills, problem-solving abilities, team performance, and culture. By adopting a change management approach, such as the IPLAY™ cycle proposed in this synthesis, play can be introduced, grown, and sustained to contribute to the achievement of company objectives.

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APPENDIX A: SUMMARY OF RESEARCH ON THE BENEFITS OF PLAY AT WORK

Factor Level	Outcomes of Play	Research
Individuals	Creativity	Hunter et al., 2010
	Divergent Thinking and Problem Solving	Jacobs & Statler, 2006
	Sense of Competence	Abramis, 1990
	Job Satisfaction	Abramis, 1990
	Learning and Mastery	Kolb & Kolb, 2010
	Task Involvement and Interest	Webster & Martocchio, 1993
	Emotional Relief	Locke, 1989
Team and Relational	Trust	Hunter et al., 2010
	Bonding and Social Interaction	Sørensen & Spoelstra, 2012
	Creative Climate in Meetings	West et al., 2016
Organizational	Organizational Creativity	West et al., 2016
	High Commitment Culture	Sørensen & Spoelstra, 2012
	Capable of Relating to an Unknown Future	Andersen & Pors, 2014
	Flexible organizational Decision-Making	Pros & Andersen, 2015

Note: This summary begins with a revisualized display of the work done by Petelczyc et al., 2018. Additional research has been added.

APPENDIX B: GAMES AND CHALLENGES

Game Challenge Activity	Joker	Kinesthete	Explorer	Competitor	Director	Collector	Artist/Creator	Storyteller	Planning	Clarifying	Negotiation	Prioritization	Assessing Risk	Leadership	Communication	Teamwork	Trust/Bonding	Critical Thinking/ Focusing	Creative Thinking/ Generating
Board Games																			
Apples to Apples* OTB-games.com	✓			✓				✓		✓		✓					✓	✓	✓
Balderdash Matel Games	✓		✓	✓				✓		✓		✓	✓		✓		✓	✓	✓
CodeNames			✓	✓	✓			✓	✓	✓					✓	✓	✓	✓	✓
Forbidden Island GameWright®			✓					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
The Resistance Lone Oak Games	✓		✓	✓	✓			✓	✓		✓		✓		✓	✓	✓		
Ice Breakers																			
2 Lies - 1 Truth*	✓		✓			✓		✓		✓		✓	✓		✓		✓		
2 Songs I like - 1 Song I don't'	✓		✓			✓		✓		✓		✓	✓		✓		✓		
Directed Drawing*					✓		✓			✓					✓		✓		
Worst Product	✓		✓					✓				✓	✓		✓		✓	✓	✓
Scavenger Hunt* Code Hunt*	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓		
Team Challenges																			
Code Talkers		✓		✓	✓			✓	✓					✓	✓	✓		✓	✓
Plane Crash			✓		✓			✓		✓	✓	✓		✓	✓	✓		✓	✓
SPLAT!				✓	✓		✓			✓			✓	✓	✓	✓	✓	✓	✓
Bonding																			
Book Group*			✓			✓		✓	✓	✓					✓		✓		
Artist's Studio*	✓	✓					✓	✓	✓	✓							✓		
Museum Night*			✓			✓	✓	✓		✓					✓		✓		
Bowling		✓		✓											✓		✓		
Axe Throwing		✓		✓									✓		✓		✓		
Escape Room	✓	✓	✓	✓	✓			✓		✓	✓		✓	✓	✓	✓	✓	✓	✓
Obstacle Course		✓	✓	✓									✓			✓	✓		

* Game/activity can be done remotely.

APPENDIX C: PLAY-BASED ACTIVITIES

Activity: SPLAT!
Description: Construction-based challenge for small-teams (3-7)
Source: Modified from California Destination Imagination Practice Challenges by Hans Helgeson for use with large groups (split into teams).

Play Types: Competitor, Director, Artist/Creator
Skills Focus: Communication, Teamwork, Leadership, Assessing Risk, Prioritization

Facilitator Notes:
This challenge can be done with small teams of 3-7. Larger groups can be accommodated by creating teams by table (up to 8 people/table) or by splitting each table in half (tables up to 12).

Time allotted can be extended based on facilitator observation of evidence of team progress and productive collaboration.

Towers may be dropped and measured by assistants or may be done in "heats" where an initial drop is used to identify potential contenders, and a final drop is conducted with those teams at the front of the room.

Note: This can be a noisy challenge in a large room. Plan ahead so you are able to get their attention and quiet the room.

Challenge begins on next page.

Splat

Team Copy

Challenge: Using only the materials provided, create a structure that is as tall as possible after it has been dropped.

Time: You will have 15 minutes to plan and build your structure and prepare to compete with other teams.

Procedure:
Part One: You will have 15 minutes to build your structure for score using only the materials provided. You may practice dropping in Part One, however these drops will not receive a score. At the end of Part One you must have a completed structure.

Part Two: Designate a team member who will bring your structure to the front of the room to be dropped for score with all the others. When instructed, you must drop your structure from a height of at least three feet. The facilitator will measure the distance between your structure and the floor. Once dropped, you may not touch your structure until after it has been measured for height.

Materials:

2 Pencils	5 Index Cards	3 Pieces of String (12" each)
10 Mailing Labels	10 Straws	1 Piece of Foil
10 Paper Clips		

Scoring:

A. 10 points for bringing a completed structure to the front to be dropped.
B. 3 points for each inch tall your structure is after it has been dropped.
C. <Option – more experienced teams can be provided with a list of additional materials that can be purchased with negative points (points subtracted from the total score). Teams must evaluate the anticipated benefit in additional height points against the cost of the materials.>

You will be provided with a tape measure that is to be used for scoring only and may ***NOT*** be used in your solution.

Activity: Plane Crash
Description: Critical Thinking Prioritization challenge for small-teams (3-7)
Source: Created from a variety of online survival skills websites
by Hans Helgeson

Play Types: Director, Storyteller, Explorer
Skills Focus: Critical Thinking/Focusing, Creative Thinking/Imaginative uses of materials, Negotiation/Prioritization, Communication, Teamwork, Leadership

Facilitator Notes:
This challenge can be done with small teams of 3-7. Larger groups can be accommodated by creating teams by table (up to 8 people/table) or by splitting each table in half (tables up to 12).

Time allotted can be extended based on facilitator observation of evidence of team progress and productive collaboration.

Note: Plane crash scenario answers for facilitator only are found following the challenge.

Challenge begins on next page.

Plane Crash

Team Copy

Challenge: You and your team are on a trip to visit a newly established PACE program in Alaska. Passing through Northern Canada, the plane's engine sputters to a stop and the plane begins losing altitude quickly. Your team survives the crash landing but the same cannot be said for the pilot and co-pilot. There is snow on the ground and daytime temperatures hover near zero. Night-time temps are expected to drop below zero. You are dressed in business casual clothing for the meeting you were planning to attend. The nearest town is more than 20 miles away. You have only a few minutes to grab items from the plane to help you survive before it sinks. The list of items salvaged is shown below.

Time: You will have 5 minutes to work individually to prioritize the list of items in order of importance for your survival. You will then have 15 minutes to work together as a team to agree on a prioritized list and why you prioritized each item as you did.

Procedure:
Part One: You will have 5 minutes to review the list of items salvaged from the plane and prioritize them in the order you feel they are most important for your team's survival. Place a number from 1-12 next to each item indicating the order of importance. During this time, you are asked to work independently and not share your list or speak with others. At the end of Part One you should have a prioritized list of the items.

Part Two: You will have up to 15 minutes to work together as a team to list the items below in order of importance to your team's survival. Discuss the reasons why each item is important including the different ways each can be used. You are asked to come to agreement as a team and list why you prioritized each item as you did. Use the Master List to record your Team's order of priority and if time allows, your reasoning.

Salvaged Items:

A small axe
A compass
A plastic-coated air map
A bottle of whiskey
A ball of steel wool
Newspapers (one for each person)
Cigarette lighter (without fluid)
Extra shirt and pants for each person
Family-sized chocolate bars (one for each person)
Can of vegetable oil with opener
A loaded pistol
20x20 foot piece of heavy-duty canvas

Each person will be provided with a list of items. A master list is also provided to be used when prioritizing the team's agreed upon list.

PLANE CRASH SCENARIO ANSWERS
Not for Team's use - For discussion later
(Importance is subjective but based on recommendations from survival guides)

1. Cigarette lighter (without fluid): The gravest danger facing the group is exposure to cold. The greatest need is for a source of warmth and the second greatest need is for signalling devices. This makes building a fire the first order of business. Without matches, something is needed to produce sparks, and even without fluid, a cigarette lighter can do that.

2. Ball of steel wool: To make a fire, the survivors need a means of catching the sparks made by the cigarette lighter. This is the best substance for catching a spark and supporting a flame, even if the steel wool is a little wet.

3. Extra shirt and pants for each survivor: Besides adding warmth to the body, clothes can also be used for shelter, signalling, bedding, bandages, string (when unravelled) and fuel for the fire.

4. Can of vegetable oil: This has many uses. A mirror-like signalling device can be made from the lid. After shining the lid with steel wool, it will reflect sunlight. While this could be limited somewhat by the trees, a member of the group could climb a tree and use the mirrored lid to signal search planes. It can be rubbed on exposed skin for protection against the cold. The empty can is useful in melting snow for drinking water. It is much safer to drink warmed water than to eat snow, since warm water will help retain body heat. The can is also useful as a cup.

5. 20 x 20 ft. piece of heavy-duty canvas: The cold makes shelter necessary, and canvas would protect against wind and snow (canvas is used in making tents). Spread on a frame made of trees, it could be used as a tent or a wind screen. It might also be used as a ground cover to keep the survivors dry.

6. Small axe
   Survivors need a constant supply of wood in order to maintain the fire. The axe could be used for this as well as for clearing a sheltered campsite, cutting tree branches for ground insulation, and constructing a frame for the canvas tent.

7. Family-size chocolate bars (one per person)
   Chocolate will provide some food energy. Since it contains mostly carbohydrates, it supplies the energy without making digestive demands on the body.

8. Newspapers (one per person): These are useful in starting a fire. They can also be used as insulation under clothing when rolled up and placed around a person's arms and legs. A newspaper can also be used as a verbal signalling device when rolled up in a megaphone-shape. It could also provide reading material for recreation.

9. A loaded pistol: The pistol provides a sound-signaling device. (The international distress signal is 3 shots fired in rapid succession). There have been numerous cases of survivors going undetected because they were too weak to make a loud enough noise to attract attention. The butt of the pistol could be used as a hammer, and the powder from the shells will assist in fire building. By placing a small bit of cloth in a cartridge emptied of its bullet, one can start a fire by firing the gun at dry wood on the ground. The pistol also has some serious disadvantages. Anger, frustration, impatience, irritability, and lapses of rationality may increase as the group awaits rescue. The availability of a lethal weapon is a danger to the group under these conditions. Although a pistol could be used in hunting, it would take an expert marksman to kill an animal with it. Then the animal would have to be transported to the crash site, which could prove difficult to impossible depending on its size.

10. Some whiskey: The only uses of whiskey are as an aid in fire building and as a fuel for a torch (made by soaking a piece of clothing in the whiskey and attaching it to a tree branch). The empty bottle could be used for storing water. The danger of whiskey is that someone might drink it, thinking it would bring warmth. Alcohol takes on the temperature it is exposed to and a drink of near freezing whiskey would freeze a person's oesophagus and stomach. Alcohol also dilates the blood vessels in the skin, resulting in chilled blood belong carried back to the heart, resulting in a rapid loss of body heat. Thus, a drunk person is more likely to get hypothermia than a sober person is.

11. A compass: Because a compass might encourage someone to try to walk to the nearest town, it is a dangerous item. The only redeeming feature is that it could be used as a reflector of sunlight (due to its glass top).

12. An air map made of plastic: This is also among the least desirable of the items because it will encourage individuals to try to walk to the nearest town. Its only useful feature is as a ground cover to keep someone dry.

Activity: Code Talkers
Description: Communication challenge for small-teams (3-7)
Source: Created by Hans Helgeson

Play Types: Director, Storyteller, Explorer
Skills Focus: Critical Thinking/Focusing, Creative Thinking/Imaginative uses of materials, Negotiation/Prioritization, Communication, Teamwork, Leadership

Facilitator Notes:
This challenge can be done with small teams of 3-7. Larger groups can be accommodated by creating teams by table (up to 8 people/table) or by splitting each table in half (tables up to 12).

Time allotted can be extended based on facilitator observation of evidence of team progress and productive collaboration.

Challenge begins on next page.

Code Talkers

Team Copy

Challenge: Your task is to create a non-verbal communication code using the objects provided and demonstrate its use.

Time: You will have 5 minutes to use your imagination to create a code and practice using it, and 2 minutes to demonstrate the code by communicating a message from one team member to another.

Set-up: On a table are materials your team can use to create a code. There are also 2 sets of the same message cards that can be used to practice using the code. Each set of message cards is in a different sequence.

Procedure:
Part One, 5 minutes. Use the objects provided to create a non-verbal code that can be used to send messages from one team member to another. The message words you can use to practice your code are: cat, dog, ball, balloons, hot dogs.

Part Two, 2 minutes. Before you begin Part Two, divide your team into two parts, the Senders and the Receivers. The Senders will be given message cards that may NOT be shown to the Receivers. The Receivers will be given the same message cards, but in a different sequence. The Receivers may NOT show the message cards to the Senders. At least one Sender must select a message card and show it to the Appraisers. Then the Sender must use the OBJECTS to communicate the word without talking. At least one Receiver must look at the code and identify the word being communicated with the code. This member must say the word out loud, but may NOT show any message cards to the Senders. The Senders may NOT communicate whether the word was correctly identified or not.

Materials:

- 2 sets of the same message cards for Part One
- 2 sets of the same message cards for Part Two
- OBJECTS for creating a code: 10 buttons, 10 beads, 6 feathers, 18 inch length of string, ball, toothbrush, small toy

Scoring: You will receive
A. 10 points for each word you correctly identify using the code
B. Up to 25 points for how creatively or effectively you use the materials
C. Up to 25 points for how well your team works together

Activity: Code Talkers

* *

For the Appraisers only:

Set-up:

1. Ahead of time, locate random objects for creating a code. You do not need to use the items suggested, but can select whatever you have on hand.

2. For Part One, use index cards to create 2 sets of message cards. Each set will contain the same words, but each set of cards will be arranged in a different sequence and set face down on a table.

3. For Part Two, use index cards to create 2 sets of message cards. Each set will contain the same words (different words from those used in Part One), but each set of cards will be arranged in a different sequence and set face down on a table.

4. Part One: The practice message words are cat, dog, ball, balloons, hot dogs.

5. Part Two: The actual message words are hat, shoe, bed, closet, bedroom.

APPENDIX D: REFLECTIVE QUESTION PROMPTS

Modified slightly from original sources and organized to fit my Reflective Practice needs:

University of South Florida (Burns, 2014, p. 1)

- What?
  - What aspects of your plan were implemented differently?
  - Why did that happen?
  - If you were going to do this again, what would you do differently and why?
  - What would you do the same and why?
  - What surprised you?
  - What connections can you make between what happened and previous experiences?
- So, What? Analyze!
  - To what extend did you get your message or lesson across? How do you know?
  - In what ways were your methods effective? How do you know?
  - In what ways were your activities effective? How do you know?
  - In what ways were the instructional materials effective?
  - How did any specific considerations affect what happened?
  - Did any single group have difficulty? What accounts for their performance difference? How could I help this group achieve success?
  - Was there a group or individual who did especially well? What accounts for that difference?
- Now What?
  - Based on what happened, what are the next steps?
  - What would you change next time?

Reflective Questions from Destination Imagination (2021, p. 78)

- What?
  - What are my strengths?
  - What weaknesses may have contributed to what happened? Why?
- So, What?
  - What did you do well?
  - What was difficult?
- Now What?
  - Are you generating enough ideas/options?
  - Are there other tools you could use to develop more ideas/options?
  - What would you do differently?
  - What could I do to improve?
  - Did you devote enough time to planning?
  - How have you made progress?
  - Do you need to change the timeline or the plan?
  - How would you benefit by returning to a prior idea/option?

APPENDIX E: ILLUSTRATIONS OF FRAMEWORKS

Figure E-1
Creative Problem-Solving Models

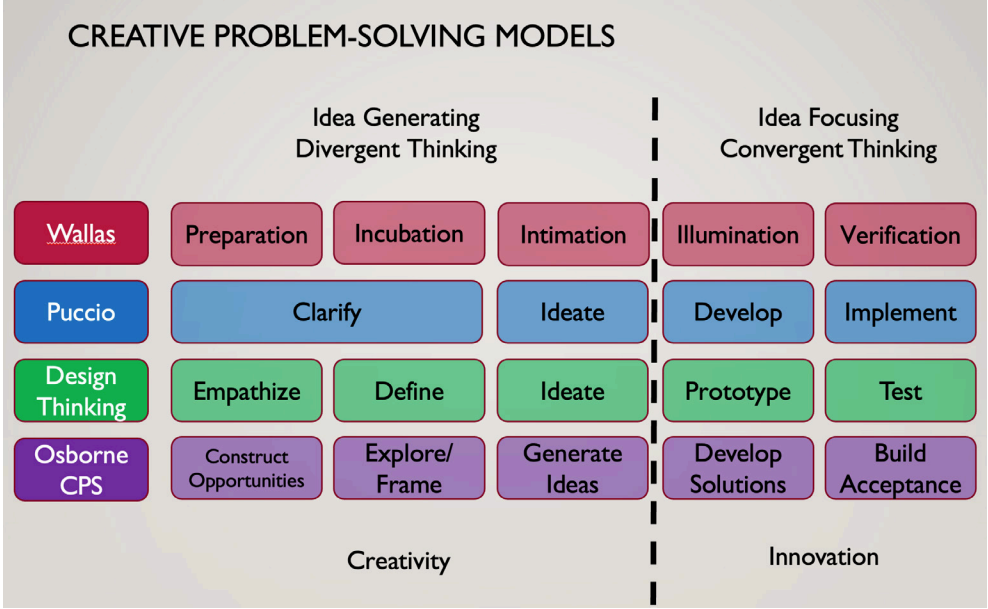

Figure E-2
Deming PDSA Cycle
Source: https://deming.org/explore/pdsa/

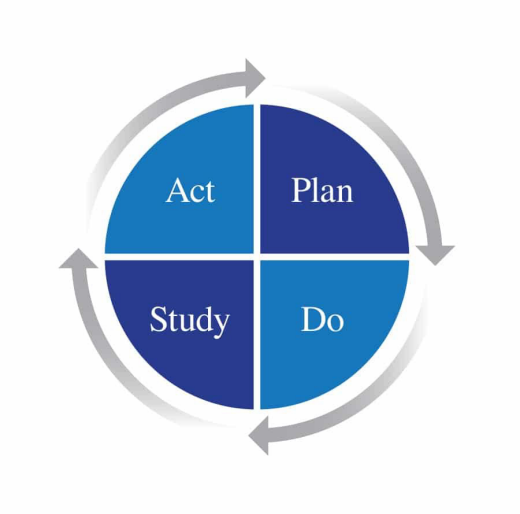

Figure E-3
ADKAR Model
Source:
https://www.prosci.com/resources/articles/communications-checklist-for-change-management

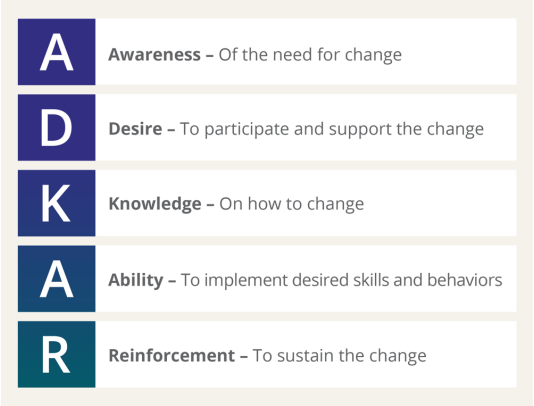

Figure E-4

Richardson Group - Change Management Flow
Source: https://richgroupusa.com/2022/10/05/change-the-right-way-change-management-what-it-is-and-why-its-important/

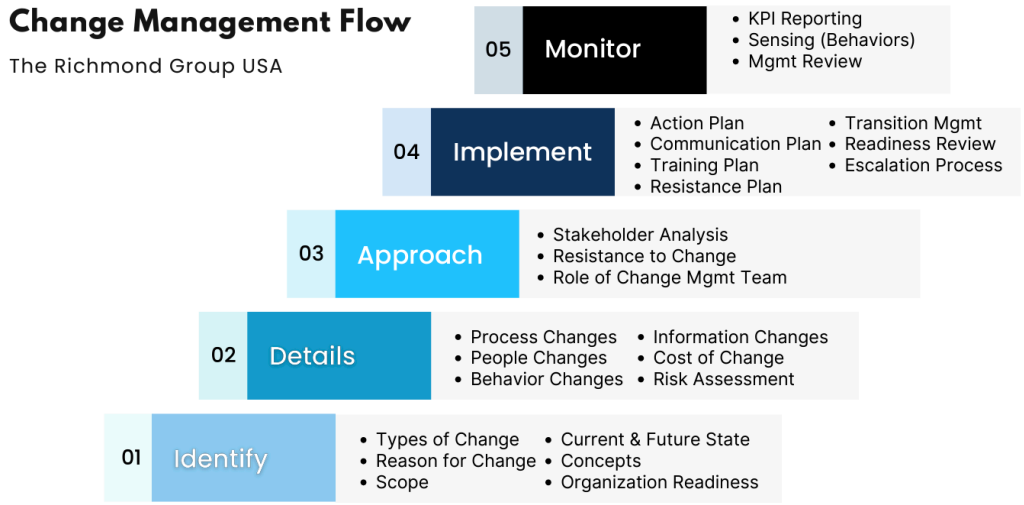

Figure E-5
Everest Group – STEP into Change Management
Source: https://www.everestgrp.com/market-insights/step-into-change-management-market-insights.html

Figure E-6

Peter Senge's Five Disciplines
Source: https://evolve-sg.com/peter-senges-learning-organization-offers-remote-teams-5-disciplines-to-support-change-part-2/

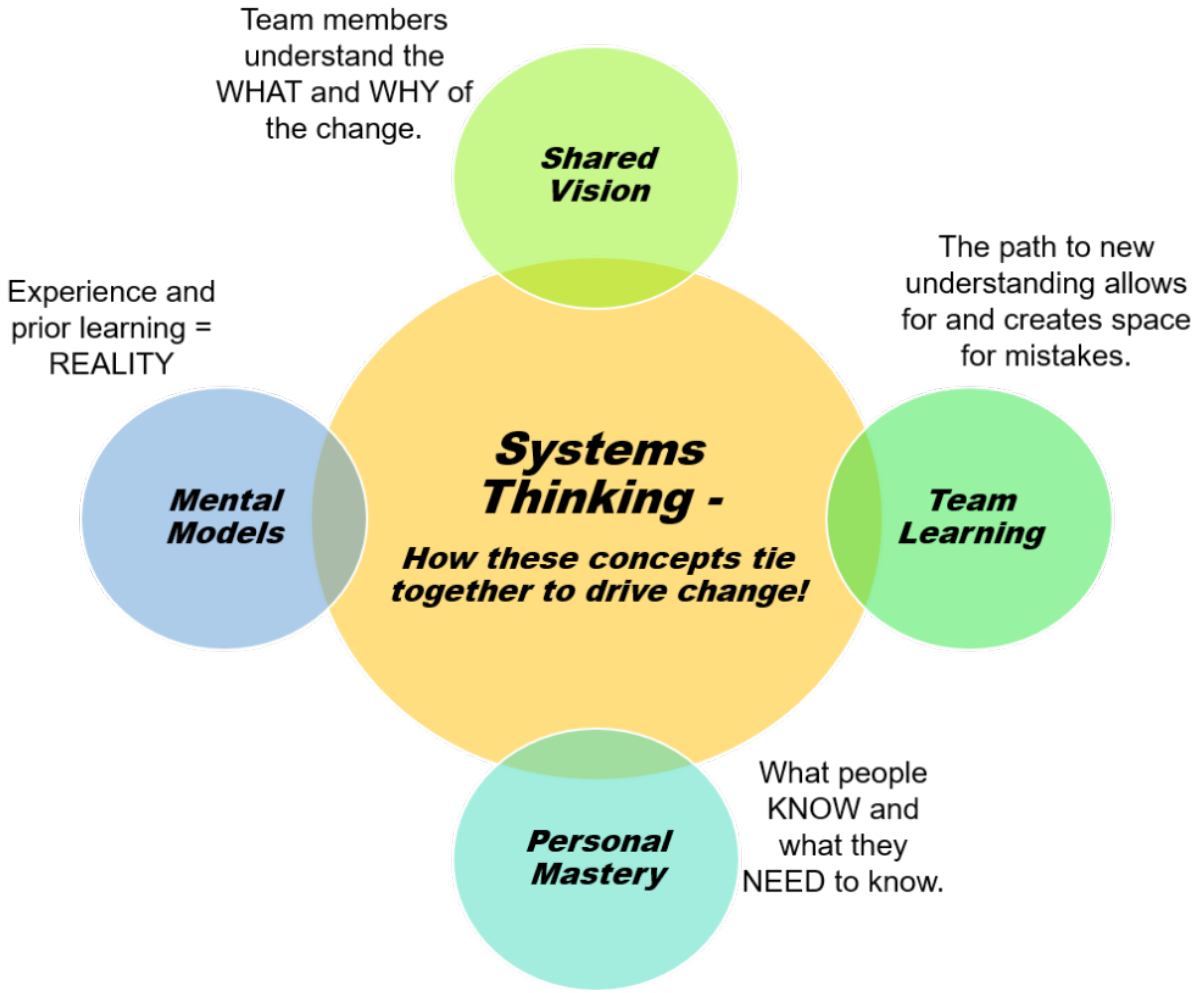

Figure E-7
Cycles and Epicycles of Action Research

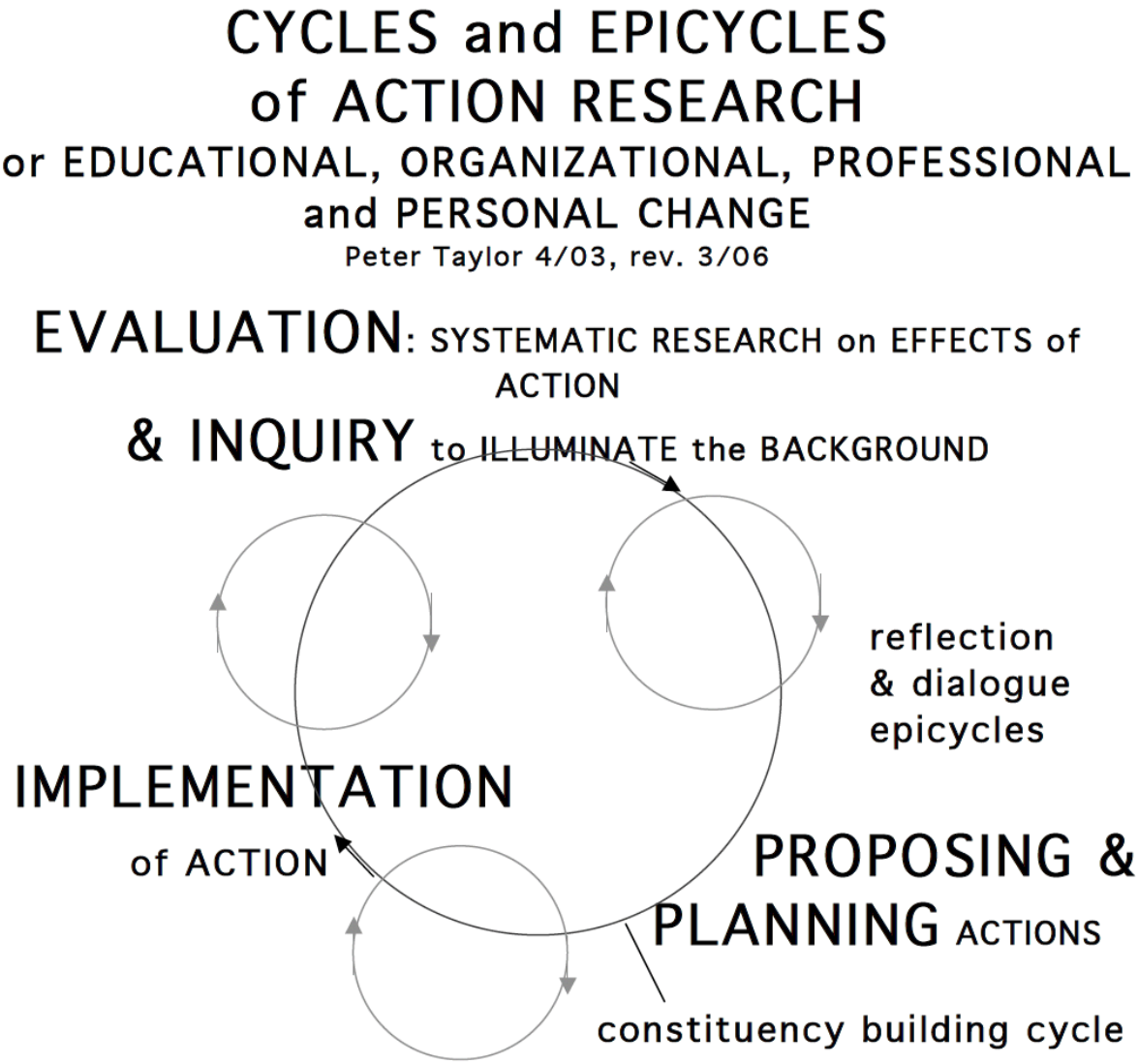

Figure E-8
IPLAY™ Change Management Framework for Introducing and Sustaining Play at Work

Inquire	Plan	Lead	Adopt	Yardstick
Assess	Vision	Constituencies of Support	Launch	Reflect
Learn	Activities	Modeling Play	Train	Measure
Identify	Cost	Stakeholders	Encourage	Monitor
Define	Risk	Change Teams	Communicate	Document
Value	Roadmap		Feedback	Celebrate