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## **Cultivating Growth Mindset with Adolescents**

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Cultivating Growth Mindset with Adolescents

Daisy Yang

California State University, Monterey Bay

Some teens may believe that intelligence and other traits are fixed and unchangeable. As a result of having these fixed perspectives, adolescents may not be motivated to achieve academically and may give up in the face of challenge. Instead, teens can increase their confidence levels and motivation and adopt a growth mindset for their well-being. In order to address this issue, I created a two-day lesson for highschoolers at Rio Linda High School in Sacramento, California.

#### **Needs Statement**

Some adolescents may believe that intelligence and other traits are fixed and unchangeable. As a result of having these fixed mindsets, adolescents may not be motivated to achieve and may give up in the face of challenge. Mindsets are perceptions that an individual holds for their abilities and for themselves. Fixed mindset is the belief that one's qualities such as intelligence and their abilities are simply fixed traits. People with this mindset believe that building these qualities is simply not possible. When it comes to failure, adolescent students are more likely to feel helpless and give up if they have a fixed mindset. However, growth mindsets is the belief that one's abilities and talents can be developed through hard work.

Adolescents with a fixed mindset were significantly found to have higher rates of depression in comparison to their growth mindset counterparts (Schleilder, 2019). Most surprisingly, they are more likely to become frustrated and give up in the face of a adversary (Zeng, 2016). As a result of this, adolescents are more likely to do worse in their academics in comparison to their growth mindset counterpart.

Adolescents who have growth mindsets are more likely to adjust and overcome their failures (Dweck & Leggett, 1988). Growth mindset is developmentally beneficial as it could allow adolescents to have the motivation to achieve and succeed in their goals (Zeng, 2016). Academically, they do better in school in comparison to those with fixed mindsets (Meindl et al, 2019). Furthermore, adolescents who have qualities of growth mindset are more likely to retain school subjects better than those with fixed mindsets (Marshik et al, 2015). By instilling positive beliefs about themselves, adolescents will significantly improve their own behaviors (Yeager et al, 2016).

Strong evidence suggests that mindset can change among adolescents with intervention. For example, a growth mindset study done by Hass et al. (2019) showed that by teaching and promoting growth mindset skills, people are able to significantly improve on their behavior and their own abilities. Participants in their study showed a positive increase in their problem solving skills and felt more confident in their creative skills. With intervention, it is possible to raise the motivation and improve the well-being of adolescents. In order to increase the use of a growth mindset among adolescents, I will conduct a two-day workshop to a class of highschool students at Rio Linda Junior High School in Sacramento, California.

#### **Theory/Development**

Developmentally, according to Erik Erikson, adolescents undergo the Identity vs. Role Confusion stage, where the sense of self begins to develop through social interactions and experiences. Identity and personality are not fixed concepts and can be changed as youth mature towards adulthood. Typically, most adolescents have not yet committed to an identity as they

continue to explore traits that they can pick and choose according to their experiences. It is also important to note that identity is expressed through self-realization through the engagement of their activities and goals in their life.

As adolescents are still experimenting during this stage, I believe it may be beneficial for them to receive support to be motivated and unfearful to try new experiences which could allow them to explore their own identity. Teaching growth mindset skills may be able to help guide adolescents in promoting positive perspectives on themselves. Also, once adolescents begin to have a stable idea of their own personal identity, it can strengthen performance and abilities of their different roles and commitments in life (Ragelienė, 2016). Therefore, I am creating a set of lessons through a workshop to help adolescents have a positive self-talk to feel more confident in their own abilities as well to improve their behavior.

#### **Consideration of Diversity**

My project will be conducted at Rio Linda Junior High School in an English class for students ages 14 to 18yrs old. In the 2017-2018 school year, the ethnic composition of Rio Linda Junior High School was 41% Hispanic, 28% White, 15% Asian, 9% Black, 4% two or more races, 2% Hawaiian/Pacific Islander, and 1% American-Indian. 79% of students are noted as economically disadvantaged (2020). I expect the current participants to reflect the data. Students who are economically disadvantaged may not have access to stable wifi or have the technology to do so. As a result, they may struggle completing the worksheet tasks or participate in discussion. The workshop will be conducted in English and participants must be proficient enough to understand the content and answer questions given to them. So, those participants who are not proficient may be excluded.

#### **Learning Outcomes**

I will complete a 2-day workshop with students from Rio Linda Junior Highschool which will each take around 45 minutes per day.

By the end of the project, participants will:

- 1. Identify growth and fixed mindset statements
- 2. Learn how to change fixed statements into growth statements
- 3. Create one personal and one academic goals for themselves using growth mindset statements

#### Method

#### Day 1

Due to covid, the entire workshop will be completed on zoom. I first began by introducing myself and why I am conducting a workshop in the students' class. Next, I did a presentation where I went over the differences between growth and fixed mindset. See Appendix A. I had them complete a growth and fixed mindset assessment. See Appendix B. Afterwards, we went over the assessment quiz and I asked students how they scored on the assessment. Then, I taught students the benefits of a growth mindset and how it can help with their academic and personal achievements through the presentation. Lastly, I led the students in a Kahoot activity in which they have to identify growth and fixed mindset statements. See Appendix C. At the end of the session, I gave students homework to think about some fixed mindset statements that they tell themselves and how they could change it into a growth mindset statement.

#### Day 2

The next day, I reviewed what we went over in the previous session. I asked students to define what growth and fixed mindset was in a discussion setting. After 10 minutes of discussion, I did a presentation on the negatives of fixed mindset. See Appendix D. Afterwards, they were put into breakout rooms of 3-4 on zoom to discuss fixed mindset statements they tell themselves. They discussed the fixed mindset statements they tell themselves and how they would change that statement into a growth mindset statement. Students did this for 15 minutes while I entered each breakout room to see how each group is doing. After the breakout rooms, I asked the class to give one example of what they discussed in their group. At the end of the workshop, the students made academic and personal goals for themselves using growth mindset-statements through a Google form. After they filled out the form, I ended the workshop with a summary of what they learned.

#### Results

For Learning Outcome 1, participants would identify growth and sized mindset statements through a Kahoot, an online quizzing activity. Students had to identify 10 different items and determine if each one was either growth or fixed mindset. These questions are shown in Appendix C. Furthermore, I discussed with them why an item was either a fixed or growth mindset statement during the online quiz after each question was answered by the students. The majority of students answered correctly with only two or three students of every class answering incorrectly for all questions. Table 1 shows how each class did in correctly answering the questions.

In Learning Outcome 2, students were given a task to recall a time that they told a fixed mindset to themselves. They were put into breakout rooms of 3-4 and discussed how they would change their fixed statements into growth statements. I went to each breakout room to ask what each student came up with. However, due to time restraints I was not able to go to every breakout room. After breakout rooms, I asked students to share what they discussed and how they would change their statement. Due to the limited environment of Zoom, some students did not participate or kept their microphones off. I recorded the responses in Figure 1. Despite this, there were a handful of students who participated, and I believe this outcome was met.

As for Learning outcome 3, students were asked to fill out a Google form in which they had to create academic and personal goals for themselves using growth statements. See Appendix E. Before this, I reviewed how to change a fixed statement into a growth statement. Students were expected to create their goals as well as a positive action to reaffirm themselves such as, "My math grade will improve because I will study harder." or "I can always improve on playing the piano." Figure 2 shows how they responded. It appears that some students were confused or did not use a growth statement to make their academic or personal goals for themselves. The chart in Figure 3 shows the amount of students who answered using growth statements. 33 out of the 59 students answered using growth statements, thus I believe this outcome was not met.

#### **Discussion**

I believe that almost all of my learning outcomes were met as most of the adolescents learned about fixed and growth mindset. Adolescents were able to identify which statements were either growth or fixed. When we discussed in groups and as a class, it was visible from the

8

statements that the adolescents had a good understanding on the subject. I believe that participants were able to connect the project with their own identity. As adolescents are theoretically in the stage of development of Identity vs. Role Confusion where they are developing their sense of identity, I believe that this project helped them figure out how to be the person they ideally want to be. Instead of thinking that their traits are fixed, they can use the positive self-talk skills that I taught them to help them improve on their own well-being. This finding was visible in some of the responses in Learning Outcome 3 where the participants had varying answers and did not properly use growth mindset statements to make goals for themselves.

In regards to diversity, I believe that more students would have been able to participate if they were not bound to the limitations of a virtual environment. I had at least one student in every class that was not able to participate in class due to internet connection problems. Other than this aspect, I believe my project applied to all students. If I could do my project differently, I would definitely recreate the project to be applicable in a classroom setting instead of the limitations of Zoom. In my third learning outcome where adolescents had to create personal and academic goals for themselves, I would elaborate on the kind of formatting I want them to write their statements in. Some adolescents wrote one word answers or did not create an actual goal statement. If the adolescents were given a direction on how to write the growth statement, they would have been able to correctly write a statement for themselves. Overall, I believe that the participants received a general understanding of growth mindset and how it can be implemented to better their everyday lives.

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Table 1

Results for Outcome 1

Class	Number of Participants	Correct Percentage of All Answers as a Class
Class 1	20	72%
Class 2	26	86%
Class 3	31	65%

Figure 1
Responses recorded for Outcome 2 from all Classes

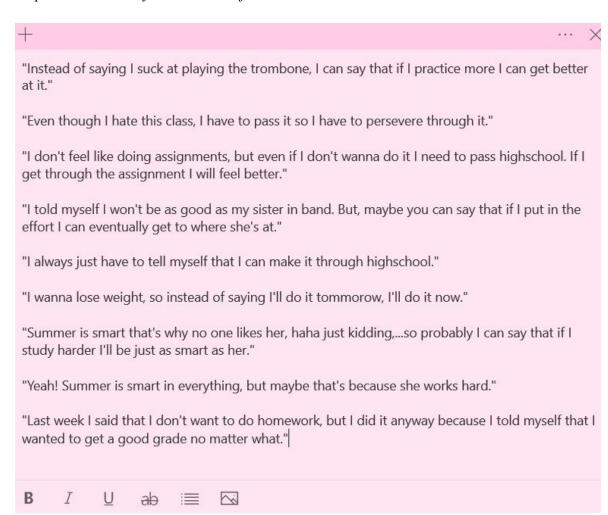


Figure 2

Responses from all students in Outcome 2 who Answered the Form

Write a growth mindset statement pertaining to one ACADEMIC goal you have for yourself.

Class Period	Write a growth mindset statement pertaining to one ACADEMIC goal you have for yourself.
1st	Pass high school
1st	i want to graduate highschool
1st	I will improve my grades so that I am not happy and not worried about my grades.
1st	I can raise my grade in my classes
1st	the one academic goal I have is to graduate high school
1st	i want to graduate
1st	I Want to get better at reading
1st	pass floral with a B or higher
1st	I will get better at doing art.
1st	pass this year
3rd	i will try harder on homework
1st	My academic goal is to graduate.
3rd	One of my growth mindsets is to just finish school and get my diploma
1st	I believe I can do anything
1st	When you think you don't know something but end up trying and get the answer right.
1st	I want to get my grades up and maintain them.
3rd	Get better at writing essays
3rd	get decent grades
3rd	i can do it!
3rd	I will keep an B average.
3rd	I will study harder until I get straight A's.
3rd	I will work hard to pass ELA H.
3rd	A academic goal that I have is to improve my grades in every class.
3rd	I will achieve my goal of maintaining good grades.
3rd	I can be better and try harder on my school assignments and class participation.
3rd	I can get straight A's if I keep trying. I can do this!!
3rd	I am gonna have straight A's all this year because I work hard and i'm gonna continue to work hard.
3rd	I want to pass all classes with at least a c.
3rd	Complete school with good grades so i can get full credits.
3rd	I want to have a GPA that stays a 4.0, but over a 3.5 is what I would strive for.
3rd	To get good grades I must try hard never quit and achieve the goal.
3rd	I can get better grades if I try.
3rd	I want to be a neurologist and if I study hard enough and get into a good University, I can achieve it!
3rd	There are all types of people who get into good universities, you don't have to be a mastermind or anything.

Class Period	Write a growth mindset statement pertaining to one ACADEMIC goal you have for yourself.
3rd	"You can do this." "Don't give up."
3rd	I am able to get better at math if I try harder.
5th	Studying, taking notes, and tutoring will help me with the subject I struggle in and I will eventually get better and better to reach my goal.
3rd	Having good grades and graduating high school
	6 to pass
	6 I can get a 4.0 GPA if I try hard enough and put in the effort.
	6 I know I can raise my grade for a B to an A.
	6 I want to get better grades and pass all my classes
	6 I want to get a 3.5 gpa or higher.
	6 get good grades and be successful
	6 Keep trying your best.
	6 A growth mindset for an academic goal is I can get better at what I am doing.
	6 I cant learn how to use trombone, no matter how many times I practice, I never grow I just get worse
	6 My grades are all A's but they could be A+'s.
	6 I can become a vet if I'm dedicated enough, nothing is impossible no matter how challenging it may seem.
	6 I can achieve anything i put my mind too when it comes to school
	6 I can achieve higher grades.
	6 A goal I have for myself is to never give up and get back up if you did something wrong don't give up and do it again and not the same mas
	6 I can do everything if I try hard.
	6 I can do better with this piece of music and try hitting more of the notes I feel unsure of.
	6 I can get a 4.0 gpa
	6 I have good grades but I can get better grades.
	6 My goal is to finish all my assignments assigned, I can do this by managing my time and not getting distracted.
	6 I will appreciate constructive criticism.

Write a growth mindset statement pertaining to one	PERSONAL goal you has	o for voursalf		
	PERSONAL goal you have	e ioi yoursell.		
Go and see Riley as much as you can				
i want to be happy and not be sad				
I will start being nicer to myself to improve my self of	esteem.			
I am smart enough to be able to go to college				
one personal goal is to be an electrician				
i want to learn new things				
Im going to lift this weight and not think about it.				
Get back in shape for sports				
I will have more self-confidence.				
to be successful in life				
i will make it through school				
My personal goal is to lose weight.				
to learn as i go through life and no matter what to k	eep going			
I can make good welds i got this				
When I think I don't feel like myself but I end up tall	ing about it and then I fee	better afterwards.		
I want to graduate and join the military and go on a	dventures.			
Beating my brother in a game				
get a job quick				
Keep trying				
I can be better than Miya at tennis in a couple more	years.			
I have to get better at soccer.				
I can draw anything if I put my mind t it.				
My personal goal that I have is to get stronger ever	y week.			
Everything will fall into place at the right time, don't	worry about it. (Saying tha	t because I worry too m	uch Imago)	
I can learn and eventually be better at improving m	art and animation.			
I can always improve if I keep practicing piano.				
I will be less stress and take more time for myself.				
I want to have better behavior and keep my cool be	tter			
To learn culinary and french.				
Personally I would want to have a healthier body ar	nd to change my diet.			
To make a schedule so I can keep track of time or v	vriting notes saying I can o	fo it in my journal when I	either have homework or	a test to do.
Everything will get better with time.				
I want to take more calmer approaches with difficul	and stressful situations s	that I won't end up doi	ng something I would regre	et later on in life, and so it won't
Mental illnesses are not forever, you can push past	the bad and eventually fin	d the good.		

Write a growth mindset statement pertaining to one PERSONAL g	goal you have for yourself.	
"Work hard." "You got this."		
I am working on getting better at doing tests and quizzes.		
My appearance is not the only thing that matters so I will not need	d to take negative opinions to heart since I mys	elf am comfortable with the way I am
Finding my self		
"TO PASS, IF NOT U WILL FAIL"		
can become an actor if I put in my effort and act as best as I can	1.	
I know i can learn piano even if its hard.		
i wanna get a job and make extra money to help pay bills		
I want to achieve all my goals. For example, get my dream job		
don't stop trying		
Just keep getting through this and trying.		
A growth mindset for a personal goal is that I got to keep on trying	g until I get something done.	
Well every time I study math I can feel growth and dont feel like I I	make no growth	
I'm not good at baking right now, but if I keep trying I'll get better.		
With hard work, training, and practice I can get better at soccer.		
Just try its okay to fail just get up and try again		
I can get better at basketball.		
A personal one I had for me was that if I did something wrong or a	anything never give up and try again.	
Believe in myself, and don ghet disapointed when something goes	s wrong.	
What if I try painting this piece with a different style and colors inst	stead of dou <mark>bti</mark> ng my color choices and being s	cared to ruin my sketch.
I can be successful in life.		
I am good at painting/drawing but with practice I can get better.		
One personal goal I have for myself is to focus on myself and not	get overwhelmed. I can do this by taking care	of myself.
I can always in improve at soccer if I try		

Figure 3

## Chart of responses from students that correctly used growth mindset skills in their statements for

### Outcome 3

1	I will improve my grades so that I am not happy and not worried about my grades.
2	I can raise my grade in my classes
3	I will get better at doing art.
4	i will try harder on homework
5	I believe I can do anything
6	i can do it!
7	I will keep an B average.
8	I will study harder until I get straight A's.
9	I will work hard to pass ELA H.
10	I will achieve my goal of maintaining good grades.
11	I can be better and try harder on my school assignments and class participation.
12	I can get straight A's if I keep trying. I can do this!!
13	I am gonna have straight A's all this year because I work hard and i'm gonna continue to work hard.
14	To get good grades I must try hard never quit and achieve the goal.
15	I can get better grades if I try.
16	I want to be a neurologist and if I study hard enough and get into a good University, I can achieve it!
17	There are all types of people who get into good universities, you don't have to be a mastermind or anything.
18	I am able to get better at math if I try harder.
19	Studying , taking notes, and tutoring will help me with the subject I struggle in and I will eventually get better and better to reach my go
20	I can get a 4.0 GPA if I try hard enough and put in the effort.
21	I know I can raise my grade for a B to an A.
22	A growth mindset for an academic goal is I can get better at what I am doing.
23	I cant learn how to use trombone, no matter how many times I practice, I never grow I just get worse
24	My grades are all A's but they could be A+'s.
25	I can become a vet if I'm dedicated enough, nothing is impossible no matter how challenging it may seem.
26	I can achieve anything i put my mind too when it comes to school
27	I can achieve higher grades.
28	A goal I have for myself is to never give up and get back up if you did something wrong don't give up and do it again and not the same
29	I can do everything if I try hard.
30	I can do better with this piece of music and try hitting more of the notes I feel unsure of.
31	I have good grades but I can get better grades.
32	My goal is to finish all my assignments assigned, I can do this by managing my time and not getting distracted.
33	I will appreciate constructive criticism.

Appendix A

The Presentation used for Day 1





# WHAT IS A MINDSET?

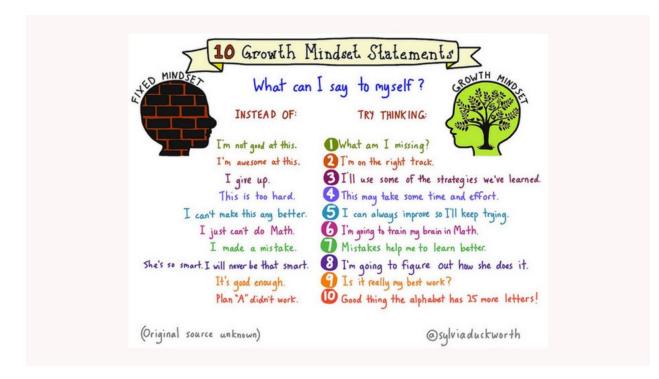
- Mindsets are perceptions that an individual holds for themselves.
- Are intelligence and traits interchangeable?
- Your beliefs play a role in what you want and whether you achieve it
- How you cope with your own challenges











## BENEFITS OF GROWTH MINDSET

- persevere in the face of setbacks
- do better in school in comparison to those with fixed mindsets (Meindl et al, 2019)
- less likely to have high rates of anxiety and depression in comparison to those with fixed mindsets(Schleider, 2019)





# HOMEWORK

Think about some fixed mindset statements that you tell yourself and how would you change it into a growth mindset statement?



Appendix B

The quiz students used to access which mindset they had.

https://www.idrlabs.com/growth-mindset-fixed-mindset/test.php

Appendix C

Kahoot Activity and in Outcome 1 Questions

Identify whether the the following is a Growth or Fixed Statement

- 1. I ask Mr.Kaplan for help when I am stuck.
- 2. People who live in Rio Linda, stay in Rio Linda.
- 3. I can be a better singer than Beyonce if I practiced hard enough.
- 4. I won't go to college because I am not smart enough.
- 5. I'm not going to finish this assignment since I'm going to fail this class anyway.
- 6. I don't understand what's going on, so I will ask questions.
- 7. Mr.Kaplan's feedback helps me understand what I should do differently even if the feedback is not positive.
- 8. Some people are just born smart.
- 9. I am not as smart as Mr.Kaplan.
- 10. I can eat 100 chicken nuggets if I try hard enough.

Appendix D

*The Presentation used for Day 2* 







# REVIEW

- Mindsets are perceptions that an individual holds for themselves.
- Fixed mindset is the belief that you cannot change and abilities cannot be developed
- Growth mindset is belief that you can change and abilities can be developed





# BREAKOUT

- 1. What are fixed mindset statements that you tell yourself?
- 2. How does it make you feel?
- 3. How would you change it into a growth mindset statement?



## NEGATIVES OF FIXED MINDSET

- more likely to feel helpless and give up
- lack of self-efficacy and problem solving skills
- more likely to have depression and anxiety



## GOOGLE FOURM

Make an academic and a personal goal for yourself using your learned growth mindset skills! Link will be posted in the chat. Afterwards we can share what we wrote!

ex.) I will study hard and better my math grade.

https://forms.gle/o6MT4LBDqcqBR3MJ8https://forms.gle/o6MT4LBDqcqBR3MJ8





Appendix E

Google Form for Students to make their Goal Statements

https://forms.gle/EyYU3HouwwHBZgMm9