

Believing in the Brain

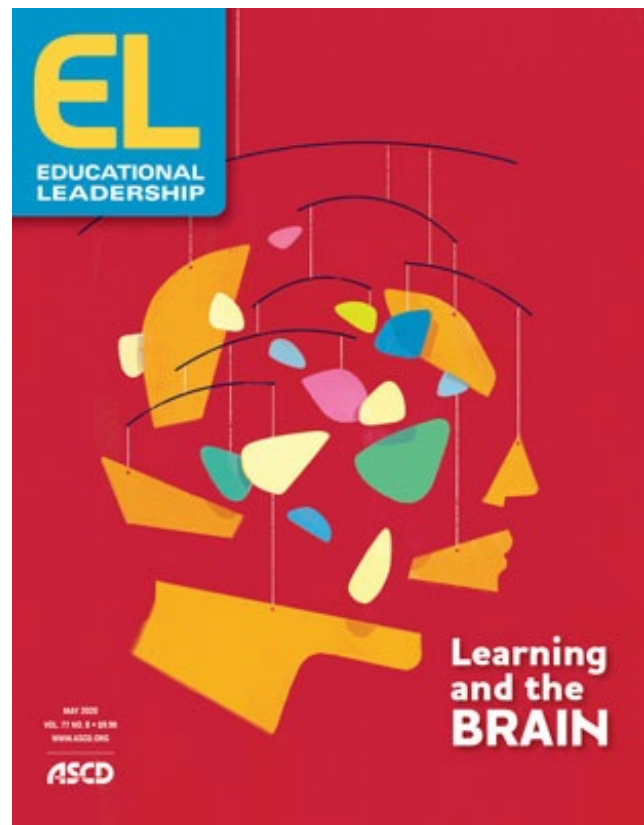
ascd.org/publications/educational-leadership/may20/vol77/num08/Believing-in-the-Brain.aspx

Around the world on every school day, students arrive in classrooms with their brains powered by some 86 billion neurons. Potentially, a single cubic centimeter of cortex may have as many connections as there are stars in the Milky Way galaxy. Learning changes the structure and function of the brain, and the creation, strengthening, and pruning of neural connections are key to the learning process (National Academies of Sciences, Engineering, and Medicine, 2018). This concept, known as brain plasticity, is foundational to the understanding that intelligence can be developed.

If students are explicitly taught about their brain's capacity to change, their motivation to learn can increase. If they also receive specific instruction on how to use effective learning strategies, there is tremendous potential for students to make steady academic gains. Furthermore, as students make these gains, their growth mindsets (the belief that intelligence is malleable) can be sustained over time.

Helping students develop an understanding of brain plasticity, coupled with cultivating growth mindsets and teaching students to use effective strategies for gaining knowledge and skills, has been the central focus of our work in teacher education and professional development for the past 22 years. One classroom example of our approach comes from a teacher who learned about neuroplasticity in our graduate program and shared her knowledge with her elementary students. She stressed to her students that by working hard and using effective learning strategies, they could enable their brains to make more connections and become functionally smarter.

This helped her students to develop growth mindsets and to be motivated to learn a range of metacognitive and cognitive strategies, resulting in what she called an "explosion of growth" in students' reading abilities. This emphasis is what we term "teaching students to



drive their brains." Among the many strategies she used to facilitate this improvement were thinking stems, which encouraged students to indicate what they wondered, inferred, or thought would occur in a particular story they were reading.

Active engagement of thought processes such as these supports learning. The teacher's students wrote down their thoughts in a blog that she had set up to share how her students were responding to learning about brain plasticity and what strategies were working well in her classroom. These posts generated comments from a network of educators around the world. This activity and many others proved to be highly motivational for the students, who made five months' worth of gains in their reading levels over a three-month period (Germuth, 2012; Wilson & Conyers, 2020).

Teachers like this know that teaching about the brain's amazing malleable nature, especially the changes that occur during learning, provides a scientific foundation for the cultivation of growth mindsets. In our new book, *Developing Growth Mindsets* (ASCD, 2020), we discuss a framework that includes seven principles designed to assist educators in continuing to develop their own growth mindset—which hinges on the belief that intellectual abilities are malleable and can be improved (Dweck, 2019)—and in supporting the cultivation of growth mindsets in their students. Here we'll examine one of these principles—"keeping plasticity front of mind"—and offer lesson ideas for teaching students about brain plasticity that will help them develop growth mindsets.

Game-Changing Knowledge

The growth in student achievement that our teacher observed aligns with the most recent study from the Programme for International Student Assessment (PISA), based on a triennial survey of 15-year-old students around the world. In the United States, students who disagreed with the statement, "Your intelligence is something about you that you can't change very much," achieved scores in reading that were, on average, 58 points higher than those who agreed with the statement, after taking schools' and students' socioeconomic profiles into account (OECD, 2019).

A range of other studies across grade levels and from around the world show that students with growth mindsets are more likely to push themselves to learn new things and persist until they achieve their goals. Over time, students who apply this outlook to their learning perform at higher levels than those with fixed mindsets on a variety of outcomes (Dweck, 2019).

We have worked with many teachers, from preK through college, to help them teach students about the malleability of the brain. By emphasizing this concept, educators show students that brain plasticity will equip them to learn almost anything if they are willing to put in the effort and apply effective learning strategies (ASCD, 2018; Wilson & Conyers, 2020). This knowledge can truly be a game-changer since it helps students understand they

have the potential to succeed, regardless of past academic performance. Dweck (2019) reported similar findings from studies on interventions used "to teach students how the brain changes with learning and how intellectual abilities can be developed" (p. 21). These studies suggest that a growth mindset could have a significant impact on student achievement and test scores.

Learning at Any Age

The realization that the brain has the capacity to change during learning is important not only for students, but for educators as well. One of our graduates found this revelation to be highly motivating. "One of the most fascinating things [we learned] was [about] brain plasticity—the finding that the brain is pretty elastic even as you get old," she told us. Another classroom teacher similarly saw brain plasticity as an important concept for educators to understand "because educators need to be aware of the fact that everyone has the ability to learn Educators and leaders will also benefit as they recognize learning never stops, regardless of an individual's age" (Germuth, 2012, p. 28).

And studies prove that learning never stops. Recent research shows evidence of synaptic development seen in brain scans from diverse subjects such as medical students studying for exams, musicians learning mastery of an instrument, and cab drivers who taught themselves to navigate the streets of London (Draganski et al., 2006; Gaser & Schlaug, 2003; Woollett & Maguire, 2011). This research has identified visible changes in areas of the brain associated with memory, spatial reasoning, and problem solving, thus supporting a conceptualization of intelligence as malleable and dynamic.

Michael Fitzgerald, who teaches at-risk students at Eagle Academy, an alternative high school in Boise, Idaho, helps students understand the power of their amazing brains by drawing a diagram (like that shown in fig. 1) that illustrates how neurons form connections with other neurons in response to new experiences and learning. This helps him drive home the point to students that learning changes their brains and allows them to grow academically—a concept that, he notes, "can be very empowering" since it challenges students to take charge of their own learning. "I tell them there are things in your life you are not in charge of, but you are in charge of you," says Fitzgerald. Over time, he says, his students become more open to taking on challenging academic tasks with the potential for higher achievement fueling their growth mindsets (Wilson & Conyers, 2016).

Figure 1. Neurons Making Connections

□

Figure Credit: BrainSMART, Inc.

Another educator we know, a high school teacher and part-time coach who graduated from our program, describes the concept of neuroplasticity to his students on the first day of school. He facilitates a discussion about the connectivity between neurons, describing how the brain can change with experience—like muscles getting stronger with exercise. This teacher tries to convince his students that they can learn more than they think they can, even if they have had learning challenges in the past. To facilitate this, he teaches them to set learning goals, self-test, summarize, and manage their time (Wilson & Conyers, 2020).

Younger children can also benefit from learning about brain plasticity. Texas teacher Diane Dahl teaches her 2nd graders about the brain during the first week of school, describing what *neurons*, *axons*, and *dendrites* are and how learning creates new connections in the brain (Wilson & Conyers, 2016). She helps students visualize these connections by having them work together to make a model of their "class's brain," using pipe cleaners and sticky notes to represent what they are thinking and learning.

Each student is given three pipe cleaners to twist together to represent axons. Dahl tells them to leave the ends untwisted to represent the dendrites. Students work together to build the class brain structure, connecting all the axons and dendrites (see fig. 2). The structure represents the class's brain at the beginning of the school year. Then, as they learn more and more concepts, the students create and add new axons and dendrites to the brain and label them with what they've learned.

Figure 2. Diane Dahl's Classroom Brain

□

Second graders in Texas teacher Diane Dahl's class create a model of their class's brain, using pipe cleaners and sticky notes to represent what they are learning. Photo Courtesy of Diane Dahl.

Dahl suspends the "brain" from the ceiling, high enough to be out of the way but low enough for students to interact with it and read the labels. As the year progresses, the brain model gets more complicated, and whenever possible, Ms. Dahl connects new learning with previous lessons.

A Powerful First Step

As the teachers highlighted in this article know, explicitly teaching brain plasticity is a powerful first step for the development of growth mindsets, but it's not sufficient on its own. It is also important to teach students how to be metacognitive, so that they can set learning goals, monitor their progress, and apply high-yield strategies such as regularly testing themselves on the material they are studying. Furthermore, it is important that teachers use

formative assessment to ensure that students are tackling content at an appropriate challenge level, to provide useful feedback, and to give praise for hard work and effective use of strategies rather than for "being smart."

More is known about the human brain and strategies for enhancing the learning process than ever before. By explicitly teaching students about their brain's plasticity and equipping them with effective learning strategies that can lead to higher levels of academic achievement, we can better empower them with the growth mindsets that can set them on a positive trajectory of lifelong learning.

Reflect & Discuss

- What insights about the brain did this article give you? How might this impact your practice?
- Do you agree that students have more motivation to learn if they know that their brains can grow and change? Why or why not?
- How might you incorporate the idea of brain plasticity into your classroom lessons?

References

ASCD. (2018). *Teaching students to drive their brains* [Video series], featuring Donna Wilson.

Draganski, B., Gaser, C., Kempermann, G., Kuhn, H. G., Winkler, J., Büchel, C., et al. (2006). Temporal and spatial dynamics of brain structure changes during extensive learning. *The Journal of Neuroscience*, 26(23), 6314–6317.

Dweck, C. S. (2019). The choice to make a difference. *Perspectives on Psychological Science*, 14(1), 21–25.

Gaser, C., & Schlaug, G. (2003, October 8). Brain structures differ between musicians and non-musicians. *Journal of Neuroscience*, 23(27), 9240–9245.

Germuth, A. A. (2012). *Helping all learners reach their potential: What teachers says about graduate programs that integrate the implications of mind, brain, and education research*. Orlando, FL: BrainSMART.

National Academies of Sciences, Engineering, and Medicine. (2018). *How people learn II: Learners, contexts, and cultures*. Washington, DC: The National Academies Press.

OECD (2019). *Programme for International Student Assessment (PISA): Results from PISA 2018 (Volumes I–III), Country note: United States*. Paris, France: OECD Publishing.

Wilson, D. L., & Conyers, M. A. (2016). *Teaching students to drive their brains: Metacognitive strategies, activities, and lesson ideas*. Alexandria, VA: ASCD.

Wilson, D. L., & Conyers, M. A. (2020). *Developing growth mindsets: Principles and practices for maximizing students' potential*. Alexandria, VA: ASCD.

Woollett, K., & Maguire, E. A. (2011). Acquiring "the knowledge" of London's layout drives structural brain changes. *Current Biology*, 21(24), 2109–2114.

Marcus Conyers and Donna Wilson are authors of 20 books, including *Developing Growth Mindsets* (ASCD, 2020) and *Teaching Students to Drive Their Brains* (ASCD, 2016). They are founders of BrainSMART and developers of graduate degree programs focused on applied mind, brain, and education science. Marcus is an international keynote speaker and a PhD research supervisor with Canterbury Christ Church University. Donna is an international consultant and speaker, and an ASCD faculty member.

Copyright of Educational Leadership is the property of Association for Supervision & Curriculum Development and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.

Use Brain's Plasticity To Become And Live As Your 'Best Version'

Pharasi, Manish . Business World ; New Delhi (Jan 13, 2018).

[ProQuest document link](#)

ABSTRACT (ENGLISH)

[...]the fourth element that you should immediately start practicing when wiring your brain is to start associating strong emotions with the things you want to program your brain for in order to become your "best version". Since thoughts are nothing but energy focusing them in this manner yields tremendous results. [...]I urge you to pick up any goal and try out the 'BRIEF' Principles on that.

FULL TEXT

There has been a long standing belief that human brain stops changing or growing beyond a particular age. However, the latest research in neuroscience shatters this myth. Indeed, our brain is "plastic" which simply means that it is "designed to change throughout our lifetime". Infact, as you read this your brain is changing at this very moment. The implications of this are huge. You can at any stage of your life define and achieve any goal. You can develop new capabilities that take you towards your goal at any age. You can thus consciously become and live as your "best version" whenever you decide to.

Studies have proven that "our focused and conscious intention to achieve something increases our brain's ability to wire in new ideas". We all have our dreams and our goals and irrespective of where you are in your life right now you can literally wire your brain to take you where you want to go.

Adding to the experience of thousands of people who have used this new discovery to change their lives is my own successful experience of working on myself and some of my clients.

So the rightful question that emerges is "are there any principles that we can use to rewire our brain in a meaningful way?" The answer is yes and to make it easier, I have coined an acronym BRIEF that is made up first letter of the five principles that can be used to rewire your brain (viz Belief, Repetition, Intention, Emotion & Focus). The article would briefly touch upon these five elements and would leave you with enough food for thought on how to use these to become and live as your "best versions".

Belief

This essentially means the degree of certainty you have about something. Hence, if you want to achieve something then make sure that you believe that you will. Brain's plasticity implies that if you believe in the positive outcome of the goals you are set then you are better off than the people who don't believe in that. There is enough evidence to show that a strong belief in the outcomes helps you tap into a higher source of energy that eventually helps you achieve your goals. The belief in your goal physically changes the neural structure of your brain resulting in measurable change in your outcomes.

Repetition

If you walk on the same path in a field that is completely covered with grass, you will find that after few days a clear pathway is formed in the field devoid of any grass. The same goes for your brain. If becoming your best version implies a great health for you then it is through repetition of daily exercise and diet regimen would you be able to make lasting improvements in your health or change your habits in a lasting way.

Intention

As per some researcher notes in the field of quantum physics it was proven that the outcome of certain

experiments is influenced by the intention of the person conducting the experiment. This implied that somehow the thoughts were affecting the outcome. Today neuroscience further shows that people are able to create much better versions of them by creating a powerful intent towards its achievement. From a purely brain plasticity point of view, when you repeat the same intention frequently and powerfully, you are wiring your brain with a new direction and telling it what you want it to do.

Emotion

Take a step back and recollect any memory from past that stands out clearly and vividly. It could be when you achieved something significant, won a competition in childhood, got married, had your childbirth, got your cherished educational degree, got your first promotion, launched your business and so on. What makes these memories stand out are the strong emotions that got associated when these events were happening. Hence, the fourth element that you should immediately start practicing when wiring your brain is to start associating strong emotions with the things you want to program your brain for in order to become your "best version".

Focus

There is an adage that says "wherever focus goes energy flows". This implies that if you keep your brain constantly focused on the future you, in effect you are programming your brain towards that future you with considerably more resources. It is similar to a scenario wherein you converge the sunlight using a magnifying glass on a wet blade of grass and within less than a minute the grass starts burning! A similar thing happens when you focus your thoughts on things that you want your future self to possess. Since thoughts are nothing but energy focusing them in this manner yields tremendous results.

Finally, I urge you to pick up any goal and try out the 'BRIEF' Principles on that. Wishing you success.

Disclaimer: The views expressed in the article above are those of the authors' and do not necessarily represent or reflect the views of this publishing house. Unless otherwise noted, the author is writing in his/her personal capacity. They are not intended and should not be thought to represent official ideas, attitudes, or policies of any agency or institution.

Copyright 2018 BW Businessworld Media Pvt Ltd, distributed by Contify.com

Credit: Manish Pharasi

DETAILS

Subject:	Neurosciences
Publication title:	Business World; New Delhi
Publication year:	2018
Publication date:	Jan 13, 2018
Publisher:	Athena Information Solutions Pvt. Ltd.
Place of publication:	New Delhi
Country of publication:	India, New Delhi
Publication subject:	Business And Economics
ISSN:	09708197
Source type:	Magazines

Language of publication:	English
Document type:	News
ProQuest document ID:	2121483477
Document URL:	https://search.proquest.com/magazines/use-brains-plasticity-become-live-as-your-best/docview/2121483477/se-2?accountid=3455
Copyright:	Copyright 2018 BW Businessworld Media Pvt Ltd, distributed by Contify.com
Last updated:	2018-10-18
Database:	ProQuest Central

LINKS

[Check for full text via 360 Link](#)

Database copyright © 2021 ProQuest LLC. All rights reserved.

[Terms and Conditions](#) [Contact ProQuest](#)

Disclaimer: This is a machine generated PDF of selected content from our databases. This functionality is provided solely for your convenience and is in no way intended to replace original scanned PDF. Neither Cengage Learning nor its licensors make any representations or warranties with respect to the machine generated PDF. The PDF is automatically generated "AS IS" and "AS AVAILABLE" and are not retained in our systems. CENGAGE LEARNING AND ITS LICENSORS SPECIFICALLY DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES FOR AVAILABILITY, ACCURACY, TIMELINESS, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Your use of the machine generated PDF is subject to all use restrictions contained in The Cengage Learning Subscription and License Agreement and/or the Gale OneFile: News Terms and Conditions and by using the machine generated PDF functionality you agree to forgo any and all claims against Cengage Learning or its licensors for your use of the machine generated PDF functionality and any output derived therefrom.

The growth mindset.

Date: Oct. 1, 2020
From: European Union News
Publisher: Right Vision Media
Document Type: Article
Length: 616 words

Full Text:

London: Chartered Accountants Ireland has issued the following news release:

COVID-19 forced companies to adapt and change with unprecedented speed. Change is always on the agenda, but the pandemic accelerated it. Right now, organisations are planning to bring people safely back to the workplace. Planning is essential to reassure workers and clients that their safety is a priority but, as COVID-19 has demonstrated, plans are only partly useful in a context where the future is complex and unpredictable. Organisations will need to cultivate adaptability to continue to respond to this ever-changing environment.

Adaptability

Carol Dweck is a Professor of Psychology at Stanford University who researches human motivation. After studying the behaviour of thousands of children and their attitude to failure, she coined the terms 'fixed mindset' and 'growth mindset' to describe people's beliefs about learning. A fixed mindset assumes that intelligence or character is limited in the sense that it cannot change. As a result, people see effort as fruitless and obstacles as indicators that they should stop working. A growth mindset thrives on challenges and learns from criticism. It sees obstacles as opportunities to learn and persists when faced with a challenge.

Dweck's mindset theory has been enormously influential in how we think about motivation and adaptability, not only in relation to children but also because of its applicability to people and organisations more generally. Dweck's book, *Mindset*, has been a best-seller since its publication in 2006. And it has particular relevance today, as a growth mindset approach to planning amid a pandemic is likely to yield more benefits than a fixed mindset approach.

The power of 'yet'

Those with a growth mindset do not view obstacles or challenges as failures. Rather, they view them as challenges to be overcome. Dweck shared the following example in her 2014 TED talk.

"I heard about a high school in Chicago where students had to pass a certain number of courses to graduate, and if they didn't pass a course, they got the grade 'Not Yet'. And I thought that was fantastic, because if you get a failing grade, you think, 'I'm nothing, I'm nowhere. But if you get the grade 'Not Yet', you understand that you're on a learning curve. It gives you a path into the future."

The concept of 'yet' removes the fear of failure. It suggests that it is possible to achieve outcomes with adaptability or change, thereby increasing the likelihood of increased cooperation and the free flow of ideas. From a fixed mindset perspective, changing direction or re-strategising is a significant problem that may throw the company off direction. From a growth mindset perspective, this may be a challenge, but also an opportunity to adapt creatively.

Dweck's research suggests that the latter framing allows for psychological adaptability, which will yield practical results.

The blame game

Dweck tells us that blame is part of a fixed mindset, as she explains in this quote from her book: "When bosses become controlling and abusive, they put everyone into a fixed mindset. This means that instead of learning, growing, and moving the company forward, everyone starts worrying about being judged."

This type of atmosphere inhibits creativity because employees will fear being blamed for risk-taking, which is central to adaptability. Leaders who exhibit a growth mindset have a vested interest in developing people and encouraging creativity. They rarely use the company as a vehicle for narcissistic posturing. Their interest is in growing the company and supporting the creative adaptability that

will ensure the success of the organisation and its people.

COVID-19 is pushing everyone to adapt to new ways of working. Dweck's research on mindsets offers one perspective on enhancing creativity at a time of uncertainty and change.

Copyright: COPYRIGHT 2020 Right Vision Media

<http://european-union-news.newslib.com/>

Source Citation (APA 7th Edition)

The growth mindset. (2020, October 1). *European Union News*, NA.

https://link.gale.com/apps/doc/A637212467/STND?u=ko_acd_shc&sid=STND&xid=25e780b0

Gale Document Number: GALE|A637212467

Disclaimer: This is a machine generated PDF of selected content from our databases. This functionality is provided solely for your convenience and is in no way intended to replace original scanned PDF. Neither Cengage Learning nor its licensors make any representations or warranties with respect to the machine generated PDF. The PDF is automatically generated "AS IS" and "AS AVAILABLE" and are not retained in our systems. CENGAGE LEARNING AND ITS LICENSORS SPECIFICALLY DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES FOR AVAILABILITY, ACCURACY, TIMELINESS, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Your use of the machine generated PDF is subject to all use restrictions contained in The Cengage Learning Subscription and License Agreement and/or the Gale General OneFile Terms and Conditions and by using the machine generated PDF functionality you agree to forgo any and all claims against Cengage Learning or its licensors for your use of the machine generated PDF functionality and any output derived therefrom.

Nurture your growth mindset -

Date: Dec. 10, 2020

From: Plus Company Updates

Publisher: Right Vision Media

Document Type: Article

Length: 539 words

Full Text:

Cambridge: Cambridgeshire Chambers of Commerce has issued the following news release:

What about when something goes really badly wrong, you don't expect to feel that support then do you? Well maybe you can, if you stop looking outside for this support and instead learn to find it internally. This is what the growth mindset can feel like, and yes, YOU can have a growth mindset too. Even if you've tried it before and couldn't get it to work, you CAN get there.

I know you haven't given up on your mindset because you're reading this. But maybe you're frustrated and finding it hard to keep the growth mindset you want.

You might even be looking at those around you who seem to have it all together and be feeling like a bit of a failure.

That's OK, I'm going to give you some hope; some knowledge about your brain so you can BELIEVE the change is possible for you, and some tips to get you started on creating, growing and caring for the mindset you want, so you too can have your own personal cheer leader.

I remember when I first started studying mindset I got so frustrated at myself for constantly slipping into bad thoughts and negative thinking. Now I know the secret is to accept that your mind is incredibly complex and that life is also complex and often difficult, so the important thing is to keep trying. Notice when you slip, but don't beat yourself up - just keep trying, because practice pays off.

Tip 1 keep returning

Remember, this is simple but not easy. No one keeps a growth mindset all the time in every situation. Just keep coming back to it - it gets easier.

I'm assuming you know a bit about mindset already. There is so much information freely available online. Dr Carol Dweck was the first to talk about growth mindset and I love her book 'Mindset' because it's full of examples that help you see the powerful benefit of a growth mindset. I've read her entire book at least three times and continue to dip in occasionally because it's important to keep feeding your brain with the positive benefits of a growth mindset.

Tip 2 learn and grow

Fill your brain with the information it needs to believe in the growth mindset and know what it looks and feels like for you. Find a book, an article, a podcast or a TEDx that works for you. Feed your brain regularly, even if it's with the same information.

The most basic principle of the growth mindset is that ability is not fixed or merely inherited, rather it can be developed with hard work and effort. It doesn't mean that nothing is inherited, or that everyone can become a world champion sprinter if they just tried harder. This is an important point because it sometimes stops people from believing in the principle. The principle is that ability can be developed, and so can your mindset. Growth mindset is also about the fact that we have to try new things if we want to learn, and that we have to expect and accept that we will make mistakes so we can learn from them.

Copyright: COPYRIGHT 2020 Right Vision Media

Source Citation (MLA 8th Edition)

"Nurture your growth mindset - 5 top tips." *Plus Company Updates*, 10 Dec. 2020, p. NA. *Gale General OneFile*, link.gale.com/apps/doc/A644564843/ITOF?u=ko_acd_shc&sid=ITOF&xid=f1bf0603. Accessed 10 Jan. 2021.

Gale Document Number: GALE|A644564843

Benefits

Education: The lost summer of 2020 - Sam, aka The Progression Coach, explains the benefits of a growth mindset

Publication info: Bury Free Press , Town and villages ed.; Bury Saint Edmunds (UK) [Bury Saint Edmunds (UK)]21 Apr 2020.

[ProQuest document link](#)

FULL TEXT

Over many years, scientists have proven that we are divided into two categories as to how we approach our lives. Some people believe that when we are born we possess a certain level of intelligence and ability that is unchangeable. Alternatively, some people believe the opposite to be true: we can develop our brain's capacity to grow and therefore increase our learning capabilities as we go through life.

American psychologist Carol Dweck was the first person to formalise these findings following thorough investigation and studies. She devised two labels: fixed mindset and growth mindset. Conducting many years of research led her to conclude that successful people foster a growth mindset.

These individuals benefit from increased self-esteem, never stress about being 'perfect', have better relationships and possess greater resilience.

So how easy is it to develop this growth mindset, particularly if we feel we are someone who fits into the fixed mindset sphere?

Here are some recommendations:

1. When faced with a mistake or failure, rather than think 'I'm so useless at this, I'm going to give up' try instead 'What could I do differently next time?'
2. Given options, try to choose the more difficult rather than the easy route. This leads to learning opportunities, a chance to challenge yourself and also promotes fortitude.
3. Ask for feedback. People with a growth mindset will always be looking for feedback to increase their chances of growing and learning. Likewise, if you are asked to give feedback for someone else, doing it positively and praising the request will lead to the process being repeated in the future.
4. Place importance on the learning process rather than the end result.
5. Encourage reflective learning and evaluation.
6. Use the word 'yet'. Dweck suggests this is important as believing you haven't mastered something 'yet' implies that it is still possible in the future, with more effort and belief.
7. When you achieve one goal, set another one to remain motivated.

The important take-away from this research is to be aware that our brains can change –it's called neuroplasticity. Choosing to enjoy the process of learning new things rather than focusing on the end result can impact your life in so many ways.

Successful people such as high performing athletes all have this growth mindset –believing that the effort and attitude applied to tasks and goals will make a massive difference to the outcome. Persistence is key as well as the knowledge that mistakes made along the way offer learning opportunities that will ultimately help us to improve and triumph.

Next week: Demystifying the Oxbridge application process

Nurturing a growth mindset over time

Publication info: Spokesman Review ; Spokane, Wash. [Spokane, Wash]08 Aug 2019: D.1.

[ProQuest document link](#)

FULL TEXT

House Call

You may have heard about the benefits of having a growth mindset at work or in the media and wondered what it means. It is a concept put forth by psychologist Carol S. Dweck in 2007 that has been gaining traction throughout the nation, especially in business and parenting circles.

Having a growth mindset can lead to greater success, personal growth and happiness in life over time. A growth mindset is essentially the belief that intelligence can be developed and improved over time with hard work and perseverance. The alternative view is that of a fixed mindset. People with a fixed mindset believe that intelligence is innate and cannot really be improved.

No one is exclusively one mindset or the other, and part of developing a mostly growth mindset includes accepting that you are a blend of the two. Some things people might misconstrue about developing a growth mindset is that it's just about encouraging and praising effort and not about outcomes.

Learning, improvement, overcoming setbacks and progress are just as important and to be encouraged and praised, as well. Having, developing and maintaining a growth mindset requires effort consistently and repeatedly. We used to think that when a person got to a certain age, the brain settled in and didn't change much for the rest of a person's life. Over the past decade or so, researchers have actually discovered that the brain retains plasticity (the ability to change and adapt) over time. The process might get a bit slower as we age, but it's still there.

Here is an example that's pretty simple and perhaps a little silly. I was a biology major in college. It required a lot of study and memorization and didn't require me to write many term papers, so I never learned to type. Having kind of clunky fine motor skills, typing intimidated me.

When I was about 50, the electronic medical record came along. It seemed that if I didn't learn to type, I was going to have a difficult time adapting. I took an online course and learned. When I first started, it was a slog, but over time it became easier and second nature. When I first found myself typing without looking or thinking about the keyboard, words would magically appear on the screen and freak me out a little.

So why not take advantage of your brain's plasticity throughout your lifetime? Take up music, reading, doing math without a calculator, birdwatching, a new language, something. Stretching your brain is good for your brain.

There are many things you can do to nurture a growth mindset in yourself and in your children as they grow up. Admittedly, some will seem easier than others, but I encourage you to work at it. If learning something new is difficult, stay with it and apply it to your situation or task. Acknowledge your imperfections, and find ways to overcome or get around them.

Just don't let them stop you from achieving a goal. Think realistically about time and effort. Learning or doing something well takes time and energy. Make "yet" your favorite new word. You haven't mastered that skill yet. We haven't achieved our goal yet. I haven't learned how to do that yet.

Pause every day, take a breath, and reflect on what you have learned. Go ahead and give yourself a pat on the back for whatever it is you have learned and achieved that day. Maybe I'll try taking piano lessons again. It might take 10 years to get decent at it, but I'll get there.

Bob Riggs is a family medicine physician at Kaiser Permanente's Riverfront Medical Center.

Fixed And Growth Mindset In Education And How Grit Helps Students Persist In The Face Of Adversity

Aaron Hochanadel, MBA, Kaplan University, USA
Dora Finamore, EdD, Kaplan University, USA

ABSTRACT

Students face a wealth of challenges in college for example a lack of support, sometimes making it difficult to persevere. However, in an academic environment that teaches grit and fosters growth, students can learn to persist. Those who believe intelligence is fixed and cannot be changed exert less effort to succeed. Students who persevere when faced with challenges and adversity seem to have what Angela Duckworth calls, grit. This is the idea behind a growth mindset in learning according to Dweck (1999, 2007, 2010) and Duckworth, Peterson, Matthews, and Kelly (2007). Grit can be defined as "...passion and perseverance for long-term goals..." (Frontiers In Psychology, 2014). One grit effect study was conducted in collaboration with the U.S. Army and the University of Pennsylvania to create predictors of retention.

The purpose of this present work is to explore researched competencies related to persistence in reaching academic goals, review literature in grit and growth mindset related to learning and persistence, and examine what educators can do to foster grit and a growth mindset. Recommendations for increasing persistence and grit in college students will be provided.

Keywords: Grit; Retention; Growth Mindset; Online Education

INTRODUCTION

*A*s a seventh grade math teacher in New York City, Angela Lee Duckworth noticed how some students were outperforming others, but she found some unexpected results after several years. After calculating scores and assigning grades, she realized that some students with the highest IQs did not have top grades, and some students with lower IQs were some of the best performers, thus her decision to return to graduate school and begin research into motivation for how and why students persist to reach academic goals and others do not. Her studies explored education from a motivational and psychological standpoint instead of one of the most common measurement across schools - IQ test scores. The one question to undergird her entire research study was, "Who is successful here and why?" Duckworth (2013, April) The key to success? Grit [Video File]. Retrieved from http://www.ted.com/talks/angela_lee_duckworth_the_key_to_success_grit#t-357357. Duckworth (2007) began to review several studies in a variety of industries. At West Point, she studied which military cadets stayed in military training and which ones dropped out. She also analyzed results from the National Spelling Bee to determine which children were more likely to advance and which ones did not. Duckworth partnered with a private corporation and surveyed managers to determine which sales representatives would be more likely to leave the company and which ones would be successful. She also analyzed data from first-year inner city elementary school teachers to measure that would not return after that first year and, of those that would, which ones would be most effective; making sure students met their outcomes. Out of all the studies across the different industries, one characteristic emerged as a significant predictor of success - *Grit*. Duckworth defines Grit as, "...passions and persistence for long-term goals" (Duckworth & Quinn, 2009, p 166).

As Duckworth's research expanded, she learned that Carol Dweck, PhD - Stanford University, was conducting studies to determine how a fixed belief that failure is permanent could prevent students from academic success. Duckworth concluded that grit could be developed by having a "growth mindset." Dweck's studies were demonstrating that teaching young students how the brain is capable of change when faced with challenges helped them persevere and develop a growth mindset.

Grit Measured At West Point

Each year, over 10,000 students apply to West Point, but only 4,000 are accepted (Duckworth, 2007). In addition to the standard testing, West Point has additional admission requirements for prospective students. The school requires ACT Plus writing, a physical assessment, and a qualifying medical exam as part of the admissions process. Duckworth's 2007 study was based upon survey results from 1,218 cadets. The Grit predictor study was based on a freshmen summer training program. With the constant demands placed on cadets and abrupt changes allowing them to make quick decisions during a high-pressure situation, Duckworth wanted to find out why and how some succeeded and others failed (Perkins-Gough, 2013).

Fixed And Growth Mindset In Education: How Grit Helps Students Persist In The Face Of Adversity

Students who value effort are said to have a growth mindset. They perceive ability as a malleable skill. Those who think intelligence is inherent and unchangeable exert less effort to succeed and have a fixed mindset (permanent capacity). Students who persevere when faced with challenges and adversity seem to have what Duckworth calls grit. This is the idea behind a growth mindset in learning (Dweck, 1999, 2007, 2010; Duckworth, 2007). Vandewalle (2012) found, "When one holds a fixed mindset, that initial information becomes an anchor that impedes the likelihood of engaging in counterfactual thinking" (p 304). It also seems that goal orientation alone is not enough to predict learning. De Meuse, Guangrong, and Hallenbeck (2010) did not find evidence in the literature of a statistically significant relationship between learning goal orientation and learning. Duckworth and Eskreis-Winkler (2013) have further demonstrated, "In our cross-sectional analyses, grit increases monotonically throughout adulthood. One possibility is that people have a growing appreciation of the efficacy of effort as they age." (p.174-181)

Dweck's theory may hold promise for those who struggle, especially in the online college environment. The low rates of retention may, in part, be due to having a fixed mindset and lack of grit. In earlier research, Peterson and Seligman (1984) found that certain associations (positive or negative) are made when faced with challenges and people act on those ideas in various ways, expecting the same results. Chiu et al. (1997) concluded that when those with a fixed mindset are asked to determine future behavior based on specific situations, they perceive subsequent behavior based on past experiences and are not able to see change. This is in keeping with Nolen-Hoeksema, Girgus, & Seligman's (1986) theoretical stance on learned helplessness, learned optimism and causal attributions or explanatory style. Dweck further asserts, "Individuals with a fixed mindset believe that their intelligence is simply an inborn trait - they have a certain amount and that's that. In contrast, individuals with a growth mindset believe that they can develop their intelligence over time" (2010, p. 16).

Duckworth and Dweck worked together to better understand why some students succeed at persisting, in order to reach academic goals, and others give up. Duckworth states, "Grit is not just having resilience in the face of failure, but also having deep commitments that you remain loyal to over many years." (Perkins-Gough, D., 2013) Duckworth conducted studies to determine what grit is and how it affects perseverance and resilience. In her seminal study on grit, she found that cadets at West Point were able to reach their goals based on grit, more than other characteristics. Duckworth, Peterson, Matthews, and Kelly (2007) "... introduced the construct of *grit*, defined as trait-level perseverance and passion for long-term goals, and showed that grit predicted achievement in challenging domains over and beyond measures of talent" (Duckworth & Quinn, 2009, p. 166).

Fixed And Growth Mindset

Stanford psychologist and researcher, Dweck, has elaborated on what and how a fixed mindset contributes to a lack of learning and success (add several). Dweck states,

In my research in collaboration with my graduate students, we have shown that what students believe about their brains -- whether they see their intelligence as something that's fixed or something that can grow and change -- has profound effects on their motivation, learning, and school achievement" (2006, retrieved from <http://www.nais.org/Magazines-Newsletters/ISMagazine/Pages/Brainology.aspx>).

*Often, when children stop working in school, parents deal with this by reassuring their children how smart they are. We can now see that this simply fans the flames. It confirms the fixed **mindset** and makes kids all the more certain that they don't want to try something difficult -- something that could lose them their parents' high regard. (113)*

Grit

In the online college environment, students often give up trying and drop out; sometimes without warning. In order to increase retention, help students persist when challenges arise, and increase learning, faculty may be in a position to create an environment where a growth mindset and grit are fostered. Faculty can help students develop grit and a growth mindset to increase their chances of reaching long-term goals, by internalizing the motivation to persist (Duckworth, Peterson, Matthews, & Kelly, 2007, p 1089). The Grit scale was developed to measure the characteristics of grit. The scale can be used to help educators teach students to measure and reflect on their own levels of grit. Educators must create learning environments to help students persist and thrive. Grit is one characteristic that can be developed to help college students change their perception; intelligence is fixed.

Intelligence, IQ, Fixed And Growth Mindset

Academic institutions have relied on intelligence tests and scores to predict achievement, but inborn abilities are not the only factors that account for learning and success. The focus on testing in many universities can undermine both creativity and grit. Dweck (2010) created a growth mindset workshop for seventh graders and randomly assigned participants to one of two groups. One group was asked to read an article focusing on the ability to improve intelligence like a muscle and the other group was deemed the growth mindset cohort and seemed to respond quite favorably to the information. Students must develop those psychological qualities of grit and tenacity and internalize a mindset that includes persevering, and universities are in a position to help. It appears that when teachers teach students how to persist, a growth mindset develops, thus improving grit to overcome any challenges.

CONCLUSION

The growth mindset can be taught to faculty, students and parents. Growth mindset is changing a student's thinking that intelligence level is not a fixed number and can change. Grit in education is how one can achieve long-term goals by overcoming obstacles and challenges. Duckworth and Dweck collaborated, conducting studies to determine how a fixed belief that failure is permanent could prevent students from academic success. Duckworth concluded that having a "growth mindset" could develop grit. Identifying explanatory style using the Grit assessment is one way to determine where students can put their efforts to learn to persist in the face of academic challenges. Faculty should not focus on making just good grades, but how to challenge that person and teach them to create solutions. In addition, teaching a growth mindset and grit facilitates long-term goals and how to achieve them.

AUTHOR INFORMATION

Aaron Hochanadel is a full-time faculty member in the School of Business and Management at Kaplan University. He also serves as a course lead for the class AB299: Associates Capstone in Management. Research interests are education and technology. E-mail: ahochanadel@kaplan.edu.

Dora CD Finamore is a faculty member at Kaplan University, Northcentral University, and The University of Phoenix. She also serves as curriculum expert in positive psychology. Research interests are education and learning, positive psychology, and child psychology/play therapy. Her recent publications include refereed journals, professional publications, books, and conference presentations focused on learning and motivation, resilience, and leadership. She completed a fellowship in positive psychology and leadership. E-mail: dfinamore@kaplan.edu.

REFERENCES

1. Blackwell, L., Trzesniewski, K. H., & Dweck, C. S. (2007). *Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention.* *Child Development, 78* (1), 246-263.
2. De Meuse, K. P., Guangrong, D., & Hallenbeck, G. S. (2010). Learning agility: A construct whose time has come. *Consulting Psychology Journal, 62*, 119-130.
3. Duckworth, A. (2007). Grit: Perseverance and Passion for Long-Term Goals. *Journal Of Personality & Social Psychology, 92*(6), 1087.
4. Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology, 92*, 1087–1101.
5. Duckworth, A., & Quinn, P. D. (2009). Development and Validation of the Short Grit Scale (Grit-S). *Journal Of Personality Assessment, 91*(2), 166-174. doi:10.1080/00223890802634290.
6. Duckworth, A., Quinn, P. D., Lynam, D. R., Loeber, R., & Stouthamer-Loeber, M. (2011). Role of test motivation in intelligence testing. *Proceedings Of The National Academy Of Sciences Of The United States Of America, 108*(19), 7716-7720. doi:10.1073/pnas.1018601108.
7. Duckworth. (2013, April). The key to success? Grit [Video File]. Retrieved from http://www.ted.com/talks/angela_lee_duckworth_the_key_to_success_grit#t-357357.
8. Duckworth, A., & Eskreis-Winkler, L. (2013). Grit. *Observer, 26*, (4).
9. Dweck, C. S. (1999). *Self-theories: Their role in motivation, personality, and development.* Philadelphia: Psychology Press.
10. Dweck, C. S. (2007). *The perils and promises of praise.* *Educational Leadership, 65*(2), 34-39.
11. Dweck, C. S. (2007, January 12). The Growth Mindset. Retrieved May 13, 2014, from <http://www.mindsetworks.com/webnav/whatismindset.aspx>.
12. Dweck, C. S. (2008). Brainology transforming students' motivation to learn. *Independent School, 67*(2), 110-119.
13. Dweck, C. S. (2009). Can we make our students smarter? *Education Canada, 49*(4), 56.
14. Dweck, C. S. (2010). Even geniuses work hard. *Educational Leadership, 68*(1), 16.
15. Dweck, C. S. (2010). Mind sets and equitable education. *Principal Leadership, Jan, 10*, (5), 26.
16. *Frontiers in Psychology* [Front Psychol]. (2014, February 03); Vol. 5, pp. 36. *Date of Electronic Publication: 20140203 (Print Publication: 2014)*.
17. Harvard Graduate School of Education. (2011). 'Pathways to Prosperity: Meeting the challenge of preparing young Americans for the 21st century', [online]. http://www.gse.harvard.edu/news_events/features/2011/Pathways%5Fto%5FProsperity%5FFeb2011.pdf [Accessed May 2, 2014].
18. Nolen-Hoeksema, S., Girgus, J. S., & Seligman, M. E. (1986). Learned helplessness in children: A longitudinal study of depression, achievement, and explanatory style. *Journal Of Personality And Social Psychology, 51*(2), 435-442. doi:10.1037/0022-3514.51.2.435.
19. Perkins-Gough, D. (2013). The Significance of GRIT A Conversation with Angela Lee Duckworth. *Educational Leadership, 71*(1), 14-20.
20. Peterson, C., & Seligman, M. E. P. (1984). Causal attribution as risk factor for depression: Theory and research. *Psychological Review, 91* 347-374.
21. Vandewalle, D. (2012). A Growth and Fixed Mindset Exposition of the Value of Conceptual Clarity. *Industrial & Organizational Psychology, 5*(3), 301-305. doi:10.1111/j.1754-9434.2012.01450.x.
22. Winkler-Eskreis, L., Shulman, E. P., Beal, S., & Duckworth, A. (2014, February). The Grit effect: predicting retention in the military, the workplace, school, and marriage. *Frontiers in Psychology.* Doi: 10.3389/fpsyg.2014.00036.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Expository Essay RUBRIC

Course: EASL69020 EAP Academic Reading, Writing and Vocabulary

Criteria	Exceeds expectations 10 points	High at level 8 points	At level 7 points	Developing 6 points	Poor /Not achieved 2 points	Criterion Score
Overall effectiveness	Effective and eloquent expository writing, with excellent unity and coherence. Covers the topic, meets the required length and follows a logical division of ideas. Two well selected main points, developed with interesting support.	Effective and eloquent expository writing, with good unity and coherence. Covers the topic, meets the required length and follows a logical division of ideas. Two main points, developed with sufficient and relevant support.	Effective and expository writing, with average unity and coherence. Covers the topic, meets the required length and follows a logical division of ideas. One or two main points developed with sufficient support.	Some features of expository writing; some first person/subjective writing may have been used. Inadequate unity and/or coherence. Mostly covers the topic and may be under the required length. One or two main points with insufficient and/or irrelevant support.	Little to no expository writing features. Topic is incompletely covered and essay is under the required length. Inadequate register – first person and/or informal writing. Unclear/insufficient support.	/ 10

Criteria	Exceeds expectations 10 points	High at level 8 points	At level 7 points	Developing 6 points	Poor /Not achieved 2 points	Criterion Score
Content - Introduction and thesis statement	Very strong hook - interesting funnel or attention getting introduction. Complete thesis (topic, 1-2 main points); error-free complex sentence.	Strong hook - interesting funnel or attention getting introduction. Complete thesis (topic, 1-2 main points); error-free complex sentence.	Funnel or attention getting introduction was used adequately. Complete thesis statement in a complex sentence.	Weak or incomplete hook - general, simplistic information or 2nd person questions. Incomplete thesis - the topic, or one/two main points are missing. Thesis is a simple sentence or contains sentence structure errors.	Incomplete or missing hook - general, simplistic information announcement of the topic. Incomplete thesis - the topic, or one/two main points are missing. Thesis is missing / incomplete or incorrect sentence.	/ 10

Criteria	Exceeds expectations 10 points	High at level 8 points	At level 7 points	Developing 6 points	Poor /Not achieved 2 points	Criterion Score
Content - Body paragraphs	Clear topic sentence includes the main point and a controlling idea. Strong support and eloquent analysis of the evidence. 5-7 complete sentences. Sufficient and varied transitions.	Clear topic sentence includes the main point and a controlling idea. Strong support and eloquent analysis of the evidence. 5-7 complete sentences. Sufficient and varied transitions.	Topic sentence includes the main point and a controlling idea. Sufficient support and some analysis of evidence. 5 complete sentences. Transitions were used.	Incomplete or unclear topic sentence – the main point or the controlling idea may be missing. Under-developed support and little to no analysis of evidence. 4 sentences or less. Transitions missing or used incorrectly.	Missing or incomplete topic sentence – the main point or the controlling idea are missing. Under-developed support and no analysis of evidence. 3 sentences or less. Transitions missing or used incorrectly.	/ 10

Criteria	Exceeds expectations 10 points	High at level 8 points	At level 7 points	Developing 6 points	Poor /Not achieved 2 points	Criterion Score
Content - Conclusion	Strong restatement of the thesis in the light of the main points presented. Strong and interesting final remarks - relevant suggestion/prediction/solution/call to action.	Complete restatement of the thesis in the light of the main points presented. Interesting final remarks - relevant suggestion/prediction/solution/call to action.	Thesis has been restated, but paraphrase may be too similar to the thesis. Sufficient final remarks -suggestion/prediction/solution/call to action was used.	Inadequate or incomplete restatement of thesis. Insufficient or irrelevant final remarks - new, irrelevant points may have been introduced.	No restatement of thesis. Insufficient final remarks - irrelevant points or repeated ideas from the introduction may have been introduced.	/ 10
Grammar and sentence structure	No grammar errors. Variety of sentence structures (simple, compound, complex) with no errors (fragments, run-ons, comma splices).	2 or less grammar errors. Variety of sentence structures (simple, compound, complex) with no errors (fragments, run-ons, comma splices).	Less than 4 grammar errors. Variety of sentence structures (simple, compound, complex) with less than 2 errors (fragments, run-ons, comma splices).	5 to 8 grammar errors. unbalanced combination sentence structures - more than half the sentences are simple. 3 to 5 sentence structure errors (fragments, run-ons, comma splices).	Multiple grammar errors. Mostly simple sentences and/or multiple sentence structure errors (fragments, run-ons, comma splices).	/ 10

Criteria	Exceeds expectations 10 points	High at level 8 points	At level 7 points	Developing 6 points	Poor /Not achieved 2 points	Criterion Score
Vocabulary	Variety of academic vocabulary; no informal words. No word form or word choice errors. No redundant words or ideas. Objective, 3rd person writing was used - no imperatives, 1st or 2nd person structures.	Variety of academic vocabulary; no informal words. 2 or less word form errors. 2 or less word choice errors. One or no redundant words or ideas. Objective, 3rd person writing was used; 1 or no imperatives, 1st or 2nd person structures.	Mostly academic vocabulary; 1-2 informal words may have been used. 3 or less word form errors. 3 or less word choice errors. 2 or less redundant words or ideas. Objective, 3rd person writing was used; 2 or less imperatives, 1st or 2nd person structures.	Insufficient academic vocabulary; more than 3 informal words/phrases. 4 or more word form errors. 4 to 6 word choice errors. Inadequate register: 4 to 6 imperatives, 1st or 2nd person structures.	Inadequate vocabulary; mostly informal or general/simplistic words or phrases. Multiple (more than 6) word form, word choice and register errors.	/ 10

Criteria	Exceeds expectations 5 points	High at level 4 points	At level 3.5 points	Developing 3 points	Poor /Not achieved 1 point	Criterion Score
----------	----------------------------------	---------------------------	------------------------	------------------------	-------------------------------	-----------------

Criteria	Exceeds expectations 5 points	High at level 4 points	At level 3.5 points	Developing 3 points	Poor /Not achieved 1 point	Criterion Score
Use of resources and APA citations	At least 3 of the 4 provided readings were used. Relevant and sufficient evidence was correctly paraphrased. All in-text citations were correct.	At least 3 of the 4 provided readings were used. Relevant and sufficient evidence was correctly paraphrased. All in-text citations were correct.	At least 2 of the 4 provided readings were used. Relevant evidence with 1-2 minor errors in paraphrasing. 1-2 minor errors in APA in-text citations.	2 or less of the provided readings were used. Insufficient evidence with errors in paraphrasing and APA in-text citations.	1 or none of the 4 provided readings was used. Insufficient, missing, or incorrectly paraphrased evidence. APA in-text citations were either used incorrectly or not used.	/ 5

Criteria	Exceeds expectations 5 points	High at level 4 points	At level 3.5 points	Developing 3 points	Poor /Not achieved 1 point	Criterion Score
Format and mechanics (spelling, capitalization, punctuation)	Name and student number top left; title top centre. 4 indented paragraphs, double-spaced, no blank lines. Required font type and size. No spelling, capitalization, punctuation, or spacing errors.	Name and student number top left; title top centre. 4 indented paragraphs, double-spaced, no blank lines. Required font type and size. No spelling, capitalization, punctuation, or spacing errors.	Name and student number top left; title top centre. 3-4 indented paragraphs, double-spaced, no blank lines. Required font type and size. 3 or less spelling, capitalization, punctuation, or spacing errors.	Top page element(s) may be missing or incorrectly aligned. Paragraphs not indented and/or blank lines. 4-6 spelling, capitalization, punctuation, or spacing errors.	Top page element(s) missing. Paragraphs not indented and/or blank lines. 7 or more spelling, capitalization, punctuation, or spacing errors.	/ 5

Total	/ 70
-------	------

Overall Score

Exceeds expectations 63 points minimum	High at level 56 points minimum	At level/Meets expectations 49 points minimum	Developing 42 points minimum	Poor/Not achieved 14 points minimum
--	---	---	--	---