

Improving Self-Efficacy by Altering Failure Communication and Reflection Processes

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Abstract

This paper is an ethnographic depiction of research conducted to improve failure experience communication strategies and self-efficacy reflection strategies to improve a Learner's self-efficacy and motivation to pursue learning activities. The researcher utilized the Learner's video game hobby as a conduit to alter the Learner's self-efficacy and perception of failure.

*Keywords:* Passive Learning, Failure Experience Communication Strategies, Self-Efficacy Reflection Strategies, Intrinsic Motivation, Video Game Failures

## Preface

Before reading, please review the following points to clarify terms, verb tenses, and picture captions used throughout this paper:

- This paper is screen-reader compatible to ensure that anyone interested in this subject may accurately read and analyze my research. Thank you in advance for your patience.
- The term “Learner(s)” refers to anyone in the position to learn something new, except in instance of “The Learner” which refers to the focus of Story B, who also served as the sole participant of my action research. Throughout the paper, I will use “learners” and “students” interchangeably.
- The term “Learning Activities” refers to any activity that involves the Learner or a Learner gaining new knowledge or skills (e.g., hobbies, formal education, continuous education, professional development, seeking mental counseling, etc.)
- Throughout this paper, I use past, present, and future tense. References to the past involve pre- and during-research information, conversations, etc.; present tense refers to all events that involve writing this paper; future tense refers to events planned or proposed post-writing.
- For the purpose of this paper, all mentions of experience refer to either failure experience or success experience. All mentions of "positive and negative experience" encompass failure and success experience.

## Introduction

This paper discusses the connection between failure communication (i.e., the way learners and educators discuss or reflect on failure experiences), learners' self-efficacy, and learners' motivation to pursue new learning activities. My research was inspired by someone very close to me (to whom I will refer to as "the Learner" to maintain their privacy). The Learner has dealt with low self-efficacy throughout their academic experiences, assigned negative connotation to all experiences with failure, and avoided pursuing extracurricular learning activities.

The purpose of my research is to find ways to positively influence the Learner's failure communication, improve the Learner's self-efficacy, and to empower the Learner to pursue new learning activities.

## Theory

My research uses Carl Rogers' student-centered learning theory. Rogers' theory was formed from his experience as an adult therapist.

The student-centered theory explains that learners' experiences are essential to understanding how they will process information. Therefore, though I reviewed academic literature to support my action research plan, the Learner's experiences and my personal observations, the Learner's personal experience directed my research.

## Meet the Learner

The Learner is a self-proclaimed gamer who enjoys solving puzzles, having philosophic discussions, and exploring technology. Though the Learner does not enjoy formal education,

they enjoy learning about science, technology, games, and odd tidbits. Formal education has always caused frustration for the Learner. Before college, all the Learner's classes were boring and unchallenging. The Learner never took notes, rarely completed homework assignments, and yet managed to excel on exams. However, because homework counted as a large part of the final grade, the Learner's grades often fell below standards set by educators; which resulted in poor grades. In turn, low grades resulted in consistent reprimand from the Learner's parents and teachers. After repetitive experiences with reprimand for falling below standard, despite their apparent ability to comprehend presented concepts, the Learner started to experience low self-efficacy.

Eventually, rather than defining failure as an experience, the Learner began to label themselves as a failure. The Learner uses failure communication such as: I suck, I'm a failure, I'm dumb, etc. After many discussions, the Learner and I realized that they felt badly because, no matter how well they displayed their understanding when their comprehension was tested, the Learner felt as though they were never good enough. The Learner didn't do the homework because it was boring, they forgot about it (because it was boring), and because it didn't challenge them. Though the Learner could have completed the homework to avoid poor grades, the Learner became disheartened after many years of dealing with frustration that a bad habit formed.

### *Questions*

The Learner and I discussed their experiences while I read the required materials for my graduate program. The books and articles discussed people like the Learner who used games to escape from reality as a way to solve problems and challenge their intellect. The books discussed

the impact that failure has on learning, and that failure can be fun. Additionally, the books discussed intrinsic motivation versus extrinsic motivation, as well as low-stress learning environments. I started to see patterns emerge and, with a background in communication, I started to wonder if confidence (not yet having the word “self-efficacy” in my vernacular) might be affected by teacher-student communication.

The turning point to my research came after I posed the following question to my cohort via a private Facebook group forum: “Do you think that low-confidence could be influenced by a distrust in education, educators, and a learner’s belief in their own knowledge/understanding of a subject?” One of my cohort peers, Landon, challenged my thinking by responding, “The last one makes the strongest case. Distrust in the educational system could cause a lot of things, but I believe the link to low confidence is weak. Now, low confidence may very well still RESULT from the current education system, but I think you could make a strong case with issues other than simply ‘distrust’. To add to Landon’s point, one of my cohort professors – Paul – responded with an article: *Self-Efficacy: How Self-Confidence Improves Learning*, by Saga Briggs.

With my question, a challenge to dig deeper, and my reference in hand, I began to explore the idea of self-efficacy “[...] which refers to a person’s belief in one’s capabilities to learn or perform behaviors. Research shows that self-efficacy influences academic motivation, learning, and achievement (Briggs, 2014).” However, the more I read, the more questions I had. Keeping the Learner in mind, I decided to narrow my research focus with the following questions:

- How do humans learn?
- When is failure a positive experience, and when is success a negative experience?

- Does failure communication affect self-efficacy; if so, how?
- What do people do to improve their self-efficacy?
- What are the best conditions for learning?
- How do I empower the Learner to identify and pursue intrinsically motivating learning activities?

Though I reviewed many references, the Learner needed to quickly comprehend relevance in the materials I would use to start my action research plan. I narrowed my list down to eight resources, and reviewed them below.

#### Literature Review

“If we numb a particular part of our body, for example, we can no longer feel, so experience is related to feeling, and feeling in turn is related to consciousness.” - His Holiness the Dalai Lama in his book *Transforming the Mind* (2003, p. 2).

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#### Themes

As I mentioned above, I compiled a list of research questions to focus on the Learner’s specific experiences with low self-efficacy. After the Learner and I chose which references to focus on, I broke the questions down further into themes:

- Theme 1: Human Learning (Optimal Conditions and Where it Happens)
- Theme 2: Games and Failure (Low-stress Environments for Failure)
- Theme 3: Self-Efficacy and Motivation (Tapping into Intrinsic Motivation)



For Theme 1: Human Learning (Optimal Conditions and Where/How Learning Happens), I explored:

- How humans acquire language skills
- The optimal conditions for learning, and
- How the language of our mentors, teachers, parents, etc. influences our failure communication

*Resources for Theme 1:*

- *The Book of Learning and Forgetting*, a book written by Frank Smith
- *Don't Bother Me Mom – I'm Learning!*, a book written by Marc Prensky
- *The learning myth: Why I'll never tell my son he's smart*, an article written by Salman Khan
- *The Social Neuroscience of Education: Optimizing Attachment and Learning in the Classroom*, a book written by Dr. Louis Cozolino

For Theme 2: Games and Failure (Low-Stress Environments for Failure), I used knowledge gained from Theme 1 about low-stress learning environments to shape my research for Theme 2. I found that:

- Humans love to fail if we are having fun
- Games are optimal for creating a low stress learning environment by
  - Creating a community within the learning environment
  - Providing an example of positive failure experiences, and

- Allowing players to make in-game mistakes without real-life consequences

Note: Due to the Learner's passion for video games, and to focus on the information most relevant to the Learner, I focused on point 2: Providing an example of positive failure experiences. Points 1 and 3 are equally important, but were far less relevant and influential when discussing my research with the Learner.

*Resource for Theme 2:*

- *The Social Neuroscience of Education: Optimizing Attachment and Learning in the Classroom*, a book written by Dr. Louis Cozolino
- *Reality is Broken: Why Games Make Us Better and How They Can Change the World*, a book written by Jane McGonigal

For Theme 3: Self-Efficacy and Motivation (Tapping into Intrinsic Motivation), I learned:

- Self-efficacy, as an internal way to process, is a form of intrinsic motivation (therefore, low self-efficacy negatively affects intrinsic motivation)

• I found that effective intrinsic motivation involves the following three (3) principles (full descriptions in [Appendix B](#)):

- Autonomy
- Mastery
- Purpose

*Resource for Theme 3:*

- *Gamify: How Gamification Motivates People to Do Extraordinary Things*, a book written by Brian Burke
- *Drive*, a book written by Daniel Pink
- *Why self-esteem hurts learning but self-confidence does the opposite*, an article written by Saga Briggs

## **Theme 1: Human Learning**

### *How We Learn*

From the time humans are born, they begin to experience sensation, temperature, language, culture, etc. Babies learn about positive and negative sensation, temperature, language, culture, etc. through these experiences. Each experience is categorized, reinforced (positively or negatively), and then stored for future reference. Through these experiences, humans begin to learn. Simply through exposure to language, "by the age of six children have a vocabulary of 10,000 words (Smith, 1998, p.14)." Based on the research I have completed, there are two basic types of learning: active learning and passive learning.

Active learning is the more obvious type of learning. It is fueled by motivation (whether intrinsic or extrinsic). An example of active learning would be when a child says, "I wonder how many legs a spider has?" In order to actively learn, the child would look at a spider, ask someone else, or read about how many legs a spider has. The child would actively learn that a spider has eight legs through a search for the answer; and learn by counting the legs of a spider or by asking questions.

Passive learning is not as obvious. A common example of passive learning occurs when babies learn to speak without any formal education. Babies learn to speak by watching and observing. They are not necessarily seeking language skills. They are simply exposed to the language of the people around them, so they learn the language of the people around them.

Another example of passive learning occurs in the semiotic domain (i.e., a particular field with its own set of field-specific words, ideas, or methods of communication) (Gee, 2007) of video games. After playing *The Sims* with his mother, a 5-year-old boy and his mother went to a park. There, the boy mentioned that the park have been expensive to build. He equated the size a small playground in *The Sims* to the size of the size of the large park he was in. He stated, "Well in *The Sims* I can buy a playground for my family that costs \$1,250 and it's just a small one, so I think this playground costs about \$20,000' (Prensky, 2006, p.9)."

Though the game *The Sims* focuses on simulating requires gamers (i.e., video game players) to actively learn for in game strategy, the boy was able to passively learn how to equate in-game currency to real life currency, and then apply a price range to a playground in real life based on in game experience. The boy passively developed (learned) how to estimate the cost of real life building materials.

### *Optimal Learning Conditions*

In his book *The Social Neuroscience of Education: Optimizing Attachment and Learning in the Classroom*, Dr. Louis Cozolino explains that low-stress environments provide the most optimal learning conditions by improving neuroplasticity (i.e., our ability to learn). In his book, Dr. Cozolino provides a superfluous amount of research material to support the assertion that learners are more academically successful when they learn in a low-stress environment that

offers fun, comfort, and humor. In fact, in Chapter 5: The Connection Between Learning and Stress (Cozolino, 2013, p.73-92), Dr. Cozolino lists the benefits of humor in learning.

On page 90, Table 5.3 lists the following as *learning* benefits of humor:

- Improves memory recall
- Increases conceptual understanding
- Increases attention
- Stimulates brain regions important for complex and abstract thinking
- Activates brain growth hormones
- Increases reward value of materials

In support of Table 5.3, Dr. Cozolino uses Table 5.4, on page 91, to list the following as the *emotional* and *physical* benefits for humor and laughter:

#### Emotional

- Reduces anxiety, tension, and stress
- Reduces depression and loneliness
- Improves self-esteem
- Restores hope and energy
- Provides a sense of empowerment and control

#### Physiological

- Improves mental functioning through increased catecholamine levels
- Exercises and relaxes muscles

- Improves respiration by exercising the lungs and chest muscles
- Stimulates circulation by increasing heart rate and blood pressure
- Decreases levels of stress hormone
- Strengthens immunological functioning

*Mentor, Teacher, and Parent Influence on Language*

In his article, *The learning myth: Why I'll never tell my son he's smart*, Salman Khan starts by sharing a story about his son.

*My 5-year-old son has just started reading. Every night, we lie on his bed and he reads a short book to me. Inevitably, he'll hit a word that he has trouble with: last night the word was "gratefully." He eventually got it after a fairly painful minute. He then said, "Dad, aren't you glad how I struggled with that word? I think I could feel my brain growing." I smiled: my son was now verbalizing the tell-tale signs of a "growth mindset." But this wasn't by accident. Recently, I put into practice research I had been reading about for the past few years: I decided to praise my son not when he succeeded at things he was already good at, but when he persevered with things that he found difficult. I stressed to him that by struggling, your brain grows.*

According to Khan, and his results of application, intellectual challenge not only feels good, intellectual challenge is superior to easy learning.

Kahn goes on to discuss research conducted by Dr. Carol Dweck of Stanford University. Dr. Dweck's research reveals what she and her team "[...] call 'growth mindset interventions'

which have shown that even small changes in communication or seemingly innocuous comments can have fairly long-lasting implications for a person's mindset. For instance, praising someone's process [...] versus praising an innate trait or talent [...] in one way to reinforce a growth mindset with someone."

This passage emphasizes that what teachers, mentors, and parents say to students – whether intentionally or without thought – can alter a learner's mindset on a certain topic. Altering communication strategies, even in small ways, can further influence a learner's mindset; with a possibility for negative and positive effect.

### *Theme 1 Summary*

Humans learn passively and actively. Communication, which influences learners' mindsets and thinking patterns, is most often experienced passively. The most influential learning – in positive and negative connotation – happens when learners feel comfortable and safe.

### *Theme 1 Application*

Unfortunately, the Learner's parents believed that poor grades equated to a negative failure experience, dismissing the Learner's concept comprehension. By ignoring the Learner's comprehension of academic concepts – and placing all value on grades – the Learner's parents reinforced that the Learner – despite the ability to grasp the concept – did not possess the ability to successfully *learn or perform* academically; therefore, this behavior unintentionally encourages negative failure communication, and reducing the Learner's self-efficacy. Additionally, the Learner's parents negatively communicated about games, encouraging a guilt mentality in regards to the Learner's preferred hobby.

The Learner's negative failure communication strategies, with support from Khan's success in changing communication patterns with his son, influenced the focus of Cycle 1 of my research ([Cycle 1 details here](#)), which focused on altering communication patterns. Due to the Learner's comfort and love of video games, with support from Dr. Cozolino's research, Cycle 1 involved communication patterns to eliminate the Learner's guilt perception of their video game hobby. Video games offer the Learner an additional area of comfort when discussing failure, which will be discussed in the Theme 2 Application.

## **Theme 2: Games and Failure (Low-Stress Environments for Failure)**

In the semiotic domain of video games, research shows that video game players (gamers) associate failure to fun. In fact, when gamers fail in an entertaining way, and do not fail passively or without obvious cause, they say that failure is fun. Failure experience that is fun, is a positive experience. Repeated instances of positive failure experience positively reinforce failure. A positive reinforcement of failure decreases the negative connotation to failure, which encourages gamers to try an experience again. On the other hand, negative failure experience - "negative failure feedback" (McGonigal, 2011) – causes gamers to lose motivation to try again, they give up.

In her book, *Reality is Broken: Why Games Make Us Better and How They Can Change the World*, Jane McGonigal provides examples of games that cause players to fail "spectacularly, and entertainingly (McGonigal, 2011, p. 66)." She references other games in her book such as *Super Monkey Ball 2*, and *Portal*. For clarification, though the games mentioned above fall into the category of video games, other game categories (e.g., card, board, sports, etc.) offer low-stress, low-consequence learning environments. McGonigal defines games as sharing four traits:



a goal, rules, a feedback system, and voluntary participation (McGonigal, 2011, p. 21). In *Gamify: How Gamification Motivates People to Do Extraordinary Things*, Brian Burke (McGonigal, 2011, p.19-20) defines the three elements of motivation, in reference to Gamification, as: autonomy (voluntary participation), mastery (rules and feedback), and purpose (a goal). Burke uses these principles to build gamification strategies to motivate communities, companies, and individuals to accomplish spectacular tasks ([see Appendix A](#)). Any game or gamified solution that follows the above mentioned. All game types inherently encourage players to fail to allow them to learn what, and what not, to do, because failure allows players to gain a sense of mastery within a game setting. And as they master the game, while following the rules, players move closer to their goal or purpose. A few examples of popular games that teach the player how to play them through failure include Mario, Mega Man, Zelda, of Risk of Rain.

In the semiotic domain of science, the scientific method supports a positive view of failure experience. The scientific method revolves around five key characteristics: observation, question, hypothesis, prediction, and testing. The failures, in science, are positive failure experiences because failed experiments reduce the number of possibilities required to reach the correct answer.

Like failure, success is not inherently negative. In the semiotic domain of video games, success experience does not always correlate to positive success experience. In a personal interview with a gamer, it was revealed that when using cheat codes, there were two negative success experiences. The first negative success experience stemmed from completing the game with the use of the cheat code. The gamer felt less excitement, and less attachment to completing the game than when completing other games where a cheat code was not used. The second negative success experience occurred when the gamer played through a second time, without

cheat codes. The game felt too difficult, and he said he felt as though he didn't know how to beat the game without help; therefore, he chose to use cheat codes when the game became difficult because the habit was established, and he felt like it was the only option. But at the end, when he completed the game, there was no ownership or pride (The Learner, personal communication, 2014).

### *Theme 2 Summary*

Failure and success are not inherently positive or negative, their value remains in the linguistic context assigned to them by the person that uses them. In the semiotic domain of games, and the semiotic domain of science, failure often teaches the associated parties (gamers and scientists) how something either does or does not work. Failure in games can be fun when the player understands how and when their actions caused them to fail. Games offer a low-stress learning environment, encouraging players to make multiple attempts to learn to play the game, and subsequently learn to win in the game. Games (board, card, sports, etc.) include any activity with the following attributes (full descriptions in [Appendix A](#)) (McGonigal, 2011, p. 21):

- Goal
- Rules
- Feedback system
- Voluntary Participation

### *Theme 2 Application*

For the Learner, the importance and enjoyment of in-game failure provided the scaffolding necessary to improve the Learner's real life failure communication. Due to the

fictitious nature of games, in-game failure does not result in any real-life, negative consequences to gamers (with the exception of professional gamers, which fall outside the scope of this research paper).

Therefore, video games offered the Learner a low-stress learning environment, in which to build the scaffolding necessary to improve the Learner's real life failure communication strategies. The option that games offered to actively use positive failure communication strategies, as well as explore positive and negative in-game failure experiences, supported my plan for Cycle 1, and influenced my plan for Cycle 2 ([Cycle 2 details here](#)).

### **Theme 3: Self-Efficacy and Motivation (Tapping into Intrinsic Motivation)**

*“Confidence is a measure of one’s belief in one’s own abilities and is considered a psychological trait that is related to, but distinct from, both personality and ability traits.” she says. “An interrelated construct is ‘self-efficacy,’ which refers to a person’s belief in one’s capabilities to learn or perform behaviors. Research shows that self-efficacy influences academic motivation, learning, and achievement (Briggs, 2014).”*

Self-efficacy is a learner's perception of their belief in their own capabilities to learn. Learners measure their capability to learn by analyzing previous positive and negative experiences (more directly their positive and negative experiences with failure and success, as mentioned above). Whether or not they believe in their ability to learn relies on whether or not positive failure and positive success experiences were reinforced. If only negative failure and success experiences were reinforced, learners will not believe in their own capability to learn or perform. Therefore, low self-efficacy – resulting from a negative perception of a learner's

intelligence (i.e., compilation of learning experiences) – decreases the learner’s belief in themselves, and decreases their motivation to approach new learning opportunities or perform new tasks. As a result of self-efficacy being a learner’s belief in themselves – an intrinsic motivator instead of an extrinsic motivator – their intrinsic motivation to perform or approach new learning opportunities declines (Briggs, 2014).

"Intrinsic [motivations] sustain engagement because they engage people at an emotional level. Extrinsic rewards can certainly be used to motivate people, but the motivation occurs at a transactional level (Burke, 2014)."

In order to encourage a learner with low self-efficacy to regain the intrinsic motivation, failure and success experience have to be positively reinforced. If failure and success experience have been negatively reinforced, the learner must be coached to relearn about failure and success experience (i.e., positive failure communication strategies).

Burke’s Three Elements of Intrinsic Motivation (full descriptions in [Appendix B](#)) (Burke, 2014, p.19-20):

1. **Autonomy**
2. **Mastery**
3. **Purpose**

### *Theme 3 Summary*

Self-efficacy is a form of intrinsic motivation, which is why learners with low self-efficacy have low intrinsic motivation when pursuing new learning activities. Using Burke’s

three elements of intrinsic motivation and positive failure communication strategies similar to will positively influence self-efficacy.

### *Theme 3 Application*

For the Learner, self-efficacy reflection needed improvement in the same way that failure communication strategies needed to be improved. Without positive self-efficacy, the Learner lacked the intrinsic motivation to pursue new learning activities. Theme 3 research, the connection between self-efficacy and intrinsic motivation, influenced the development of Cycle 2, in addition to information gathered from Theme 2 research. Burke's three elements of intrinsic motivation influenced my plan for Cycle 3 ([Cycle 3 details here](#)).

## Methodology and Results

### **Purpose**

The purpose of my research was to positively influence the Learner's failure communication, improve the Learner's self-efficacy, and to empower the Learner to pursue new learning activities. I structured my methodology around Carl Rogers' student-centered learning theory, which puts the learner in charge of the direction depending on personal experiences. Furthermore, I structured my cycles around the Learner's experience and relevant, supportive research to improve self-efficacy.

Due to the personal, learner-centered nature of this research, I collected qualitative data rather than quantitative research. I used surveys to collect the Learner's feedback twice per cycle: pre- and post-cycle. The pre-cycle survey measured the Learner's perceived confidence

([see Appendix C](#)). The post-cycle survey measured, according to the Learner's perception, the effectiveness of each cycle.

Throughout the research, I maintained transparent practices. The Learner knew of each influencing theory and research resource; the Learner knew the goals and objectives for each cycle; and, the Learner directed when and how often each discussion occurred. The Learner was free to question my methodologies, research, or suggestions. Furthermore, I made myself available to the Learner for any questions or concerns they had about the research.

### **Cycle 1: Failure Experience Communication**

#### *Problem*

When discussing failure experiences, the learner used destructive self-talk such as "I am stupid", "I am a failure", and "I suck".

#### *Goal*

Improve the Learner's failure communication.

#### *Actions*

- Conducting baseline, confidence evaluation (Full results in [Appendix C](#))
- Maintaining transparent research dissemination practices
- Establishing boundaries for failure communication and self-talk
- Facilitating researcher-to-learner failure communication conversations
- Validating learner's hobbies
- Administering end of cycle evaluation

*Researcher's End-Of-Cycle Analysis, Cycle 1*

Throughout the research, the learner began setting boundaries for failure communication when others used destructive failure communication. For example, a sibling made negative comments about themselves, the Learner would correct them and offer alternatives for talking about it.

The learner seemed engaged when discussing failure in games, and how the failure was necessary to learn to play the game.

*Learner's End-Of-Cycle Analysis, Cycle 1*

(Full results in [Appendix C](#))

**Q:** Actions taken in this cycle positively influenced me and my actions.

**A:** Unsure

**Q:** Why or why not?

**A:** It is difficult to see the changes now I believe. There is not a huge appreciable difference, but there is some I think. It could simply be that I am just working still and have yet to be overly challenged. I think it is mostly in my mindset, which means something has to happen for me to really see if any changes in my actions are apparent.

*Cycle 1 Summary – What I learned*

**What Happened?** The Learner was not consciously aware of the progress they were making; though, the progress was subtle. Throughout the research, the learner began setting boundaries for failure communication when others used destructive failure communication. For example, a

sibling made negative comments about themselves, the Learner would correct them and offer alternatives for talking about it.

**How did I react?** I did not reveal my observations of the user making changes to their vocabulary because the Learner made it a point to say that they did not think it was working.

**Why?** I did not want to skew the research by influencing the Learner's point of view.

## **Cycle 2: Self-Efficacy Reflection Processes**

### *Problem*

When presented with complicated or overwhelming situations, the learner projected low self-efficacy.

### *Goal*

Improve the learner's self-efficacy and motivation to persevere when they encounter problems or failures during their first term at a new school.

### *Actions*

- Conducting baseline, confidence evaluation (Full results in [Appendix C](#))
- Maintaining transparent research dissemination practices
- Facilitating researcher-to-learner, self-efficacy reflection conversations
- Reinforcing failure communication boundaries
- Connecting learner's self-efficacy in hobby to self-efficacy in learning
- Administering end of cycle evaluation



*Researcher's End-Of-Cycle Analysis, Cycle 2*

The learner initiated the necessary research to solve the issue when faced with a complicated and overwhelming educational situation that historically caused depression or anxiety.

The self-efficacy that occurred after the issue was resolved was positive and future-focused.

There were no signs of debilitating anxiety or depression.

The learner made comments about feeling more confident and initiated conversation without prompting.

*Learner's End-Of-Cycle Analysis, Cycle 2*

(Full results in [Appendix C](#))

**Q:** Actions taken in this cycle positively influenced me and my actions.

**A:** Agree

**Q:** Why or why not?

**A:** Even though school didn't go quite as expected, I didn't lose heart like I would have before. I could tell I felt more confident and didn't get so upset when something happened this quarter compared to the past.

*Cycle 2 Summary – What I learned*

**What Happened?** The Learner started at a new school, and the first two weeks were frustrating for the Learner. They missed assignments because, as a new student, the Learner did not have the necessary information to find the assignment information – or even know there was an

assignment – that was due on the first day of class. Toward the middle of the quarter, the Learner made the decision to drop the class that had caused issues from the first day with a plan to reenroll and start fresh the next quarter. Normally, the Learner would have been depressed, anxious, and full of self-doubt; however, the Learner made the decision with confidence and without negative failure communication. The Learner used positive failure experience communication to identify the source of frustration and problem solve.

**How did I react?** I offered emotional assistance, provided feedback when the Learner asked questions, and let the Learner discuss the situation as often as necessary.

**Why?** Allowing the Learner the ability to discuss the situation as often as they wanted seemed to help the Learner feel more confident and justified in the decision to drop the class.

### **Cycle 3: Motivation to Pursue Learning Activities**

#### *Problem*

The learner lacks motivation to pursue new or challenging learning activities in- and outside of the formal classroom.

#### *Goal*

The learner will maintain improved self-confidence and explore activities outside of their comfort zone.

#### *Actions*

- Conducting baseline, confidence evaluation (Full results in [Appendix C](#))
- Maintaining transparent research dissemination practices

- Reinforcing failure communication boundaries and positive self-efficacy reflection processes
- Researching and encouraging the pursuit of new learning activities related to career or personal interests
- Administering end of cycle evaluation

*Researcher's End-Of-Cycle Analysis, Cycle 3*

**Per the Learner's request, Cycle 3 was cancelled.**

*Learner's End-Of-Cycle Analysis, Cycle 3*

**Per the Learner's request, Cycle 3 was cancelled.**

*Cycle 3 Summary – What I learned*

**What Happened?** The Learner requested that I cancel Cycle 3 due to personal reasons associated with a family medical emergency. However, Cycle 3 did garner some results. The Learner reported that they had made the decision to drop out of college. They felt that the environment, due to its lack of relevancy and project-based learning, did not suite their academic needs. The Learner reported that they are planning to teach themselves the skills required to pursue their dream career; furthermore, the Learner reported feeling much more confident about the situation without having to worry about school.

**How did I react?** Out of respect for the Learner, I cancelled any formal activities I had planned for Cycle 3; however, I did ask the Learner to report on any information they were willing to share after making their decision to cancel the remaining cycle.

**Why?** I wanted to remain true to the student-centered aspect of my research.

### Personal Reflection

“It’s the process.”

The most descriptive sentence I will ever utter about my experience throughout the entire research process; including writing this paper. Already 9-hours past due, I sat outside of my house attempting to enjoy the fresh air after pulling – what I had hoped to be my last – college all-nighter (guess who’s pulling her second all-nighter in a row as she writes this?). It’s the process. Those three simple words hold so much meaning for me.

When I started the program at Pepperdine University in July 2014, I knew my life would change; I knew that I would meet extraordinarily intelligent people; I knew I would read more in 12-months than I would have ever thought possible; I knew that I would work hard into the early morning hours on occasion; but I never expected to come away as a person that 2014-Stephani would not – and could not possibly begin to recognize.

I never expected those same intelligent people to be not only generous, but compassionate, loyal, and there for me. I never expected to walk into a room of 18 strangers and immediately feel comfortable. I never expected the metamorphosis that this program inevitably forced upon me with rigorous consistency. And I wouldn’t change a thing: not one.

This research only perpetuated my year-long metamorphosis. When I started, when I wrote down the purpose, I honestly believed that it was all for the Learner. I thought if I could only perfect it; there were so many other people I could help!

After a few emotionally jarring events that left me unemployed and alone with my own thoughts for the first time in 8-or-so years, I started to realize that I was the Learner (metaphorically speaking, the Learner is a real person that is someone other than me).

I always followed the rules. I started working when I was 14. I went to college immediately after graduating from high school. I pursued a degree for a career with sensible options. I earned good grades all through high school and college. I married young to the man of my dreams (to whom I am still both married and dedicated to 4-years later). We got a cat, we got a dog. We were on our way to the American Dream; right? Sure, but something was missing.

I had never stopped to take inventory on myself as my life changed. I kept my head down and followed the rules; I never challenged myself to reach outside my comfort zone. Applying to this program is the craziest stretch I've made in my life, and it's one of the best decisions I've made.

As I progressed through my research, and as I watched the Learner grow more and more confident, I questioned myself. I asked myself the same questions I asked the Learner, and I realized that I needed this research more than they did. I still do. Working to finish my paper on time, I haven't been able to spend as much time working on myself as I'd like. But after I submit this paper, I have plans to start following my own advice.

Right now, I'm looking for myself. I'm trying to figure out what I like to do for fun. I'm working confidence into my daily routine, and I'm also taking it easy. My husband and I left busy-Western Washington to move back to our hometown. I'm currently working part-time at RiteAid. It makes sure that I'm not constantly thinking about things I can't change, but it also

reminds me why I got a master's degree in the first place (in case you didn't know, being a peon sucks).

Thank you for following my journey. To avoid taking up too much more space with this craziness, I'm going to finish out my reflection with my personal results from the confidence quiz. Good luck on your journey, and may you always follow your happiness. And don't forget: It's the Process.

**1. If you were asked to complete a passion or hobby project, how would you rate your confidence to complete the project? (low, 1 - high, 5)**

Answer: 3

**2. If you were to make an attempt to complete the project you considered above, and made a mistake that required you to restart the project, what would you think about yourself?**

Answer: Right now, I would feel pretty crappy about myself for a bit. I've been in a "woe is me" mood for awhile, and it's hard to shake it sometimes.

**3. Rate your willingness to try again. (low, 1 - high, 5)**

Answer: 2, the project I'm thinking about costs a bit of money so I wouldn't be able to justify trying again for awhile.

**4. If you began the process again, and made another mistake that required you to start over, what would you think about yourself?**

Answer: I would be so frustrated! I'd probably be pretty hard on myself.

**5. Rate your willingness to try again. (low, 1 - high, 5)**

Answer: 1

**6. Do you play video games that require you to build or create?**

Answer: Yes

**7. When you play video games that require you to build or create, how many mistakes are you willing to make on a single project before you try something different?**

Answer: 2-6

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Appendix A

McGonigal's Four Game Traits (McGonigal, 2011, p. 21):

1. The **goal** is the specific outcome that players will work to achieve. It focuses their attention and continually orients their participation throughout the game. The goal provides players with *a sense of purpose*.
2. The **rules** place limitations on how players can achieve the goal. By removing or limiting the obvious ways of getting to the goal, the rules push players to explore previously uncharted possibility spaces. They *unleash creativity* and *foster strategic thinking*.
3. The **feedback system** tells players how close they are to achieving the goal. It can take the form of points, levels, a score, or a progress bar. Or, in its most basic form, the feedback system can be as simple as the players' knowledge of an objective outcome: "The game is over when..." Real-time feedback serves as a *promise* to the players that the goal is definitely achievable, and it provides *motivation* to keep playing.
4. Finally, **voluntary participation** requires that everyone who is playing the game knowingly and willingly accepts the goal, the rules, and the feedback. Knowingness *establishes common ground* for multiple people to play together. And the freedom to enter or leave a game at will ensures that intentionally stressful and challenging work is experienced as *safe* and *pleasurable* activity.

## Appendix B

Burke's Three Elements of Motivation (Burke, 2014, p.19-20):

1. **Autonomy** – the desire to direct our own lives. In effective gamified solutions, players opt in to participate, and once they do, they make choices about how they will proceed through the challenges to achieve their goals. Players are given the opportunity to discover and learn using different paths through the solution. In some gamified solutions there are no paths at all. Players are given goals, tools, rules, and a space to “play” without being directed on the next steps to take.
2. **Mastery** – the urge to make progress and get better at something that matters. We all have a deep-seated need to improve in aspects of our lives, but often we lack the motivation to take the first step. Gamification provides the positive feedback and easy on-boarding that can motivate people to start performing better in a chosen area. But mastery is not an attainable goal, it is a journey. There are many signposts along the way that indicate progress, but there is never an end point. In virtually all of life's pursuits – whether it is running, painting, or learning a language – there is always another level. Gamification is about getting better at something.
3. **Purpose** – the yearning to act in service of something larger than ourselves. By definition, gamified solutions are distinguished from traditional games by their purpose. Gamification is focused on one or more of three objectives: changing behaviors, developing skills, or driving innovation. Gamification must start and finish with a purpose that is centered on achieving meaningful player goals. As we saw with the Pain Squad app, the kids played a critical role in the effort to reduce pain for the cancer patients. It's a goal much larger than themselves.

Appendix C

Confidence Quiz and End-of-Cycle Evaluation Results

Links:

- [Confidence Quiz](https://bit.ly/1LsC92n): bit.ly/1LsC92n
- [Cycle 1 Eval.](https://bit.ly/1RDBMsM): bit.ly/1RDBMsM
- [Cycle 2 Eval.](https://bit.ly/1LeGhpL): bit.ly/1LeGhpL
- [Cycle 3 Eval.](https://bit.ly/1TGVuBg): bit.ly/1TGVuBg

Confidence Quiz, Cycle 1 (Responses) ☆

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fx | If you were asked to complete a passion or hobby project, how would you rate your confidence to complete the project?

	B	C	D	E	F	G	H
1	If you were asked to complete a passion or hobby project, how would you rate your confidence to complete the project?	If you were to make an attempt to complete the project you considered above, and made a mistake that required you to restart the project, what would you think about yourself?	Rate your willingness to try again.	If you began the process again, and made another mistake that required you to start over, what would you think about yourself?	Rate your willingness to try again.	Do you play video games that require you to build or create?	When you play video games that require you to build or create, how many mistakes are you willing to make on a single project before you try something different?
2		I would think that I don't have enough knowledge or time.		I would think that I was stupid to try again if it didn't work the first time.		1 Yes	7-9

Cycle 1 Evaluation (Responses) ☆

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fx |

	B	C	D	E
1	Goals and objectives of this cycle were clearly communicated?	Why or why not?	Actions taken in this cycle positively influenced me and my actions.	Why or why not?
2	Agree	I was included with your discussions about class. I always just generally knew what the goal was, as long as you knew it anyways. If you weren't sure, the naturally I wasn't either. All in all I knew what the general idea was.	Unsure	It is difficult to see the changes now I believe. There is not a huge appreciable difference, but there is some I think. It could simply be that I am just working still and have yet to be overly challenged. I think it is mostly in my mindset, which means something has to happen for me to really see if any changes in my actions are apparent.

Confidence Quiz, Cycle 2 (Responses) ☆

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	B	C	D	E	F	G	H
1	If you were asked to complete a passion or hobby project, how would you rate your confidence to complete the project?	If you were to make an attempt to complete the project you considered above, and made a mistake that required you to restart the project, what would you think about yourself?	Rate your willingness to try again.	If you began the process again, and made another mistake that required you to start over, what would you think about yourself?	Rate your willingness to try again.	Do you play video games that require you to build or create?	When you play video games that require you to build or create, how many mistakes are you willing to make on a single project before you try something different?
2		I would think that maybe I missed something, or I need to try again and do something different.		I would probably start to get discouraged, but I would probably decide that I need more information or that I need to try something smaller.		3 Yes	7-9

Cycle 2 Evaluation (Responses) ☆

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	B	C	D	E
1	Goals and objectives of this cycle were clearly communicated?	Why or why not?	Actions taken in this cycle positively influenced me and my actions.	Why or why not?
2	Agree	We talked constantly about what it was we were trying to work on. A lot of conversations about self efficacy and self confidence. About how to look at failure and how to build self confidence. As well as how helping someone else, or discussing something with someone who knows less than you can help you learn something.	Agree	Even though school didn't go quite as expected, I didn't lose heart like I would have before. I could tell I felt more confident and didn't get so upset when something happened this quarter compared to the past.

# IMPROVING SELF-EFFICACY BY ALTERING FAILURE COMMUNICATION AND REFLECTION PROCESSES

Confidence Quiz, Cycle 3 (Responses) ☆

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fx

	B	C	D	E	F	G	H
1	If you were asked to complete a passion or hobby project, how would you rate your confidence to complete the project?	If you were to make an attempt to complete the project you considered above, and made a mistake that required you to restart the project, what would you think about yourself?	Rate your willingness to try again.	If you began the process again, and made another mistake that required you to start over, what would you think about yourself?	Rate your willingness to try again.	Do you play video games that require you to build or create?	When you play video games that require you to build or create, how many mistakes are you willing to make on a single project before you try something different?
2		I would doubt myself a little, but I would most likely not beat myself up about it, I wouldn't really look down on myself.		I would think that maybe I wasn't paying enough attention to something or that I made a mistake somewhere.		4 Yes	7-9