

USING DIALOGIC READING TO FOSTER A GROWTH MINDSET IN EARLY
ELEMENTARY STUDENTS

by

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Abstract

The present study examines the use of dialogic reading strategies during whole class read alouds of picture books specifically chosen for their likelihood of illustrating particular growth mindset concepts. The researcher describes the concept of growth mindset, gaps in current growth mindset research, benefits of dialogic reading, and development of survey questions for the present study. Case study findings focus on outcomes obtained with a class of seventeen first grade students. The read alouds resulted in greater student understandings of growth mindset concepts. Students were able to support their survey question answers with evidence from the lessons using growth mindset phrases. When comparing pre-survey and post-survey data, the growth mindset read alouds resulted in improved self-talk, as well as stronger understandings and support of the notion that “mistakes help me learn.” Study limitations and time constraints are detailed and followed by a description of how this research experience impacted the researcher as a future teacher.

Introduction

The study focuses on using dialogic reading to foster a growth mindset in elementary age students. The overarching topic of motivation was chosen after the researcher took a trip to Haiti with a small group of East Carolina University Honors College students. While in Haiti, the researcher learned the true power of education. Haiti is one of the poorest countries in the world, “according to their gross domestic product (GDP) based on purchasing power parity (PPP) per capita,” (Tasch, 2017) and education is a privilege, not a right. During the trip, the researcher hiked close to two miles through the mountains of Fondwa, Haiti, on rough terrain to reach the Saint Antione School. While standing at the top of one of the mountains in the wind and rain, looking out at the remaining part of the journey, the researcher realized just how fortunate we are in America. The strength and determination of the young Haitian students is inspiring. Children as young as five years old, walk on average six miles, both ways, every day to get to the school. Their motivation to learn and receive an education is unmatched here in America. The motivation of these young people in Haiti stands in stark contrast to the concerns that many American teachers have about students who can read and learn, but choose not to. There is a lack in a desire to grow through learning and challenges within today’s youth. Students are not intrinsically motivated to learn.

The researcher carried a lot from the trip into her daily life and academic career. Being immersed in the determination of the Haitian culture influenced the researcher to explore previous research on methods used to instill in students a desire to learn. This research led to exploration of the value-expectancy theory of motivation as explained in the following section. The researcher chose using dialogic reading to teach the complex ideas of growth mindset to young students because it engages them in the reading and can be used to encourage the students to verbally discuss the subject matter.

Literature Review

Growth Mindset

According to the value-expectancy theory, “a learner’s motivation is determined by how much they value the goal, and whether they expect to succeed” (“The expectancy,” 2011). Carol Dweck (2000) argues there are two different mindsets: a fixed mindset and a growth mindset. A person with a fixed mindset believes their qualities such as intelligence or talent, are fixed traits they either possess or lack. These individuals see their level of intelligence as unchanging. However, an individual who believes he or she can develop his or her skills through hard work and assistance, is said to have a growth mindset, a term coined by Carol Dweck (2000).

In recent literature, (Donohoe, Topping, & Hannah, 2012; Hochanadel & Finamore, 2015) it has been found that subjects characterized with a fixed mindset value the end result, such as receiving a quality grade, over learning and retaining the material. These same individuals also “exert less effort to succeed” (Hochanadel & Finamore, 2015) when faced with a challenge or setback. They see failure as a representation of the limits of their abilities. Past studies have found growth mindset to have a positive impact on academic performance (Ablard, 2002; Aronson, Fried, & Good, 2001; Blackwell, Trzesniewski, & Dweck, 2007).

Growth mindset education is more successful when the teacher reflects a growth mindset (Dweck & Leggett, 1988; Gollwitzer & Schaal, 2001). Clarke (2014) supports this notion by suggesting that how teachers view the potential and abilities of their students plays a key role in the success of implementing methods to improve learning.

Research shows educators with a fixed mindset tend to use techniques that create a classroom environment in which students classified as low ability have low motivation to learn. Additionally, the teacher has lower expectations of their potential for academic success (Rattan, Good, & Dweck, 2012). The teachers with a fixed mindset take their students’ best interests into

account, however their fixed point of view can influence them to communicate about education through ineffective methods which hinder their students' learning experience (Rattan et al., 2012).

Dialogic Reading

Dialogic reading is a technique used to connect students with picture books by engaging them through interactive talk about the story they are reading (Lonigan and Whitehurst, 1998). When using dialogic reading, the adult uses questions to *prompt* the student. Once the student responds to the prompt, the adult *evaluates* their response, and *expands* on the student's thoughts through rephrasing or adding on. Finally, the adult *repeats* the prompt to check for comprehension. This process is rereferred to as P.E.E.R. (Prompt, Evaluate, Expand, Repeat).

The practice of dialogic reading was initiated in the early 1990s by Dr. Grover Whitehurst. Although the concept originated with the purpose of assisting preschoolers in reading and comprehending picture books (Whitehurst et al., 1988), in recent years a number of studies have examined the approach with students of other ages and populations. These studies include students with disabilities (What Works Clearinghouse, 2010; Fleury & Schwartz, 2016), English language learners (Brannon & Dauksas, 2014; Huennekens & Xu, 2016), and struggling readers (Swanson et al., 2011). Dialogic reading supports numerous positive outcomes, including the development of oral vocabulary. It also fosters more challenging language skills such as comprehension, grammar, and the ability to form an argument or opinion and elaborate on ideas (NELP, 2008).

A number of studies in the dialogic reading literature report positive outcomes related to the development of oral language (Lonigan, Anthony, Bloomfield, Dyer, & Samwel, 1999; Lonigan & Whitehurst, 1998; Wasik & Bond, 2001). A study by Dickinson and Smith (1994) found that teachers can support literacy growth in students through interactive reading

such as dialogic reading, and use it as a promising support for future literacy development.

Dialogic reading has also been found to improve narrative and expressive language skills (Zevenbergen, Whitehurst, & Zevenbergen, 2003).

Purpose

My research will explore student outcomes related to the use of using dialogic reading to foster a growth mindset in elementary age students.

Research questions

Can dialogic reading of literature related to the notion of a growth mindset teach students how to alter their thinking from fixed to growth mindset?

Do whole group mindset lessons impact individual student thinking?

Methods

Participants

A case study was performed to achieve the purpose of the study. The case study consisted of a class of twenty-two first grade students. Of the twenty-two students, seventeen participated in the research. Five students were excluded from the research because they do not speak fluent English. Of the seventeen students, ten were male and seven were female. Fifteen of the students were Caucasian and two were African American. The parents of the seventeen students were made aware of the research study through a consent form sent home in their child's communication folder prior to the start of the research. The consent form can be found in Appendix A. In order for the student to participate in the research study, the consent form had to be signed by a parent or legal guardian and returned to the researcher. Consent involved permission to administer the pre-surveys and post-surveys. All seventeen students' parent or legal guardian gave permission for their child to participate in the present research study.

Survey Development

The five items in the present study's pre-survey and post-survey were modified from a recent study done by Snipes and Loan (2017). Their research "examines student and teacher attitudes and beliefs about growth mindset, performance avoidance, and academic behaviors in Nevada's Clark County School District" (Snipe & Loan, 2017). They were able to analyze the data from 103,066 students and 5,721 teachers. Their goal was to measure the self-reported levels of growth mindset, performance avoidance, and academic behaviors, and analyze how they varied based on grade level, prior academic achievement, and sociodemographics. Snipe and Loan (2017) also surveyed teachers' "reported level of growth mindset, student performance avoidance, and student academic behaviors."

The survey items used in Snipe and Loan's study, were originally developed by the Consortium on Chicago School Research for the Becoming Effective Learners Survey and additionally used in another previous study (Farrington et al., 2014). The current study uses these survey items as a guideline because they have been analyzed for reliability using Cronbach's alpha and McDonald's omega statistic. The growth mindset portion of the survey, along with the rest of their survey items, exceeded a score of 0.7 for both the alpha and omega statistic, "the accepted criterion for internal consistency" (Nunnally, 1978).

Snipe and Loan's (2017) survey was given to students grades 4-12, leaving grades K-3 out of the study and a large gap in the research. The present research was performed on a class of first grade students. Due to the age difference in the subjects of the present study and the subjects in Snipe and Loan's (2017) research, Snipe and Loan's "student version" questions were further modified to reflect the comprehension level of a first grader. For example, one of Snipe and Loan's (2017) survey questions reads, "I stop doing work if I feel like I can't do it well" for the purpose of the present study, this was reworded to say, "I give up when the work is too hard."

Additionally, Snipe and Loan (2017) used a five point answer scale with the answer choices for each statement being: not at all true, a little true, somewhat true, mostly true, and completely true. The present study simplifies this scale to only have three options: true, sometimes, never.

Snipe and Loan's (2017) study uses self-reports of students and teachers to measure their personal level of growth mindset. There was no intervention in the study. The present study is conducted to determine whether whole class dialogic reading intervention can be used to improve students' level of growth mindset.

Materials

The survey found in Appendix B, was developed by the researcher as previously described and was administered to the participants twice over the course of the study. The pre-survey was administered prior to the growth mindset dialogic read alouds. The same survey was administered once more at the conclusion of the growth mindset read alouds. Using the same survey before and after the growth mindset dialogic read alouds, provided a means for measuring students' opinions on the growth mindset survey statements prior to and after the intervention. The change in mindset was determined by comparing the students' pre-survey answers to their post-survey answers.

Between the pre-survey and post-survey, the researcher facilitated a growth mindset dialogic read aloud intervention. Over the course of two weeks, the researcher planned and implemented five growth mindset lessons. Each lesson was taught to the whole group and took from thirty to forty-five minutes. During each of the five lessons, the researcher used dialogic reading methods and the P.E.E.R. process to read a picture book to the students related to a predetermined aspect of growth mindset.

Chart 1 lists the selected picture books in the order they were read. Next to each book is the topic of discussion and the *key take away phrase* selected by the researcher to summarize the

topic of the read aloud. The phrase was verbalized by the students and referenced throughout the read aloud. These phrases were provided students with the language to help students think and talk about applying each growth mindset skill to their personal lives. The take away phrases were all worded with age-appropriate language so that students could build their growth mindset vocabulary.

Book Title	Topic of Discussion (related to book topic)	Key Take Away Phrase
<i>Bubble Gum Brain</i> by Julia Cook	Introduce fixed vs. growth mindset	I can grow my brain.
<i>The Magnificent Thing</i> by Ashley Spires	Mistakes are how we learn	Mistakes are how I learn.
<i>The Thing Lou Couldn't Do</i> by Ashley Spires	Fear of failure	When I fail, I grow.
<i>Giraffes Can't Dance</i> by Giles Andreae	Power of "yet"	I can't do it YET, but I am going to do my best.
<i>Flight School</i> by Lita Judge	Perseverance	I like a challenge.

Chart 1

At the start of the read aloud intervention, the researcher placed six growth mindset posters in the front of the classroom under the Smartboard, seen in *Image 1*. The posters were at the students' eye level while sitting on the carpet, which is where the growth mindset read alouds took place. Each of the take away phrases were displayed on a separate poster. The phrases were "I can grow my brain," "Mistakes are how I learn," "When I fail, I grow," "I can't do it yet but, I try my best," and "I like a challenge." The posters can be found in Appendix C. The phrases summarized the concepts for the students and were introduced at the beginning of each lesson. The posters provided the students with a visual aid to accompany the lessons. They were able to reference the posters throughout the rest of the school day as they thought about how growth mindset might apply to their learning throughout the intervention.



Image 1

Procedures

Pre-Survey. In order to ensure that all students understood survey content, the researcher completed the surveys with each individual student. The pre-surveys were conducted two weeks prior to the growth mindset read aloud intervention. To ensure confidentiality, the researcher took one student into the hallway at a time, read the ascent script, explain the survey to them, and read each statement. Researcher and student sat on the floor outside of the classroom away from others so that the students would feel comfortable sharing their thoughts without possible judgement from others. The pre-survey process was started with a brief conversation about the child's weekend plans, the approaching holidays, the clothing they were wearing that day, etc. This step was meant to build rapport because children usually associate "being called into the hallway" with a negative action. After the short dialogue, the researcher told each student the intent of the research study and read the verbal ascent script, found in Appendix D. It was explained to the students that they would be learning about how growth mindsets. The researcher informed the student that they were going to ask them only five questions – and the questions did not have a right or wrong answer. They were informed that the goal was for the researcher to better understand what they were thinking "in their brains." The students who were outwardly

anxious about this new experience, but relaxed when they heard there was no wrong answer.

The researcher read each statement to the students followed by the answer choices. While reading the choices, the researcher pointed to the words and images. For example, the dialogue followed this pattern for each statement.

Ms. Murdock: “I feel smart. Do you always feel smart? Sometimes feel smart? Or never feel smart?”

Student: *Verbally answers the question or points to the corresponding image.*

Ms. Murdock: *Circles their answer choice.*

This process was repeated for each question and with each student. The researcher followed up the survey by talking more about why they chose their answers. This was done to better understand their mindset prior to the read aloud intervention. The researcher asked questions such as, “Why did you choose _____?” or “Can you explain your thinking for this statement?” The researcher made note of the student’s reasoning on the back of their pre-survey.

Read Alouds. The researcher specifically chose the five picture books (see Image 2) used in this study because they offer opportunities for in-depth growth mindset discussions. The books were ordered in a logical sequence to explain the basic concepts of growth mindset. Each lesson followed a similar structure. The lesson began by introducing the take away phrase by referencing the growth mindset poster. The read alouds took place after lunch each day, so the students became accustomed to the routine of sitting on the carpet, looking at the next poster, and exclaiming “Today we are learning about when I fail, I grow!” The picture book/topic was then introduced through a brief conversation or thought-provoking question to gain the students’ attention. The picture book was then read to the students using dialogic reading methods. The questions asked during the reading were open-ended and predetermined by the researcher. The read aloud was followed by a whole class discussion and/or creation of an anchor chart. The take

away phrase was then revisited and each lesson was concluded with a short video from the 5 part ClassDojo video series on growth mindset found on YouTube (ClassDojo, 2016). The detailed overview of each read aloud lesson plan can be found in Appendix E.

The growth mindset read aloud intervention was launched with the picture book, *Bubble Gum Brain* by Julia Cook. This story compares fixed mindsets versus growth mindsets. The researcher equates the growth mindset to a “bubble gum brain” which means it can grow and stretch. While a fixed mindset is described as a “brick brain” meaning their thinking is stuck and unmalleable. However, in *Bubble Gum Brain* students learned that underneath every “brick brain” is a “bubble gum brain,” which led into a discussion about how the students are capable of changing their mindsets.

This book was followed by the reading of *The Most Magnificent Thing* by Ashley Spires. This picture book is used to teach the students that mistakes are a way for them to grow and learn. The girl in the story struggles to build her “magnificent thing” and when she gets frustrated due to her mistakes, she exhibits a fixed mindset. However, when she looks at each of her failed inventions and creates something magnificent out of her mistakes, she shifts to a growth mindset. This builds off of the discussion from the previous read aloud and supports the notion that our mindset can change. However, the girl is successful when her thinking shifts to a growth mindset.

The next read aloud focused on the book, *The Thing Lou Couldn't Do*, by Ashley Spire. This book accompanied the take away phrase “when I fail, I grow.” Building off the discussion of failures and mistakes in the previous book, this story follows Lou, a girl who has a fear of failing at new challenges. This book was brought to a personal level for the students by having a discussion about fears they have. The students were prompted to use their growth mindset when creating a verbal plan for how they can overcome their fears. In the story, Lou is unable to climb

the tree to the top. When she says she “can’t climb,” the phrase “not yet anyway” follows. The ending of this book provided preview of the next read aloud topic: the power of “yet.”

The power of “yet” is discussed using the book *Giraffes Can’t Dance* by Giles Andreae when Gerald the giraffe offers the take away phrase “I can’t do it yet, but I am going to try my best.” Even though he is unable to dance as well as the other animals, he still attempts to dance. The read aloud was followed by a class discussion where the students had a chance to share the things they can’t currently do, but they are attempting to learn such as, riding a bike, skateboarding, or whistling.

The read aloud intervention concluded with the reading of *Flight School* by Lita Judge. This book was used to illustrate the notion of perseverance. Penguin was not able to fly on his first try, but he did not give up, instead he continued to work hard and practice. The discussion that followed this read aloud was centered around embracing challenges. The students were able to share struggles they faced, things they had to practice, and the feeling of accomplishment they experienced when reaching a challenging goal.



Image 2

During the read aloud intervention time and during the researcher's daily time in the classroom, anecdotal evidence related to intervention outcomes was gathered through informal interviews, individual conversations, and whole group discussions.

Post-Survey. At end of the study, post-surveys were administered using the same pre-survey that preceded the intervention (see Appendix B). When collecting the post-survey data, the pre-survey process was repeated. Individually, the students were taken into the hallway. The researcher and the student sat in the same area as the pre-surveys, on the floor outside of the classroom away from others. Even though the students were more comfortable with the process this time, it was still important to isolate the student to ensure they felt comfortable sharing their learning without possible judgement from others. Several of the students saw the survey paper, immediately recognized it, and made a comment such as, "I remember this!" or "You asked me these a while ago!" It was explained to the students that they would be asked the same questions again. It was reiterated that there were only five questions and there was no right or wrong answer. Each statement was read out loud to the student while pointing to the visual aid that accompanied each answer choice. The student responded to the statement and the researcher circled their answer choice for them. This was followed by a discussion about the student's thought process when answering the questions. The researcher made note of the student's comments on the back of their post-survey.

The data was analyzed by comparing the pre-survey answers to the post-survey answers. The survey data was used to determine the students' change in mindset from before to after the growth mindset read aloud intervention. When analyzing the data, the anecdotal notes taken during the pre- and post-surveys and the dialogic read alouds were used to support the statistical data. The goal of the growth mindset dialogic read aloud intervention was to see a shift in the students' survey responses from fixed mindsets to growth mindsets.

Results

Pre-Survey. As shown by the data in *Figure 1*, twelve of the seventeen students surveyed said they sometimes feel smart when answering #1. The majority of students also said they can always learn new things. Statements #3 and #4 did not have a clear majority answer. The students were split when trying to answer “challenges make me smarter” and “mistakes help me learn.” However, the final statement, “I give up when the work is too hard” prompted thirteen of the seventeen students to answer “never.” If the students reflected a strong growth mindset, the majority of students would answer “always” for statements #1-4 and “never” for statement #5.

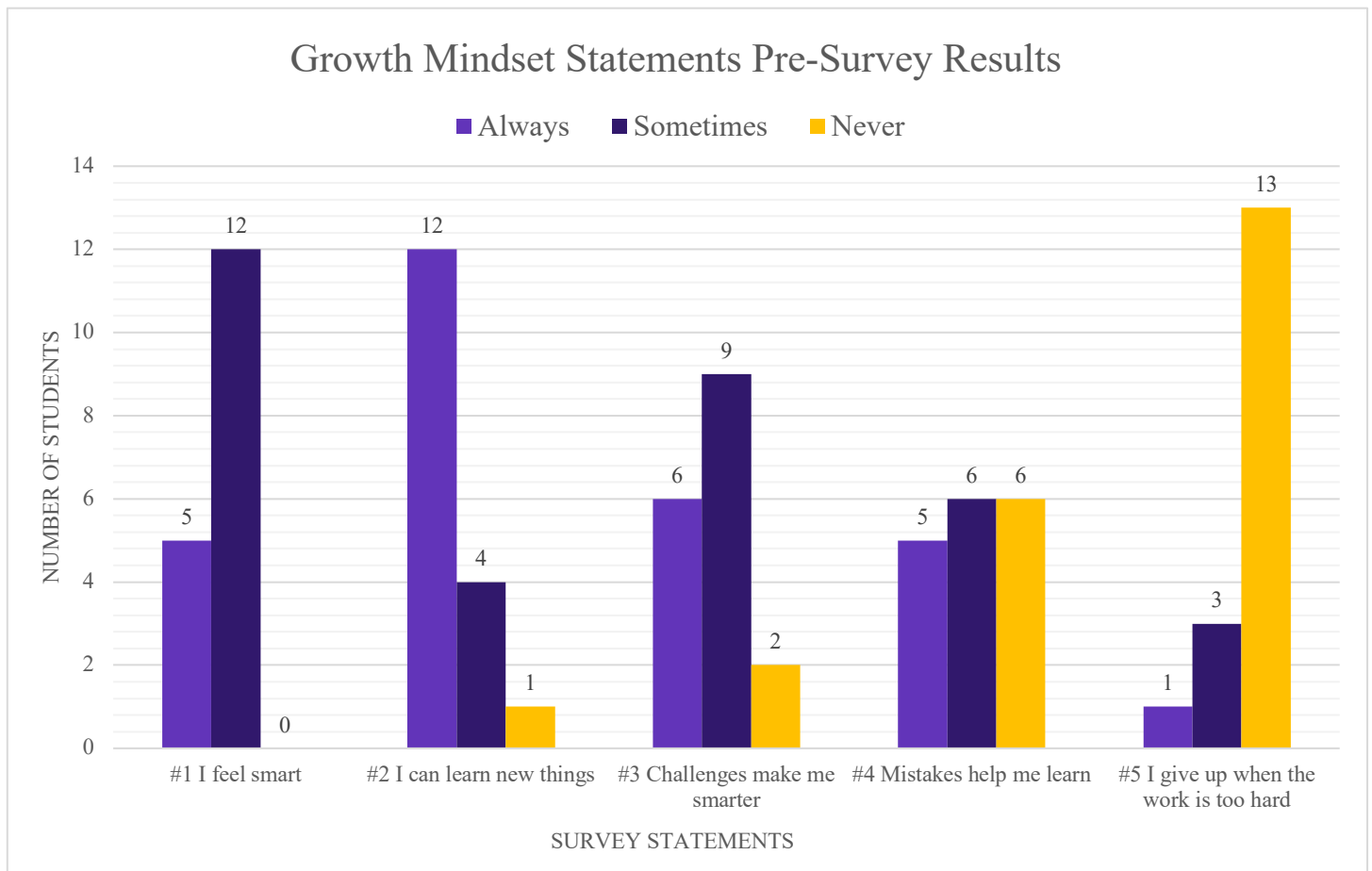


Figure 1

There were some key patterns not accurately represented by the data collected in the chart. When responding to the statements, students consistently were quick to answer statements

#1 and #2. However, this pattern did not repeat itself when responding to statement #3. The large majority of students took more than ten seconds to choose an answer. Five of the students had the researcher repeat the statement. Statement #4 followed a similar pattern and took the most thought for the students to answer. A few of the students offered a confused look, for some the answer choices had to be repeated, and others were reminded there was no wrong answer in order for them to offer a response. Statement #5 had an immediate answer from majority of the students. Those students who chose “never” provided their answer with confidence for the first time during the survey.

In addition to reading the statements and recording their answers, the researcher questioned each student’s reasoning for choosing their answer choice. This provided a better understand of their rationales for choosing their answers. When answering statement #1 “I feel smart”, answers were split between “always” and “sometimes” with majority of students choosing “sometimes.” None of the students said they never feel smart. When asked to explain when they did and didn’t feel smart, the common answer was they felt smart when they were doing something they were good at and they did not feel smart when they got an answer wrong or made a bad choice.

Statement #2 “I can learn new things” and #5 “I give up when the work is too hard” had strong majorities reflecting a growth mindset. When asked to support their answers, the students said things such as “Our teacher tells us we are going to learn something new,” and “my ____ (mom, dad, grandparent) tells me to never give up.” Such answers indicated developing understandings of a growth mindset or perhaps compliance to please. These students may not yet be aware of the reasoning and benefits behind having this mindset, but they are attempting to adapt it as their own because they frequently hear these phrases being spoken to them.

Answering #3 “challenges make me smarter” proved to be a difficult statement for the

students to answer. Six students said “challenges always make me smarter,” but not a single one of them could give an explanation for why this was their answer. Several of the students were unable to verbally define the word “challenge” when prompted.

When asked to explain their answer choice for #4, their reasoning followed similar patterns based on their answer choice. The students who said “mistakes always help me learn,” had two basic explanations for why. They either said they “weren’t sure why, but it sounded like a good thing to say” or “mistakes teach you what not to do.” Based strictly on their answer choice, one might assume these students have a growth mindset point of view about mistakes. However, when asked to explain their reasoning, it is clear to see they choose “always” because they thought it was the *right* answer or because when they make a mistake they learn to never do that again. The goal of the intervention was to have the students view mistakes in a positive light because individuals with a growth mindset use mistakes as an opportunity to grow, learn, and develop their skills.

Post-Survey. Based on the data shown in *Figure 2*, when responding to #1 “I feel smart,” eight students chose “always” and nine students chose “sometimes.” The large majority of the students, fourteen out of seventeen, said they can always learn new things. The responses to #3 “challenges make me smarter” were split similarly to the answers for statement #1. Eight students said challenges always make them smarter, seven students said challenges sometimes make them smarter, and two students said challenges never make them smarter. The results for #4 showed that fourteen of the seventeen students said mistakes always help them learn. When looking at the data for #5, eleven of the students never give up when the work is too hard and six students sometimes give up when the work is too hard.

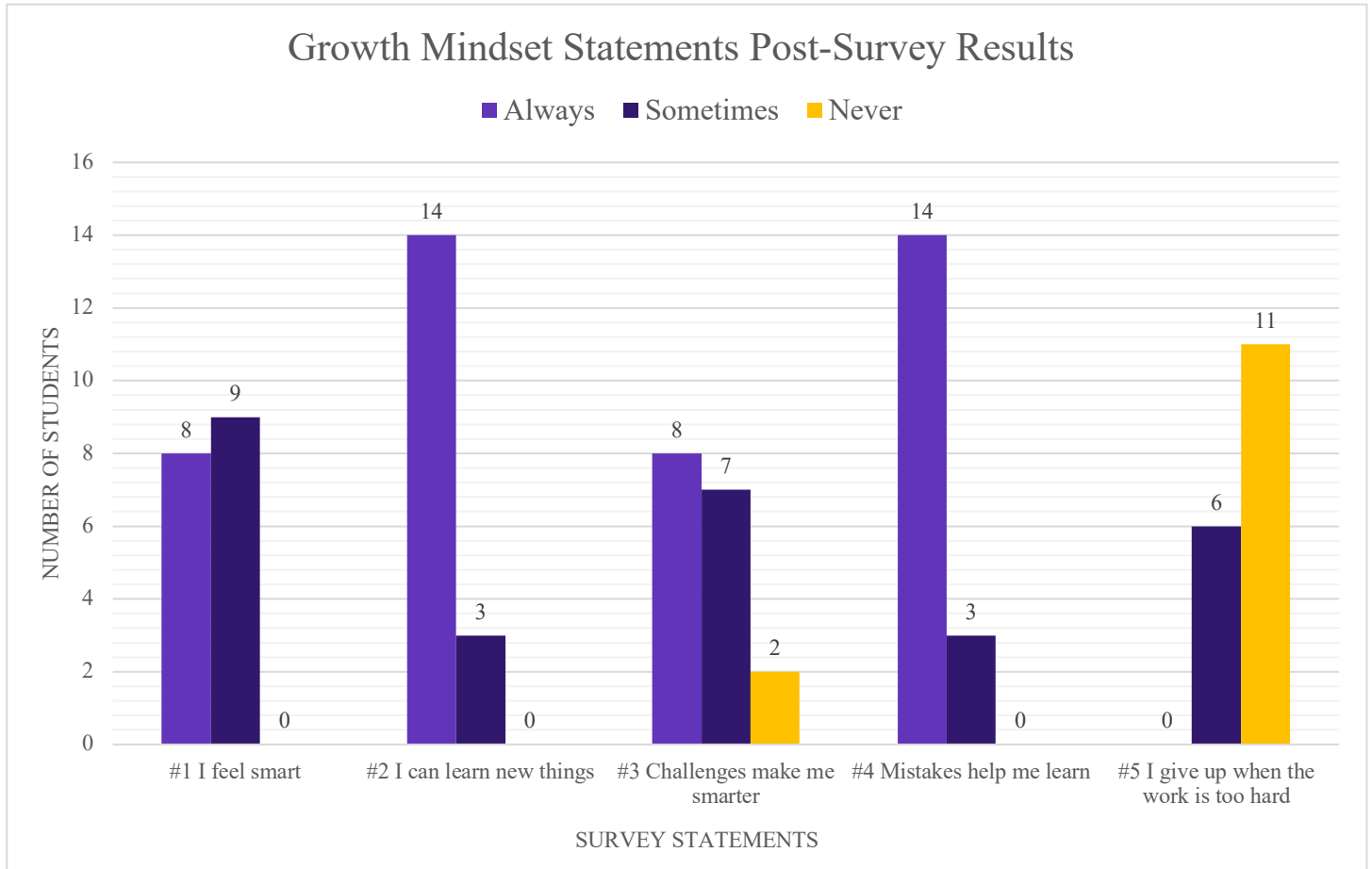


Figure 2

During the post-surveys, the students did not take as long to respond to the statements as they did during the pre-survey. There was significantly less wait time between when the researcher read the statement to when the students made their answer choices. The students often pointed to their answer before all the choices were read. During the post-surveys, the students provided rationales for their answer choices without being prompted.

As with the pre-survey, analyzing the students’ anecdotal evidence was taken into consideration when looking at the post-survey data. The students referenced all aspects of the growth mindset read aloud intervention when supporting their answers. They referenced the posters, verbalized the take away phrases, and mentioned the books and ClassDojo videos. The students made comments such as “challenges grow my brain,” “I like to use my bubble gum

brain,” “I know that because it’s on the growth mindset posters,” or “Mojo made a mistake and didn’t give up. He learned.” The students showed more confidence in their answer choices and the confusion and doubt present during the pre-survey was absent.

Pre-Survey vs. Post-Survey. The data from the pre-survey and the post-survey are compared in *Figure 3*. The data is organized by survey statement. During the pre-survey, five of seventeen students said they “always feel smart” and during the post-survey this answer increased to eight of seventeen students choosing always. There was also a slight increase in the number of students who chose always from pre-survey to post-survey for statement #2. At the end of the study, two more students said they can “always learn new things” than in the pre-survey. The students’ answers for statement #3, “challenges make me smarter” were split during the pre-survey and post-survey. There was a slight increase in the number of students who chose “always” following the read aloud intervention. However, during the pre-survey and post-survey two students chose “challenges never make me smarter” as their answer. Statement #4 saw the largest shift from pre-survey to post-survey. Prior to the read aloud intervention, six of the seventeen students said mistakes never help them learn, but during the post-survey zero students chose never as their answer choice. Fourteen of the seventeen students chose “mistakes always help me learn,” an increase of nine students from pre-survey to post-survey. There was a decrease in the number of students who chose “I never give up when the work gets too hard.” During the pre-survey, thirteen of seventeen students said they never give up, but this number dropped to eleven out of seventeen students. For statement #5, there was an increase of three students that said they sometimes give up when the work is too hard. When comparing the pre-survey data and post-survey data, statements #1-4 support an increase in growth mindset thinking within the students.

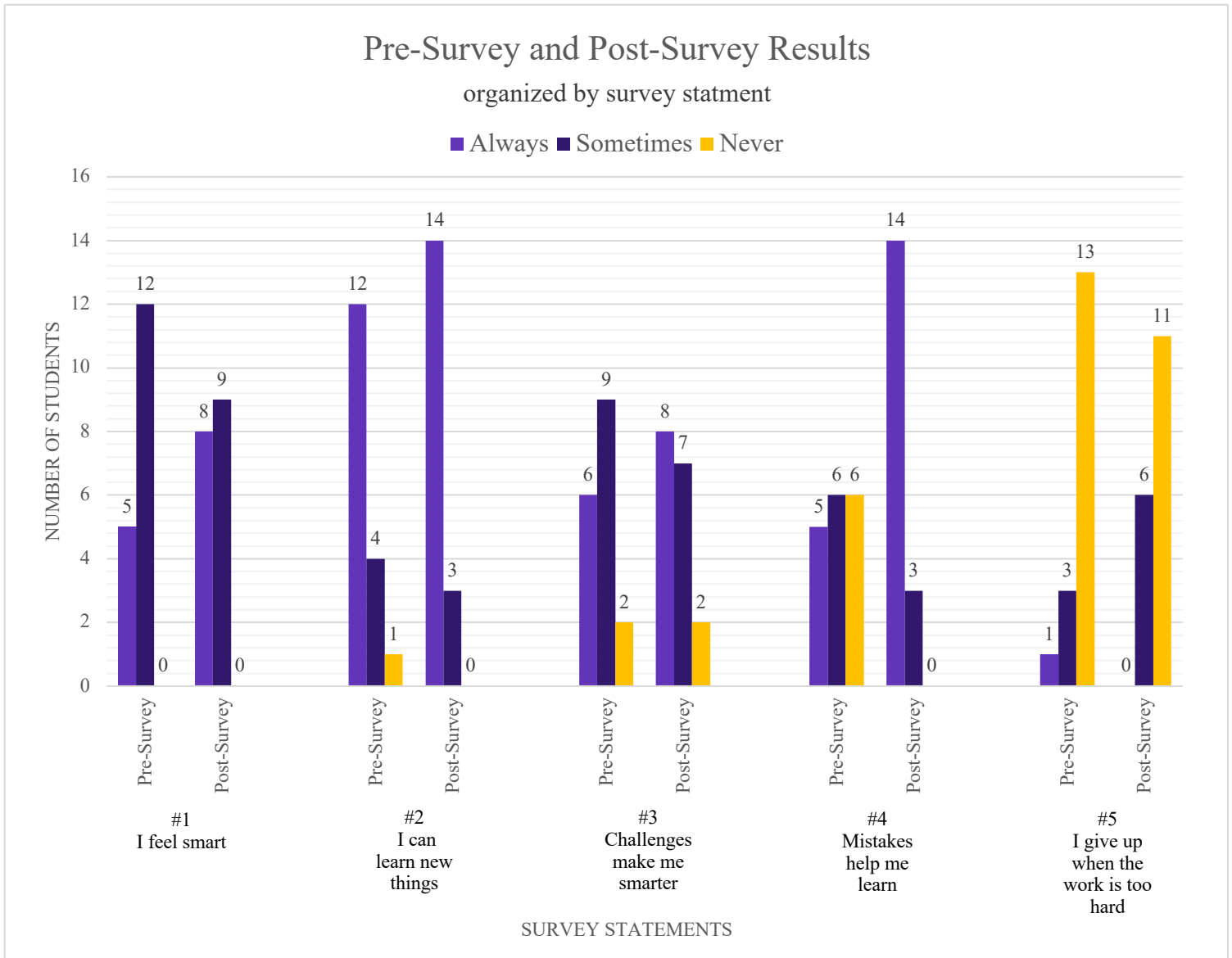


Figure 3

Discussion

When comparing the pre-survey data and post-survey data, statements #1-4 support an increase in growth mindset thinking within the students. The students showed a greater understanding of growth mindset concepts and vocabulary. The data from survey statement #5 was an outlier in the data and did not reflect an increase in growth mindset thinking.

Survey statement #5, “I give up when the work is too hard” showed a decrease in growth mindset. This may be explained by a number of factors. When the post-survey was conducted,

the students had just finished middle of the year (MOY) testing and their workload was greatly increasing. They had more opportunities to give up when the work got hard than they had prior to the pre-survey. The students were also more comfortable with the researcher at the point of the post-survey. The researcher had been in their classroom for eight additional weeks since the pre-survey, so the students had formed a stronger relationship with the researcher. This could explain why more students said they sometimes give up, because they were facing challenging school tasks and/or felt more comfortable being honest with the researcher than they did during the initial survey.

The biggest change from the pre-survey to the post-survey was the students' ability to support their survey answers with evidence from the lessons using growth mindset phrases. This supports the studies done by Dickinson and Smith (1994) and Zevenbergen, Whitehurst, and Zevenbergen (2003) which found dialogic reading can be used to support literacy growth and improve narrative and expressive language skills. During the pre-survey, the students were unable to provide a rationale for their answer choices. The main justification used was they thought it was "the right answer," "just because," or "I don't know why." However, during the post-survey, the students began to explain their thinking without being prompted. They used the lessons as support for their answers by saying things such as, "I try to never give up," "there some things I can't do – and that's okay!" "I can learn from the mistakes I make," or "I can just try again and learn from the mistake."

"Mistakes help me learn" is the take away phrase the students took ownership of most often, which is supported by the data and their vocabulary. Throughout the read aloud intervention and the school day, the students referenced "mistakes help me learn" in many different contexts. They used it in their conversations with each other, they related it to other books and characters, they talked about these ideas with their peers in other classes while waiting

to go home, and even corrected their teacher when she got upset about a mistake she had made. As suggested by Dweck (2000) “mistakes help me learn” is one of the most important growth mindset concepts and can be used as a stepping stone to teach other important growth mindset concepts such as, perseverance and the power of yet.

The students also showed improvement in their self-talk and encouragement of their peers. The researcher was in the classroom with the students on a daily basis, so she had the opportunity to observe them outside of the read aloud intervention time. The students were heard correcting themselves when getting frustrated. Instead of saying “I can’t do it” they corrected themselves to say “I can’t do it, yet.” The students also verbalized to the classroom teacher and researcher that they were going to “try their best” when given a challenging task. This positive talk translated from self-to-peer as the read aloud intervention progressed. During and after the intervention, the students prompted each other to use a growth mindset. Below is an example of a frequently heard dialogue among students.

Student A: “I can’t do this!”

Student B: “No, it’s alright, you can’t do it, yet.”

Another commonly heard conversation followed a structure similar to the example below.

Student A: *upset about making a mistake*

Student B: “It’s okay, mistakes are how we learn”

Student C: “Yes, use your bubble gum brain!”

During these observations, the students were unaware the researcher was listening to their conversations with their peers. A previous study found dialogic reading supports numerous positive outcomes in oral language, including the ability to form an opinion and elaborate on ideas (NELP, 2008). This example of the transfer of knowledge from the dialogic read aloud setting to their everyday lives in the current research study offered evidence that students

understand the growth mindset concepts and are capable of appropriately applying them to new situations.

Limitations

There are two major limitations in this study that indicate the need for future research related to this growth mindset intervention. The first limitation involved the time frame of the study and the second limitation concerned the study subjects. The primary limitation to the generalization of these results is the timespan of the growth mindset read aloud intervention. Due to uncontrollable deadlines and inclement weather, the read aloud intervention was provided during a two week period. In an ideal situation, the read alouds would have been a weekly occurrence and spanned at least five weeks in total. The survey size is also a limitation of this study. For the purpose of this study, participants included one class of first grade students. Further research might expand on this intervention to include a larger sample size, perhaps with an entire grade level, rather than one class.

Impact on Teaching Career

This research opportunity has impacted me as an educator. I have been able to conduct a research study centered around a belief and idea that I am passionate about. The research shows growth mindset intervention is most successful when it is implemented by a teacher who possesses a growth mindset as well (Dweck & Leggett, 1988; Gollwitzer & Schaal, 2001). The knowledge I have gained through this case study I will carry with me into my future classroom. Carol Dweck discusses the power of growth mindset education and how it can transform student mindsets (TED 2014). I believe that educators have a responsibility to teach the required content, but the biggest impact they can have on a student does not always align with a standard. Teaching the students to value education, have a positive attitude, and develop a strong work ethic are all crucial skills the students will take with them when they exit the classroom. The

research supports growth mindset intervention as a positive method of improving academic performance (Ablard, 2002; Aronson, Fried, & Good, 2001; Blackwell, Trzesniewski, & Dweck, 2007). Growth mindset education through read alouds is nowhere to be found on the state standards. This is not a topic or theme I will ever be required to teach. However, by aligning these book choices with other English Language Arts Standards, exploring the notion of growth mindset development will be integrated into my future classroom throughout the year. I plan to build off of the current 5 book read aloud unit to extend the growth mindset read alouds to span the entire school year. I hope to begin the school year by introducing growth mindset to my students and believe this choice will set the tone for my classroom community and establish a read aloud routine.

Carol Dweck (2006) suggests growth mindset education is a way to create community within the classroom. During the growth mindset read aloud intervention, the students all sit together in a calm environment with the opportunity to share their personal experiences that pertain to the topic of discussion. This sharing of personal stories, creates a bond between students. It gives the students and the teacher a chance to discover things about each other that they would not have otherwise learned. Even at the young ages of six and seven years old, students have profound thoughts worthy of valuing and contributing to the classroom community. By centering the read alouds around growth mindset, the classroom community is strengthened as the students learn how to support each other through their learning process. Giving the students' knowledge of phrases such as "mistakes are how I learn," and "I can't do it, yet" provides them with the vocabulary to accept their failures as new beginnings.

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Appendix A
Parent Consent Form



Dear Parent/Guardian,

I am presently working on my Bachelor of Science in Elementary Education at the Honors College of East Carolina University. As part of my Honors College requirements, I am planning an educational research project to take place in your child's classroom that will help me to learn more about how teachers can implement strategies that shift their students' mindsets from a fixed mindset to a growth mindset. A person with a fixed mindset sees challenges as limitations and use phrases such as "I give up" or "I can't do it." A person with a growth mindset sees mistakes as learning opportunities, tries new things and challenges, and confidently acknowledge that "I can't do it *YET*" while working to build the skills needed to reach their goal. I will be working under the guidance of an ECU faculty mentor, Dr. Terry Atkinson. The fundamental goal of this research study is to analyze the impact growth mindset read-alouds can have on the students' mindsets.

For the next four to eight weeks, with your consent, your child will participate in weekly read-alouds of picture books about how to have a growth mindset followed by class discussions. The data will be collected through individual interviews/surveys over the course of the study. As this study is for educational research purposes only, the results of your child's participation **will not** affect your child's grade.

I am requesting permission from you to use your child's data in my research study. The identity of your child will be kept confidential. Only first names will be used when sharing data in publications and presentations. Please know that participation is entirely **voluntary**.

If you have any questions or concerns, please feel free to email me at murdockj15@students.ecu.edu. If you have questions about your child's rights as someone taking part in research, you may call the Office of Research Integrity & Compliance (ORIC) at phone number 252-744-2914 (days, 8:00 am-5:00 pm). If you would like to report a complaint or concern about this research study, you may call the Director of the OHRI, at 252-744-1971.

Please return the form below by **November 16th 2018**. Thank you for your interest in my educational research study.

Your Partner in Education,
Jenna Murdock

As the parent or guardian of _____,
(write your student's name)

- I grant my permission for Ms. Murdock to use my child's data in her educational research project regarding growth mindset. I fully understand that my child's data will be kept confidential and will be used only for the purposes of Ms. Murdock's research study. I also understand that I or my child may at any time decide to withdraw my/our permission and that my child's grade will not be affected by withdrawing from the study.
- I do NOT grant my permission for Ms. Murdock to use my child's data in her educational research project regarding growth mindset.

Signature of Parent/Guardian: _____ Date _____

Appendix B

Student Survey (used for pre-survey and post-survey)

Name: _____

Pre or Post

Date: _____

STUDENT SURVEY

ALWAYS

SOMETIMES

NEVER

1. I feel smart.



2. I can learn new things.



3. Challenges make me smarter.



4. Mistakes help me learn.



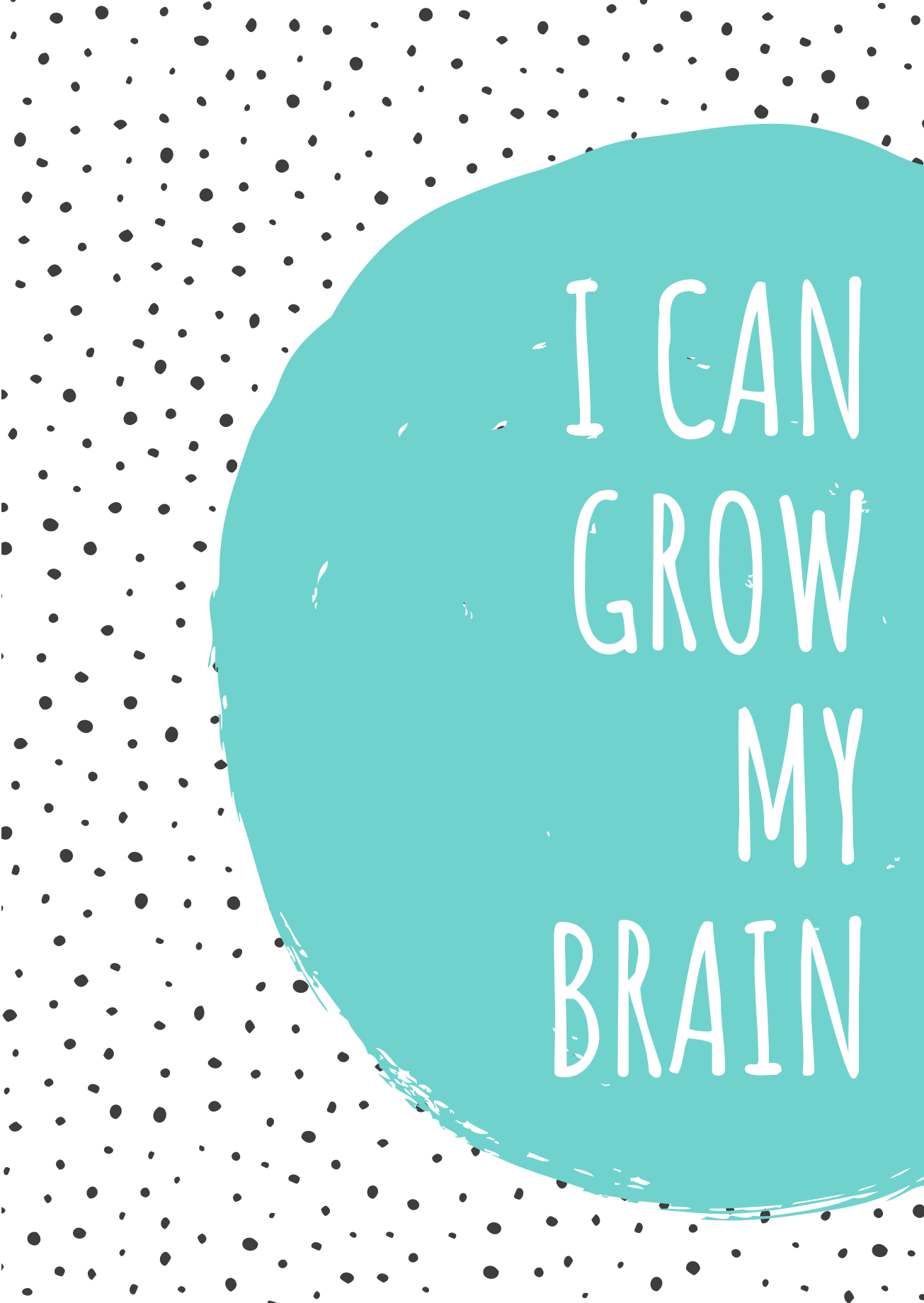
5. I give up when the work is too hard.

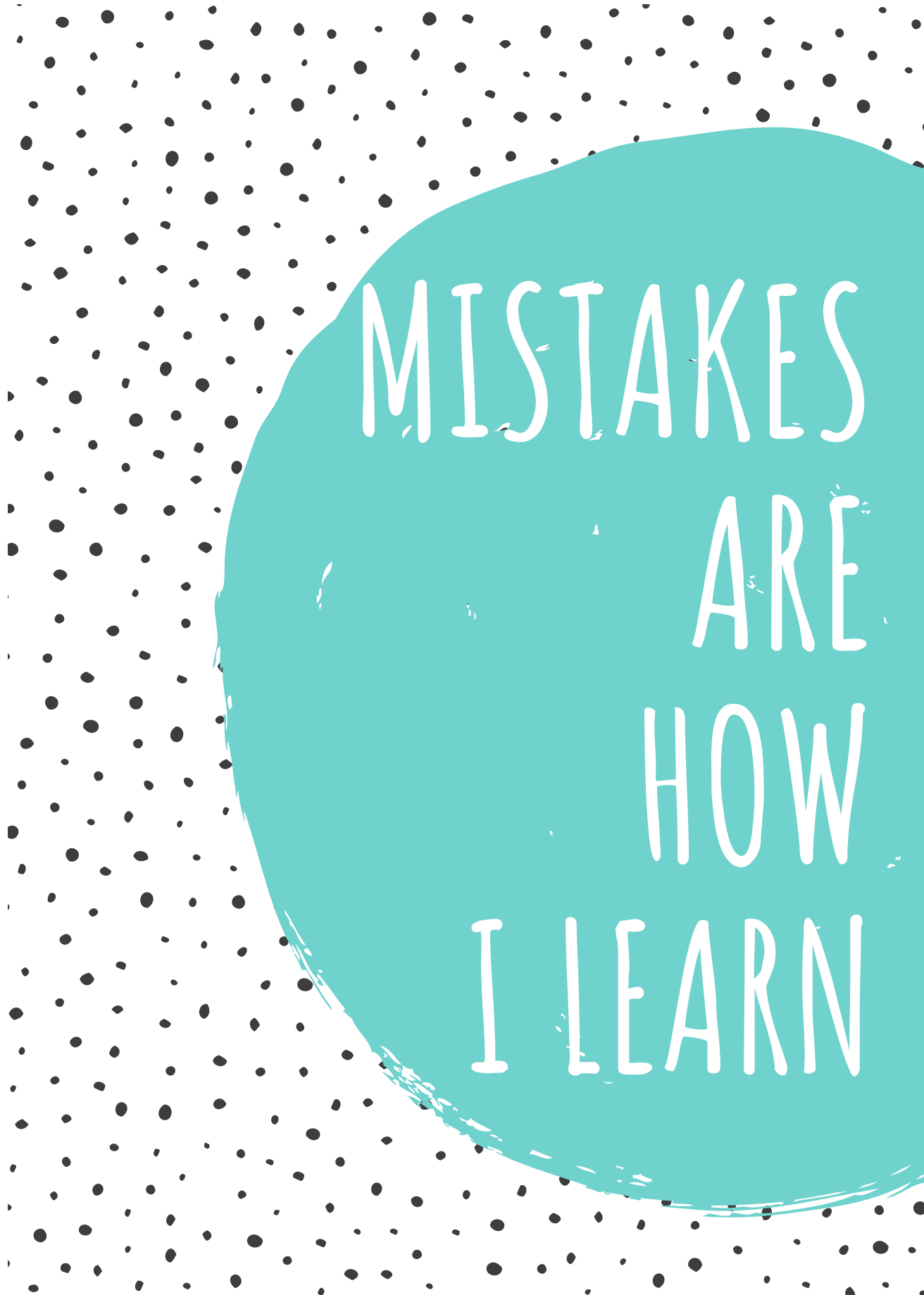


Appendix C

Growth Mindset Posters







MISTAKES
ARE
HOW
I LEARN



WHEN
I FAIL
I GROW

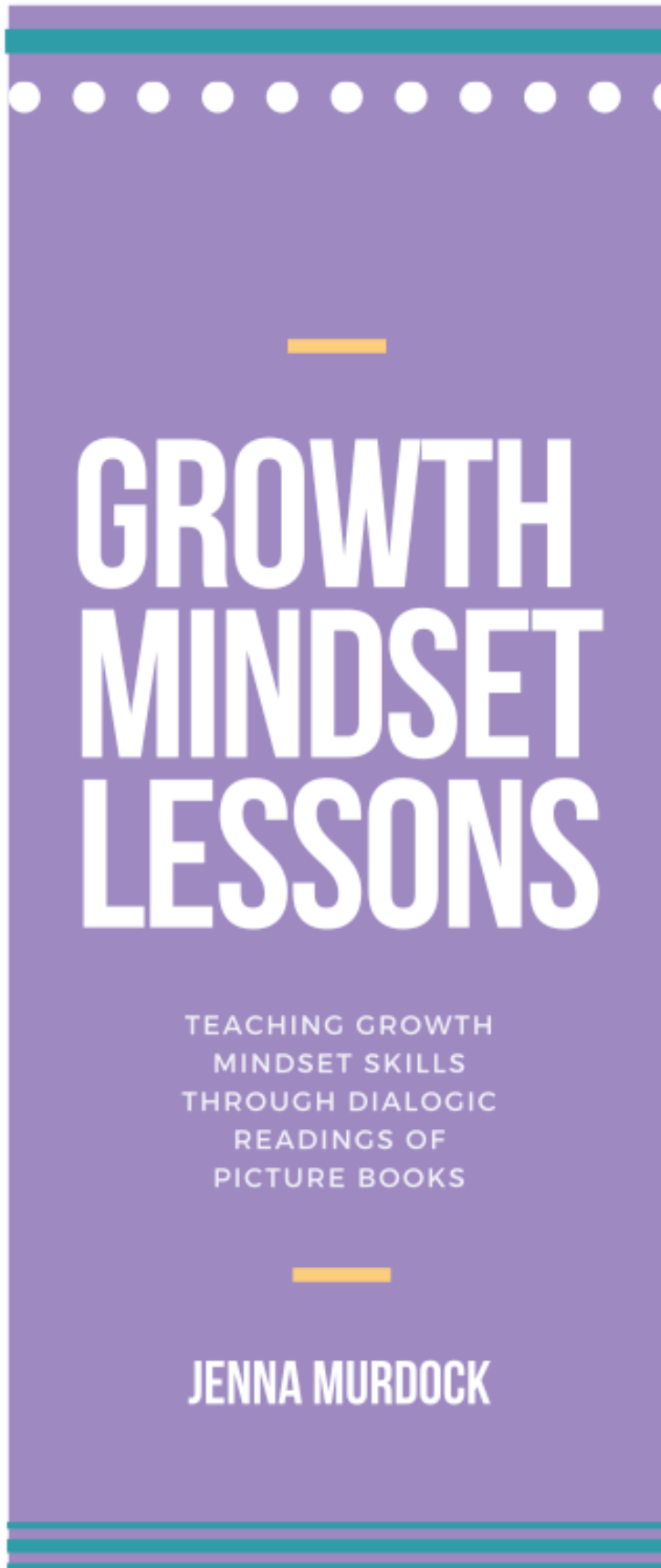


I CAN'T
DO IT YET
BUT I
TRY MY
BEST



Appendix E

Growth Mindset Dialogic Read Alouds Overview



GROWTH MINDSET PICTURE BOOKS

BUBBLE GUM BRAIN

BY JULIA COOK

THE MOST MAGNIFICENT THING

BY ASHLEY SPIRES

THE THING LOU COULDN'T DO

BY ASHLEY SPIRES

GIRAFFES CAN'T DANCE

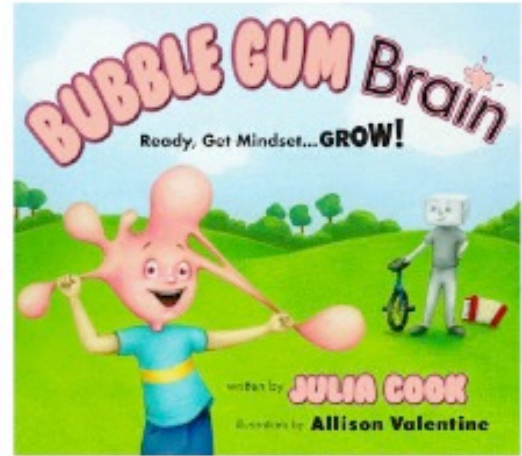
BY GILES ANDREAE

FLIGHT SCHOOL

BY LITA JUDGE

BUBBLE GUM BRAIN

BY JULIA COOK



INTRODUCTION

THIS BOOK WILL BE USED TO INTRODUCE THE TOPIC OF A GROWTH MINDSET AND A FIXED MINDSET.

WORK TOGETHER TO DEFINE "MINDSET"

DEFINITION: OUR ATTITUDES AND BELIEFS ABOUT SOMETHING

AFTER THE READING

TALK WITH THE STUDENTS ABOUT THE BENEFITS OF HAVING A GROWTH MINDSET. DISCUSS HOW WE ARE GOING TO BE WORKING ON GROWING OUR BRAINS TO HAVE A GROWTH MINDSET. AFTER READING THE BOOK WITH THE CLASS, CREATE AN ANCHOR CHART THAT CLEARLY DEFINES A FIXED MINDSET VS A GROWTH MINDSET.

FIXED MINDSET

- AVOIDS CHALLENGES
- GIVES UP EASILY
- THREATENED BY OTHERS' SUCCESS
- FEEL UNCOMFORTABLE MAKING MISTAKES

GROWTH MINDSET

- EMBRACES CHALLENGES
- TRIES THEIR BEST
- ENCOURAGES OTHERS TO SUCCEED
- LEARNS FROM THEIR MISTAKES

DURING THE READING

QUESTIONS TO ASK THE STUDENTS WHILE READING:

- WHAT ARE SOME DIFFERENCES BETWEEN BUBBLE GUM AND A BRICK?
- HOW ARE THE TWO CHARACTERS DRAWN DIFFERENTLY?
- WHAT YOU NOTICE ABOUT HOW THEY TALK TO THEMSELVES?
- WHICH CHARACTER WOULD YOU RATHER BE LIKE? WHY?

I CAN GROW MY BRAIN

<https://www.youtube.com/watch?v=2zrtHt3bBmQ>



THE MOST MAGNIFICENT THING

BY ASHLEY SPIRES

INTRODUCTION

ACCEPTING MISTAKES CAN BE A DIFFICULT CHALLENGE FOR CHILDREN AND ADULTS. THIS BOOK HELPS INTRODUCE THE IDEA THAT MISTAKES ARE A POSITIVE THING.

AS A CLASS, MAKE A LIST OF SYNONYMS FOR THE WORD MAGNIFICENT. REVIEW WITH THE STUDENTS HOW SOMEONE WITH A FIXED MINDSET WOULD FACE A CHALLENGE VS. SOMEONE WITH A GROWTH MINDSET.

DURING THE READING

QUESTIONS TO ASK THE STUDENTS WHILE READING:

- WHAT WOULD YOUR MOST MAGNIFICENT THING BE?
 - HAVE YOU EVER FELT FRUSTRATED LIKE THE GIRL DOES?
- WHAT DID THE GIRL LEARN?
 - HOW DID HER ATTITUDE CHANGE OVER THE COURSE OF THE BOOK?

AFTER THE READING

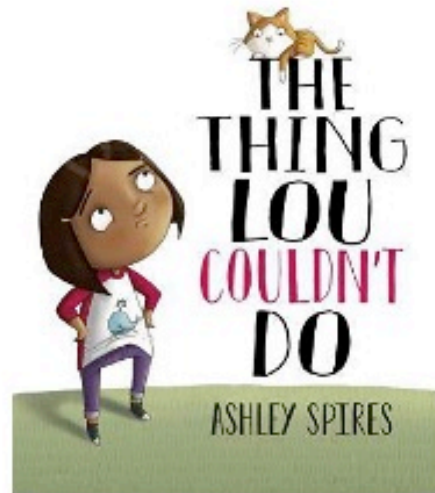
TALK TO THE STUDENTS ABOUT IF THE GIRL HAD A GROWTH MINDSET OR A FIXED MINDSET. THIS WILL OPEN A CONVERSATION ABOUT HOW SHE WAS BOTH. WE ARE NOT ALWAYS GOING TO HAVE A GROWTH MINDSET OR A FIXED MINDSET. WE SWITCH BACK AND FORTH EVERYDAY LIKE THE GIRL, BUT IN THE END SHE WAS ABLE TO BE SUCCESSFUL BECAUSE OF HER GROWTH MINDSET IN THE END.

MISTAKES ARE HOW I LEARN

<https://www.youtube.com/watch?v=EoWLgWCcpWo>

THE THING LOU COULDN'T DO

BY ASHLEY SPIRES



INTRODUCTION

INTRODUCE THE BOOK BY TALKING WITH THE STUDENTS ABOUT A TIME WHEN THEIR FRIENDS WERE GOOD AT SOMETHING BUT THEY WERE AFRAID TO TRY IT. STUDENTS OPEN UP MORE WHEN THEY FEEL A CONNECTION TO THEIR TEACHER. SHARE A TIME WHEN YOU WERE AFRAID SO THEY FEEL COMFORTABLE SHARING THEIR FLAWS AS WELL.

DURING THE READING

QUESTIONS TO ASK THE STUDENTS WHILE READING:

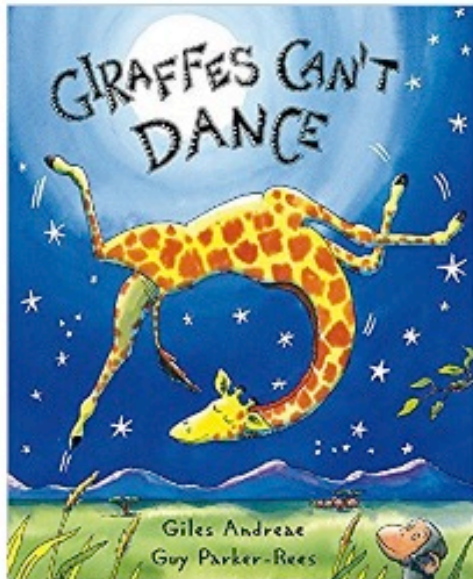
- HOW WOULD YOU DESCRIBE LOU'S PERSONALITY?
- WHAT WOULD YOU DO IN LOU'S POSITION? WOULD YOU CLIMB THE TREE?
- WHAT IS SOMETHING YOU ARE AFRAID OF DOING?
- HOW CAN YOU OVERCOME YOUR FEAR?

AFTER THE READING

FEAR OF FAILURE IS A HARD FEELING TO OVERCOME. AS A SOCIETY, WE WANT TO BE GOOD AT THE THINGS WE ATTEMPT. HELPING THE STUDENTS ACKNOWLEDGE THEIR FEARS AND OVERCOME THEM CAN BUILD STRONG INDIVIDUALS. HAVE THE STUDENTS CREATE A PLAN FOR HOW THEY CAN OVERCOME THEIR FEAR THEY DISCUSSED WHILE READING THE BOOK.

WHEN I FAIL, I GROW

<https://www.youtube.com/watch?v=HWr2gE5lIPc>



GIRAFFES CAN'T DANCE

BY GILES ANDREA E

INTRODUCTION

YET IS A POWERFUL WORD. THE "POWER OF YET" IS A LARGE PART OF HAVING A GROWTH MINDSET.

GERALD THE GIRAFFE IS THE PERFECT CHARACTER FOR TEACHING STUDENTS ABOUT GROWTH MINDSET. TALK TO THE STUDENTS ABOUT THE COVER OF THE BOOK AND MAKE PREDICTIONS.

DURING THE READING

QUESTIONS TO ASK THE STUDENTS WHILE READING:

- HOW DO YOU THINK GERALD FEELS WHEN THE OTHER ANIMALS MAKE FUN OF HIM?
- DOES GERALD HAVE A GROWTH MINDSET OR A FIXED MINDSET?
- COMPARE GERALD'S DANCE TO THE OTHER ANIMALS' DANCES.

AFTER THE READING

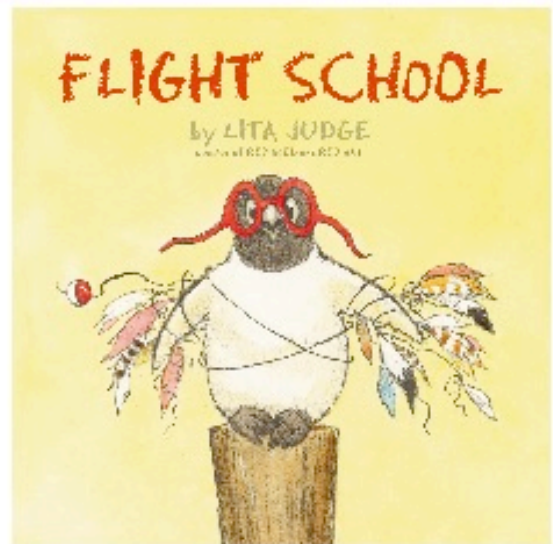
FOLLOWING THE THEME OF THE BOOK, DISCUSS WITH THE STUDENTS HOW LEARNING IS A PROCESS. WE ALL HAVE THE POTENTIAL TO DO ANYTHING WE WANT, BUT IT TAKES TIME. CELEBRATE THE STUDENTS' POTENTIAL BY CREATING AN ANCHOR CHART THAT HIGHLIGHTS ALL THE THINGS YOUR STUDENTS WANT TO LEARN/DO, BUT HAVEN'T YET.

I CAN'T DO IT YET, BUT I AM GOING
TO DO MY BEST

<https://www.youtube.com/watch?v=OFKVoCuwl2s>

FLIGHT SCHOOL

BY LITA JUDGE



INTRODUCTION

BEFORE READING THE BOOK, ENGAGE THE STUDENTS BY HAVING THEM THINK-PAIR-SHARE ABOUT A TIME WHEN THEY PRACTICED SOMETHING. ASK THE STUDENTS WHY WE PRACTICE AND WHAT DO WE LEARN FROM PRACTICING. THEY SHOULD USE THEIR PERSONAL EXPERIENCES TO HELP THEM ADD TO THE CONVERSATION.

DURING THE READING

QUESTIONS TO ASK THE STUDENTS WHILE READING:

- PENGUIN PRACTICED, WHY CAN'T HE FLY ON THE FIRST TRY?
- IF YOU WERE PENGUIN, WHAT WOULD YOU DO?
- WOULD YOU GIVE UP OR KEEP TRYING? WHY?
- HOW DID OTHERS HELP PENGUIN REACH HIS GOAL?

AFTER THE READING

THE MAIN TAKE AWAY FROM THIS BOOK IS PERSEVERANCE. AFTER READING THE BOOK, TALK WITH THE CLASS ABOUT WHAT IT MEANS TO KEEP TRYING AND NEVER GIVE UP.

ASK THE STUDENTS HOW THEY FEEL AFTER REACHING A GOAL THEY WORKED REALLY HARD FOR. LEAD THIS INTO A DISCUSSION ABOUT THE FEELING OF ACCOMPLISHMENT AND THE REWARD CHALLENGES OFFER.

I LIKE A CHALLENGE

<https://www.youtube.com/watch?v=pZVW-AsN5PU>