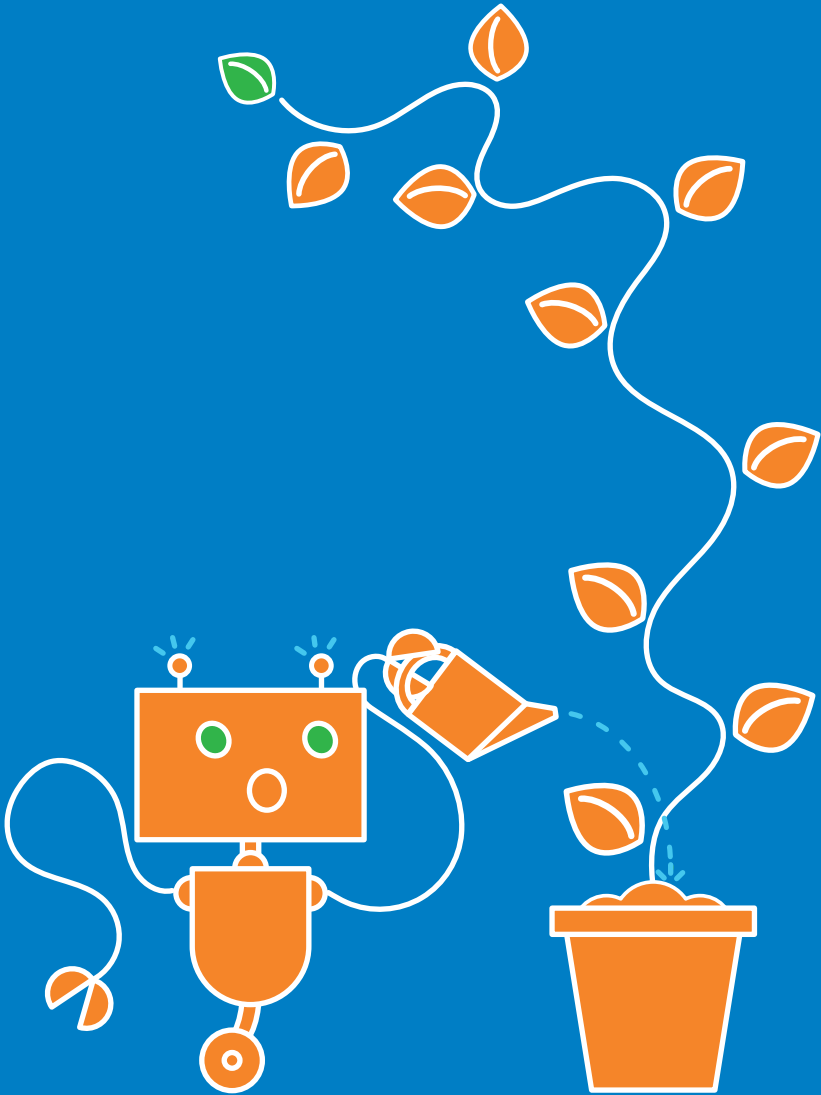


## Chapter 1

# Confront Failure



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## Introduction

I'm excited to share my story about parenting in a world filled with technology, distractions and lots of opportunities. I have three beautiful kids, each with their own amazing talents and challenges. My oldest son Mike is a junior in high school. He is a talented football player and wants to play in college, but he has a hard time keeping his grades up. Brittany is in middle school. I'm sure she will be the CEO of a major company one day, but sometimes I worry that she spends all of her time studying, and there's no time left for being a kid. My youngest, Jackson, is my baby boy. He is full of life and curiosity.

Over the past year, I stepped out of my comfort zone and started learning how to be a better parent. I started attending school meetings, taking classes at church and reading stories online about successful parenting. Everything I have learned has changed our lives in a positive way.

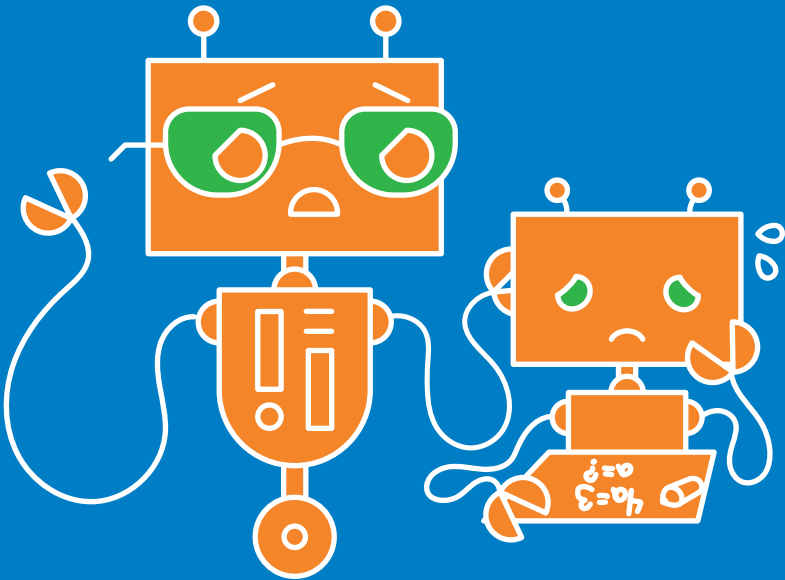
It's my hope that in sharing my experiences and what I've learned this year, other parents who feel like I did will be able to apply some of those lessons to their lives. Ok...let's get started!

With love,  
Alisha



## Confront Failure

First, I'd like to share an experience I had with my daughter, Brittany, who was struggling in algebra. She's always been a good student and learning had always come easy to her up to this point, so suddenly struggling in a class was extremely difficult for her. She started saying things like, "I hate math" and "I can't do it" which were very out of character. I quickly became concerned she would give up and lose interest in math altogether. I never went to college, but I know that giving up on math would limit her opportunities for college. So I was very worried...



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I wanted to change her attitude, so I started saying more encouraging things to her, like complimenting her on how well she was doing in other subjects. But then she would respond with, “yeah, but I’m failing math so who cares.” Since compliments didn’t work I tried telling her stories about some of the challenges I had faced as a single mother. I shared stories of going to school at night while raising three young kids or my car breaking down and having to save up for a new one. The stories seemed to help a little, but it was hard for her to relate these stories to her situation.

Finally, I started reminding her about the challenges she had overcome in the past. In elementary school, Brittany was a really shy kid. She would not talk to the other kids and would end up being alone during recess and lunch. Everything changed in fourth grade when we made a plan. Brittany would start saying ‘hi’ to a different kid everyday. Slowly this turned into small conversations with her classmates and other kids in the hall. Eventually, a group of girls invited Brittany to sit with them at lunch. After that, she slowly started opening up to other kids and is still friends with some of the girls that invited her to lunch. She had to face her fear of talking to someone she didn’t know! When I reminded Brittany of how far she’s come, she became hopeful of overcoming this challenge as well.

Later that week, I asked her teacher what I could do to help Brittany. She told me there were a couple of workshops the school’s Parent Center was offering in the evenings that would be helpful for me. I attended one that same night. The topic discussed was “growth mindset”. Honestly, I had no clue what that meant but I figured I had nothing to lose. I listened carefully and took many notes. Afterwards, I felt much more prepared to help Brittany through her difficult situation and in a matter of days she was back on track! Here is what I learned at the workshop, and what I did at home.

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## Summary of Alisha's Experience

The strategy that I learned is called “fostering a growth mindset.” In other words, believing that with dedication and hard work, you can get better at anything.

### Growth mindset

Believes intelligence can be developed

Embraces challenge

Persists to try again

Learns from criticism

With a growth mindset, we can persevere through failure until we succeed.



### Fixed mindset

Believes people are born intelligent or not

Avoids challenge

Gives up easily

Sees criticism as bad

With a fixed mindset, we either fail or succeed, and don't attempt to improve.



Based on research by Carol Dweck, Ph.D.

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The opposite of a growth mindset is a **fixed mindset**. A fixed mindset is a belief that you can't do something no matter how hard you try because you weren't born with a specific characteristic or skill (like intelligence). People with fixed mindsets tend to think that everyone is born with specific intelligence or abilities and that those abilities can't change.

With a **growth mindset**, opportunities are endless. A child will be more confident when faced with problems or challenges because she knows that with hard work she can succeed in anything. She will also start to see failures or mistakes as a part of the learning journey instead of as proof she isn't good at something. This makes it easier for her to persevere through failures and mistakes.

Learning about growth mindsets and how to help my children develop them was super exciting for me. Toward the end of the workshop, the presenter handed out some worksheets. He said these would help us put into practice what we had learned that night. When I got home I started on this first activity.

<sup>1</sup> [http://web.stanford.edu/~paunesku/articles/claro\\_2016.pdf](http://web.stanford.edu/~paunesku/articles/claro_2016.pdf)



## Activity 1

Circle the statements that best describe the thoughts that come to you in the following situations.

### When trying something new:

- What if I fail? I will be a failure.
- Can I really do this?
- People will laugh at me for thinking I could do this.
- If I don't try, I won't fail.
- I am not sure if I could achieve that now but I believe I can learn with time and effort.
- Even the most successful people have faced failure.
- If I don't try, I have already failed. What pride is there in that?

### When facing a setback or failure:

- This would have been easier if I were smarter.
- Now that I've failed, everyone will know I am not good at this.
- My talent can be developed more with practice and time. That is the key to getting better at this.

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### When facing criticism:

- It was not my fault! I was never smart enough to succeed at this!
- I'm never going to be able to do this so I should not even bother.
- I've failed, and now I know what I can improve.

### After this exercise do you lean more towards a fixed mindset or growth mindset?

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I learned so much about myself from this activity that I decided to do it again with Brittany. She really enjoyed it and we laughed about the kinds of “fixed” statements that we make to ourselves when faced with certain challenges. She even mentioned how she frequently says to herself, “this would be so easy if I were smarter,” when doing her algebra homework. I asked her if she wanted to learn more about growth mindsets and how to overcome challenges. She said “yes!” So, the following week we completed another activity together, too.





## Activity 2 (by PERTS<sup>1</sup>)

It is common to have both a fixed mindset about one thing and a growth mindset about another. For example, your child may have a growth mindset about becoming a great baseball player, but a fixed mindset about making better grades. They know they can only become a great baseball player with practice, but might not realize that school work is the same. It needs practice!

The more you are able to recognize what type of mindset your child has regarding different things, the more likely you will be able to help encourage a growth mindset.

For one week, start by listening to your child to see where they have a fixed mindset and a growth mindset. Pay attention to what you say and other kids, teachers and parents say. Write down what you observe in the table below.

What	What was said?	Was it a fixed or growth mindset?
Ex. Algebra	I can't do this!	Fixed

<sup>1</sup> <https://www.perts.net/>

On a Sunday afternoon, we both sat down to read the different statements we had heard in our home. We documented statements we each had made, and even wrote down statements we heard from Grandma that struck us as being related to “growth” and “fixed” mindsets. We used the following chart to help us change our “fixed” statements:

Situation	You Can Say This:	Avoid Saying This:
Finding solutions	“I liked that way you used different types of strategies in this project until you finally made it!”	“Wow! You did well with that problem in one try. You are so smart!”
Completing projects	“That was long and tough but you dedicated yourself to finish it and you did it. Great job!”	“See, I told you this was going to be easy for you. You are very talented!”
Succeeding with little effort	“That was way too easy for you. Let’s try something a little bit more challenging so you can learn something new.”	“Great job! You got an “A” without any effort.”
Working hard and failing	“I like the effort you put in. Let’s work together a little more and let’s try to understand what you do not yet understand.”	“Some people are simply not good at math or science. Don’t worry about it.”

I sat down with Grandma to explain what I had learned about mindsets and how we need to be mindful about the comments we make around the kids. She was more interested once she made the connection that our comments would help Brittany change her perspective when facing difficult tasks. I asked her if she could do me the favor of jotting down statements that imply a person is born smart and those that imply that a person can learn and improve their level of understanding. I did the same in this section:

**My growth mindset statements**

**My fixed mindset statements**

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This helped me get a better understanding of my own mindset and also Grandma's, but the next activity helped me put into practice everything I had learned.



## Activity 3

Try all three actions over the next week and write down how you feel afterwards.

1. Do something that makes you feel uncomfortable or that you were afraid to do before. (Examples: Try Zumba, make a difficult meal, speak to your child's teacher.)

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2. The next time you make a mistake, stop and reflect on it. What can you learn from it? Talk about it with your child. Even if it is small thing like "the dinner turned out too salty", what can you do differently and how can you make it taste better?

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3. Ask for feedback from your boss or family member in an area you don't feel confident in. What did you learn from their feedback?

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After completing this activity, I felt more equipped to help Brittany overcome her struggle with algebra. I asked her how she was feeling about the subject and she expressed she was still struggling a bit but that the conversations we had been having about “growth mindsets” have really helped her not to give up. She said, “Mom, I am beginning to realize I can do this. I am doing well in other things it’s just some subjects are easier for me to understand than others.” I told her, “Baby, I am so proud of you already because of all the effort you are putting into learning this. Keep it up and soon it will become easy for you.” At that moment, I realized that all I had to do was remind her that if she works hard at something, she can get positive results. I just need to help her remember that one thing!

Brittany started to be more patient with her math homework and she reached out to her teacher for help. It has been great to see her solve her own problems and feel confident again.



At 15, Michael Jordan tried out for the varsity basketball team at his high school and did not make it. Instead of giving up, he played on the junior varsity team, learned how to dunk and spent a year working on his game. “Whenever I was working out and got tired and figured I ought to stop, I’d close my eyes and see that list in the locker room without my name on it,” said Jordan. “That usually got me going again.” Jordan won six NBA championships, five MVP titles, and scored 32,292 points during his career. He is considered one of the best basketball players of all time.

“I have missed more than 9,000 shots in my career. I have lost almost 300 games. On 26 occasions I have been entrusted to take the game winning shot, and I missed. I have failed over and over and over again in my life. And that is why I succeed.”

— Michael Jordan



## Family Science Activity

Try this design challenge from Curiosity Machine with your family to continue developing a growth mindset!

### Design Challenge: Build a Communication Network

Plan and build a network to send communication signals in multiple directions to multiple people.

### Suggested Materials

Estimated cost: Free to \$5

#### Recommended

- Cups of different sizes
- String, twine, or fishing line
- Scissors and tape

#### Optional

- Paper clips
- Push pins
- Cardboard
- Washers or nuts

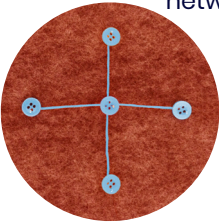
#### Testing Station

- At least 2 people and a quiet space

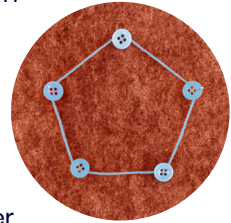
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## Inspiration

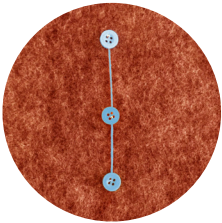
**Communication networks** send and receive signals to spread information. People can access and send out information through many types of connections. Before you create a plan for your network, research and choose at least two communication networks for inspiration. Here are some types networks to check out:



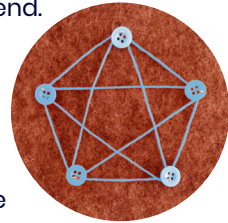
In a **wheel network**, all information is given and received by a person in the middle.



In **circle network**, there is no central person. Instead, communication flows equally from one person to another, with no start or end.



**Chain networks** have a clear start and end point.



In **star networks**, every person can communicate with each other.

What type of network do you think the internet is? What type of network do you think would work best for a sports team?

## Explore sound.

Sound waves move differently depending on the material they are moving through—air, solids, and water will spread sound differently. As you plan your communication network, keep in mind these terms:

**Vibration:** A vibrating object creates sound waves. Your ears will interpret the vibration as sound.



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**Amplitude:** The height or amplitude of the wave changes with the volume of the sound. Tall waves are louder, small waves are quieter. More energy is needed for tall waves than small waves.

**Frequency:** The speed or frequency of a wave determines whether it is a high pitch sound or a low pitch sound. There are some sound frequencies that humans can't hear!

## Plan

In this design challenge, you are going to make a network that multiple people can use to communicate. You'll do this by creating your own communication network, linking together your materials in a way that helps people to share information by sound over multiple pathways across a distance. Think about the different ways and types of materials you can use to connect people in a communication network.

Apply your research! How can you use your materials in new ways? Remember, sound waves will travel through things like cardboard, string, and metal differently. Create at least 2 plans that explore how you can send messages by adding these different materials.

If you need help getting started, you can find video and more resources for this design challenge at [curiositymachine.org/challenges/114](https://www.curiositymachine.org/challenges/114)

## Build

Choose the plan you think will work best to build your Communication Network. Building can be one of the most frustrating parts of a design challenge. If your child gets frustrated, remember to pause and remind them that the challenge is difficult, but that together you can do it if you keep trying.

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## Test

Gather family and friends to test your communication network.

- Observe your prototype's performance by looking and listening and writing down your impressions.
- Measure its performance. Measurements can be height, distance, repetitions, temperature, volume—anything that you can write down as a number!

Remember, growth mindset means learning from not just success, but failure as well! If something doesn't work like you think it should, try to figure out why.

## Redesign

Apply the growth mindset and think about the observations you gathered from testing your prototype. Here are some tips:

- Make sure your string is stretched taut, otherwise the energy from the sound wave will not travel very far.
- Experiment with different materials. Some transmit sound waves better than others.
- Make your network directional by using materials to muffle sounds.

Even if your prototype worked well, think about what was hard for you to get right. What did you have to tinker with? What would you improve if you were building another communication network?

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## Reflect

- Every person has both growth and fixed mindsets. What part of this design challenge did you have a fixed mindset about? How did you persevere to continue learning?
- Frustration is inevitable when doing hard things. How will you encourage your child to move past frustration in other daily tasks, like completing homework?
- How do the materials you used affect the way the sound wave travels?
- How could you redesign your network to work over a longer distance?
- Can you think of a way to add two networks together?

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# Summary

I hope learning about “growth” and “fixed” mindset was as helpful to you as it was to me. In summary, here is what we learned in this chapter:

- People with **growth mindsets** see intelligence as something that they can develop with effort.
- People with **fixed mindsets** see intelligence as something that cannot change.
- To foster a growth mindset, make statements that acknowledge work and dedication instead of outcome or result.
- You can change your mindset from “fixed” to “growth” by being open to new things and not being afraid to fail.
- Remember, failure is only one step toward achieving success.