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> *"All of old. Nothing else ever. Ever tried. Ever failed.*
> *No matter. Try again. Fail again. Fail better."*
> —**Samuel Beckett** (O'Connell, 2014)

> *"Creativity is allowing yourself to make mistakes.*
> *Art is knowing which ones to keep."*
> —**Scott Adams** (Adams, 2015)

The idea that "failure is not an option" is a trope of competitive thinking that is present throughout American culture—in business, sports, and even schooling. However, when it comes to creativity, it is clear that anyone who succeeds creatively must be willing to try and fail—and to learn, regroup, and try again. Beyond its necessity for creative success, failure is sometimes an end itself in the work of creative practitioners. The ability to understand this—to grapple with the struggles in creative work, and build resilience and tolerance for ambiguity, is a key learning outcome. To fail in creative processes is essential, whether in iterations of failure that lead toward ultimate success; or reflections on failure where struggling with uncertainty leads to contemplation and an ability to manage ambiguity. Here we focus on failure as a means of heightening creativity, or coming to a better understanding of the creative process. But the value in allowing failure, as a means to an end—or an end itself—is imperative in the creative classroom.

United States educational policy, unfortunately, has created a platform where successes are celebrated and failures are punished—in line with the culturally popular but problematic catchphrase "failure is not an option" (Giroux & Schmidt, 2004; Weinzimmer & McConoughey, 2012). Policy often builds a negative view toward failure, preventing opportunities for teachers and students to fail. This is compounded by other factors that heighten fear of failure. Beyond this, there remains the fact that failure lies rooted in an area of the psyche, which makes risk-taking a natural aversion.

Psychology tells us that in our evolutionary past, survival was dependent on minimizing loss of what you have. To risk or explore unnecessarily and lose (even a little) was dangerous—building risk-aversion into human psychology (Nicholson, 1998). Yet human ingenuity and discovery have always indulged curiosity, and curiosity requires being open to failure. When circumstances are safe enough, this is often what people do. Konner (2010) has described this behavior of learning in children where they learn about their world through playful trail and error—but only when they know they are safe.

Aversion to risk and failure has consequences for growth and learning, which can be seen in Dweck's (2006) research that describes the differences between two common types of mindsets, "fixed" versus "growth." People with a fixed mindset view traits as innate and tend to tie identity to success and performance, which often leads to discomfort with failure (e.g., bad grades, mistakes). People with a growth mindset view their own selves as changeable through learning, including the need to try new things in order to advance. People with a growth mindset associates mistakes and failures with positive learning and improvement—not negativity. Unfortunately, the fixed mindset is commonly cultivated in education, in how we approach mistakes, grades, and failures. This is problematic for creative practice and development.

While there is hesitancy around failure, it is rare that good original work comes together in the first try. In fact, examining the flip side of "failure is not an option," David Kelley, the founder of the IDEO design firm, believes failure is not merely an option but is the *essential* ingredient of creative success. Without the freedom to explore all ideas (even bad ones), employees will miss out on many of the best ideas. This view is often credited as a core reason that IDEO is a top innovator among design companies. It mirrors what the field of creativity suggests about the process of creative work.

In this article, we suggest that embracing failure is an important pedagogy for visual arts classrooms in order to instill more creative thinking in students. We cover some personal examples from work with graduate students in education, and describe their learning through failure. But first, we examine the connections between creativity and failure in the literature.

Creativity and Failure: Reviewing the Literature

We define creativity as developing ideas and/or objects that are **new novel** (original) or interesting, **effective** (or useful), and have a certain aesthetic sensibility as a **whole** (Mishra & Koehler, 2008; Mishra, Henriksen, & the Deep-Play Research Group, 2013). This definition is useful because it draws on common and widely applied language on creativity in education and psychology. The two elements of novelty and effectiveness are widespread in the literature, yet they remain subjective and highly contextual (Cropley, 2003; Sternberg, 2006). The extra addition of the component of "**whole**" as described by Mishra and Koehler (2008) and Mishra, Henriksen, and the Deep-Play Research Group (2013) is useful because it goes beyond novel and effective to acknowledge the context-sensitive and aesthetic value of the "whole." This gives creativity a place in varied contexts, in which it can be considered on its own terms.

Taking Risks and Being Creative

Intellectual risk-taking practices (not risky behavior or dangerous risks) have long been considered an integral component for creativity (Clifford, 1991; Dewett, 2007; Glover, 1977; Martins & Terblanche, 2003). Anderson (2002) reflected on creativity among exceptional teachers, noting, "the most fundamental risk these teachers accept is found in their willingness to confront both success and failure in the interest of teaching better. They risk themselves in being responsible for their work. In this way, they are not so different from creative artists in other arenas" (p. 35).

In a recent study that included interviews with National Teacher of the Year award finalists, Henriksen (2011) found a wide range of examples and cases where innovative and accomplished classroom teachers talked about the importance of trying new things, taking risks, and embracing failure, as a key to their creativity in the classroom. Such openness to failure allows these teachers to come up with new, interesting and effective approaches to teaching (Henriksen & Mishra, 2015).

For example, Michael Geisen, the 2008 National Teacher of the Year, is a middle school science teacher with an art background. Acknowledging the arts as a site for student thinking and valuable habits of mind, Geisen infuses as much arts-based learning as possible into his science classes. His approach has been popular and highly effective for student learning, and he commented on his teaching philosophy as such:

> It needs to be about the ability to try new things, to make mistakes, to learn from them, to collaborate about what happened. For students to see that kind of risk taking and iterative process—it helps them to understand how to do things well. Ultimately what students will gain from your class is not all content knowledge. It's how you approach it … the bigger lessons that they'll take into the real world, which is essential in this day and age. (Henriksen & Mishra, 2015, p. 21)

As we connect these aspects of creativity and the value of risk taking and failure for art and education, it becomes important to consider this in context. We present a narrative case that asks: What does this pedagogical philosophy of embracing failure in order to encourage creativity actually look like in practice?

A Case in Point: Examining Personal Teaching Experience

The following narrative case study focuses on a master's level technology-based teacher education course taught by the first author. In this semester-long course, graduate students explored ways to use arts-based approaches for integrating new media (i.e.,

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Figure 1. *Mr. Fishy*, mixed media on cardboard, by Nadia.

digital fabrication technologies, 3D printing) into various K–12 contexts. We utilize a narrative inquiry approach (Connelly & Clandinin, 1990), through the use of autobiographical writing (the first author's field notes), and journal records (students' weekly reflections). We use both "burrowing" and "broadening" techniques (Connelly & Clandinin, 1990)—burrowing to find specific instances from graduate students' self-reported experiences of failure and broadening to identify the practices that inspired the experiences. While this article is jointly written, the following case is drawn from the first author's teaching experience, and thus is recounted in the first person for authenticity of voice.

Embracing Failure to Shift Classroom Culture in a Teacher Education Course

Despite my years of teaching, I (the first author, Smith) never properly realized the importance of nurturing creative persistence until I began doing art activities with my daughter. As a perfectionist, she would get frustrated when her vision was not realized on the first try. Initially, she would toss the mistake aside and move on to something easier. Discussing the mistake was difficult because it was emotionally charged with a sense of "being wrong." But we both experienced a change and revelation when at age 5 she came to me with *Mr. Fishy* (see Figure 1). Immediately I told her how I enjoyed the use of lines for texture and the 3D fin she stapled onto the cardboard. She grinned and told me, "the best part is that *Mr. Fishy* is a mistake." Intrigued, I asked her to explain. Joyfully she described the process of how she was using this piece of cardboard to mix the perfect blue for the sky in another painting. She used the napkin to wipe brushes as she painted. Then as she was about to throw away the cardboard and napkin, she realized that

the blue paint blob looked like a fish. Immediately she transformed it by adding crayon details and stapling the folded napkin to the cardboard. Voila, *Mr. Fishy* was born.

Mr. Fishy inspired me as a parent as well as an educator. It reminded me that even in the arts, it can be easy to get entrenched in our usual practices; we need a willingness to try the new. I felt compelled to restructure my graduate-level educational technology course focused on integrating new media into K–12 contexts. I restructured it to include reflections on failure in hopes that my students would (re)consider what it meant to fail. In doing so, I threw away familiar step-by-step tutorial handouts and redesigned open-ended challenges with strategic constraints to enable creative interpretations.

Nurturing a Growth Mindset: "There Are a Lot of Mistakes to be Made as One Learns"

Beginning the first class meeting with a reading of Saltzberg's (2010) *The Beautiful Oops!* I set the stage for reconsidering possibilities within our mistakes through an interactive discussion about failure and why it is tainted with negativity. Transitioning this perspective to a hands-on creative experimentation, I used *Mr. Fishy* and Peot's (2011) *Inkblot: Drip, Splat, and Squish Your Way to Creativity* to encourage students to challenge their own point-of-view by producing ink blots and transforming them into expressive art. Arguably, this was not a typical first day of class experience in a technology-based course, but it set the tone for the open mindset they needed throughout the semester as they negotiated the technical complexities of new media technologies, and experimenting with creative integration strategies for K–12 environments.

One student, Brian, noted, "There are a lot of mistakes to be made as one learns" (blog post, week 15). This is very true; however, if learners are not provided with opportunity to truly reflect on the process they might never see the impact of engaging in mistakes along the way. Beverly explained the embattled feelings of embracing and learning from failure in her final post:

> I started out feeling a bit insecure and scared about the areas we were going to study. I felt that I didn't know much about the topic, so I wasn't sure that I'd be able to keep up with the learning. I learned that I was capable of doing things that I didn't think possible. I love that I was able to instill the same kind of empowerment in my own students as I implemented these lessons in my class. (blog post, week 15)

Strategies for Structured Multimedia Reflections

Challenging learners to maintain a growth mindset during activities that promote the uncomfortable need to fail requires an adjustment to formative assessment strategies. To aid the graduate students in keeping a growth mindset throughout the semester, I required them to create their own blog using WordPress, a free blogging platform, and had them post weekly reflections with multimedia (e.g., photographs, video clips) to document their artistic process. The weekly reflections were framed as a "3-2-1" formative assessment in which they discussed: three things they learned, two things they are curious about or want to learn more about, and one thing that they are completely confused about. The "3-2-1" not only provided valuable insight into how they perceived the experience but it also served as a formative assessment to check for understanding of concepts covered in class. The addition of multimedia within their reflection allowed me to model ways of valuing that the learners' process is equally as meaningful as the end product itself.

Playing With Mistakes: There Is Not "One" Correct Answer

"I've never been asked to fail on purpose before," Amber said as she left the first class. Amber, a middle school mathematics teacher, professed that she was accustomed to linear thinking and seeking out the one correct answer. In her first weekly reflection she clarified her changing perspective,

> After this experience I am beginning to see how profound an impact this approach to failure could have on students. Not only in the outcome of creating something but in the process of making mistakes along the way and feeling confident to tweak them as you go. (blog post, week 1)

With a similarly inspired view of failure as a catalyst for enhanced learning, Susan sums up the practical benefits of integrating this playful approach by pointing out that students can be empowered when the teacher isn't always expected to know the "correct" answer:

> I explained to my class that they would get to play using this software. The word "play" just brought giggles to each child. Through play, they learned so much and taught me things about the software that I was unaware of or uncertain about. When some of the students thought they had "failed" we talked about what was working and what could be improved. Talking to them in a positive manner about mistakes allowed them to

see that some of the mistakes made it look "cooler" and some of the mistakes helped them figure out what to do differently to "fix" it. Also, we could add the mistakes to our "Wonder Wall" and reflect on potential design solutions or alternative uses. (blog post, week 10)

Figure 2 shows how Susan began her "Wonder Wall" to allow students to mount their discarded "mistakes" so that others could consider creative solutions or alternative uses. By allowing students to "play" with the mistakes, they not only explored design in a meaningful way but also found ways to inspire collaborative classroom culture to encourage divergent thinking.

Strategies for Structuring Class Time to Reexamine, Rethink, and Revise

Through purposefully scheduling in time to analyze mistakes and revise, the graduate students explored what it meant not only for their individual learning but also what it could mean

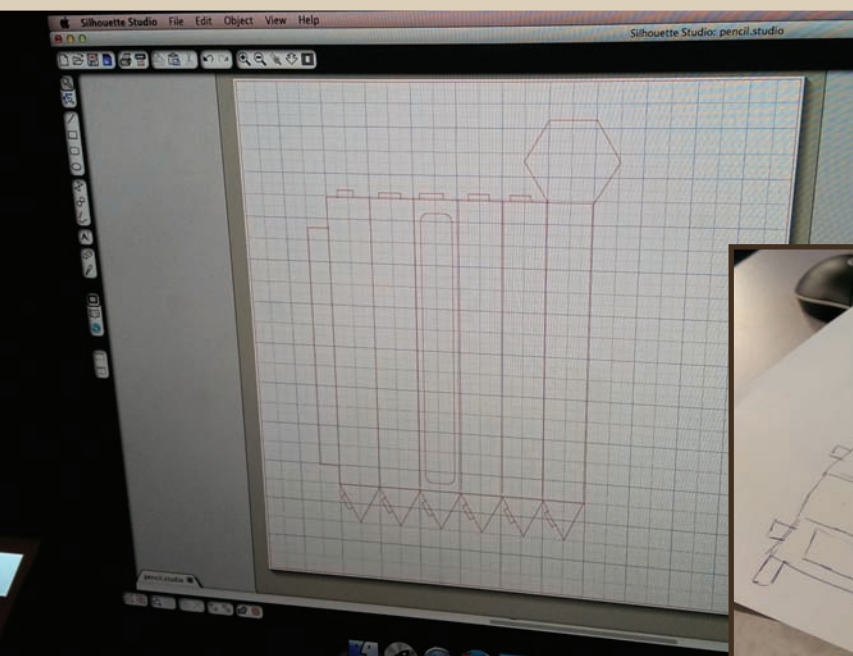Figure 2. Close-up of *Wonder Wall,* mixed media on bulletin board.
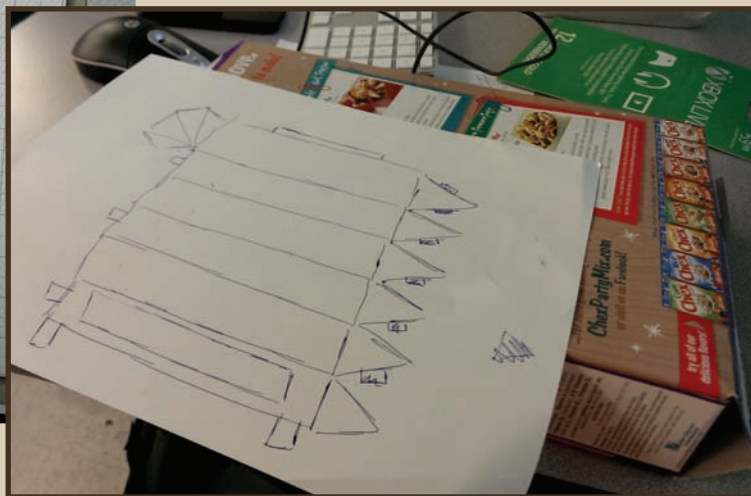
Figure 3. *Pencil Box,* original design sketch.

Figure 4. *Pencil Box,* digital design in *Silhouette Studio.*

for their classroom practice. Students were given dedicated time within the class session to reexamine their work and brainstorm with a partner about how they could revise and/or improve on their design. They were then given time to act on those considerations and rework the designs until the end of class. Students were encouraged to engage in reflection on their own outside of the class; however, having time built into the session allowed kept them from feeling that was the only option.

Embracing Ambiguity: "Just Make It Your Own!"

Ambiguity can make even the most creative individual question how they should proceed; however, creating an environment where learners know there are rarely easy solutions can also inspire them to face such challenges bravely. After an exploration and discussion about the role of shape-nets in product packaging (e.g., cereal boxes) and how to design them in Silhouette Studio software, it was the graduate students' turn to design a shape-net of their own. Expecting a handout with step-by-step instructions (which they are accustomed to from traditional-style professional development), I grinned and shared the one-sentence instructions: *Construct a foldable shapenet in Silhouette Studio software that can be cut by a Silhouette Cameo machine using one piece of 12″ × 12″ media.*

A distinct shock spread across the classroom as the students looked at me as if I had gone mad. On the verge of an uprising, Susan, a 3rd-grade teacher, told her peers that they were big kids and they could figure it out. "Just make it your own, people!" she playfully shouted. After a few seconds, the stressed expressions

diminished and they shrugged, willing to give it a try. Susan later clarified her view of experiencing a refreshing change to the tired old tutorials:

> Open-ended exploratory opportunities can be exciting for students because they will feel empowered to think of an idea and have the freedom to figure out how to make that idea come to fruition. It is important for students to learn how to solve problems on their own terms, instead of feeding answers and/or knowledge "down his/her throats." … I am excited about the possibilities that this will bring into my classroom with a new type of problem solving and "free" thinking. (Susan, reflective blog post, week 4)

As a result, she designed her own pencil box in Silhouette Studio and used the Silhouette Cameo to fabricate enough copies for herself and her classmates (Figure 3 and Figure 4).

Strategies for Framing Activities With Ambiguous Criteria

As educators embark on preparing lessons that align with targeted learning outcomes, we often forget that we can achieve that without strictly set criteria. By giving learners permission to interpret criteria in a personally meaningful manner, we empower them to take artistic risks—which emphasizes that there is not one "correct" answer. This can be achieved by (1) giving learners criteria for materials (tools, media, etc.) but letting them choose the context or alternatively (2) giving learners criteria for the context (specific type of design, topic, etc.) but letting them choose the

Creating an environment where learners know there are rarely easy solutions can also inspire them to face such challenges bravely.

materials. When an activity is framed as such, it honors ambiguity yet provides a structure to start the learner on the journey.

Strategies for Assessment

The grading process itself is a challenging space in the practice of a teacher who aims to encourage creativity, risk-taking, and play. In fact, one could argue that conventional structures of grading, which assign a rating/judgment to the quality of the end project alone, end up ignoring the creative/artistic process and learning trajectory. This can damage a pedagogy of play and creative experimentation, in which fears of "failure" or low grades and negative judgments wreck the potential of the experience. This is a tension that all teachers face, but particularly K–12 (with policy constraints and other factors). While there is no easy answer, we suggest that framing the grading structure more around process and risk-taking is an approach that better matches assessment to creative process and learning. It is helpful to move away from summative final-product-only assessment, and utilize formative assessments that focus on thought processes. This may be facilitated by considering student reflections in practice, and giving consistent feedback along the way—with positive outcomes for trying new things and iterating. In the graduate course described here, every student had opportunities to revise, iterate and improve on each project. Encouraging iteration can become part of the grading process—rewarding the very act of rethinking, trying something different, or trying again.

Conclusion

In this article, we highlight literature from multiple perspectives to discuss the connection between creativity and failure. We explore the pedagogical concept of embracing failure in order to nurture creativity within arts-based classrooms as a way for teachers to instill and inspire more creative thinking in their students.

To consider this in practice, we suggest instructional strategies based on the case within this article, which may help visual arts teachers to bridge theory and practice in their own environments. This is framed around key themes that include, *nurturing a growth mindset*, *playing with mistakes*, and *embracing ambiguity*. Within these themes we suggest strategies for (1) integrating multimedia reflections as formative assessments, (2) structuring class time to allow learners to reexamine, rethink, and revise, and (3) framing activities with ambiguous criteria that empower individualization.

Embracing failure has the potential to shift classroom learning culture toward great creativity. This can be approached through mechanisms for assessing learners' reflective process, structuring class time to negotiate experiences with failure, and open-ended assignment structures to support individualization. As one student stated (Allison, week 11), "Failure **is** an option." Or perhaps, if we want to improve creative outcomes in the classroom—failure is, possibly, the *only* option. ■

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References

Adams, S. (2015, June 21). The famous quote I never said [Web log post]. Retrieved from http://blog.dilbert.com/post/122081192901/the-famous-quote-i-never-said

Anderson, D. (2002). Creative teachers: Risk, responsibility and love. *Journal of Education, 183*(1), 33-48.

Clifford, M. (1991). Risk taking: Theoretical, empirical, and educational considerations. *Educational Psychologist, 26*, 263–297.

Connelly, F., & Clandinin, D. (1990). Stories of experience and narrative inquiry. *Educational Researcher, 19*(5), 2–14.

Cropley, A. J. (2003). *Creativity in education & learning*. Bodmin, England: Routledge Falmer.

Dewett, T. (2007). Linking intrinsic motivation, risk taking, and employee creativity in an R&D environment. *R&D Management, 37*(3), 197–208.

Dweck, C. (2006). *Mindset: The new psychology of success*. New York, NY: Random House.

Giroux, H., & Schmidt, M. (2004). Closing the achievement gap: A metaphor for children left behind. *Journal of Educational Change, 5*, 213–228.

Glover, J. (1977). Risky shift and creativity. *Social Behavior and Personality, 5*(2), 317–320.

Henriksen, D. (2011). *We teach who we are: Creativity and trans-disciplinary thinking among exceptional teachers.* (Doctoral Dissertation). Michigan State University. Retrieved from ProQuest Dissertations and Theses.

Henriksen, D., & Mishra, P. (2015). We teach who we are: Creativity in the lives and practices of exceptional teachers. *Teachers College Record, 117*(7), 1–46.

Konner, M. (2010). *The evolution of childhood: relationships, emotion, mind.* Cambridge, MA: Harvard University Press.

Martins, E., & Terblanche, F. (2003). Building organisational culture that stimulates creativity and innovation. *European Journal of Innovation Management, 6*(1), 64–74.

Mishra, P., Henriksen, D., & the Deep-Play Research Group. (2013). A NEW approach to defining and measuring creativity. *Tech Trends, 57*(5), 5–13.

Mishra, P., & Koehler, M. J. (2008, March). Introducing technological pedagogical content knowledge. In *Annual meeting of the American Educational Research Association* (pp. 1–16).

Nicholson, N. (1998). How hard-wired is human behavior? *Harvard Business Review, 76*, 134–147.

O'Connell, M. (2014, January 29). The stunning success of fail better. *Slate Magazine.* Retrieved from http://www.slate.com/articles/arts/culturebox/2014/01/samuel_beckett_s_quote_fail_better_becomes_the_mantra_of_silicon_valley.html

Peot, M. (2011). *Inkblot: Drip, splat, and squish your way to creativity.* Honesdale, PA: Boyds Mills Press.

Saltzberg, B. (2010). *The beautiful oops!* New York, NY: Workman Publishing.

Sternberg, R. (2006). The nature of creativity. *Creativity Research Journal, 18*(1), 87–98.

Weinzimmer, L., & McConoughey, J. (2012, September 7). Failure is the only option, if success is the end goal. *Fast Company.* Retrieved from http://www.fastcompany.com/3001086/failure-only-option-if-success-end-goal