

Improving Student Engagement Despite Lowering Attention Spans in the Classroom

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Abstract

Attention spans have been decreasing throughout society for many years, partially due to the constant increase of technological advances. The average human attention span of eight seconds is particularly concerning to teachers and others in the classroom. It does not seem that the average attention span is ever going to increase, so teachers must implement intentional methods and strategies within their classroom to keep their students' attention. Physical activities, technology and hands-on supports, small group instruction, shorter lessons, making intentional mistakes, flexible seating, and differentiated instruction are all strategies supported by research to improve student engagement within the classroom. Every classroom will respond differently, so teachers will benefit by incorporating the set of methods that work best for their students.

Improving Student Engagement Despite Lowering Attention Spans in the Classroom

In a generation centered around fast-paced life and exponentially developing technology, the shortening of attention spans is not a new issue. This is something that has been happening for decades at an increasingly alarming rate (Getahun, 2022). The current average human attention span of eight seconds is particularly concerning when it comes to teachers and those in the classroom (Georgiou, 2015). It does not seem that the average attention span is ever going to increase, if anything, it is going to continually get worse. What does that mean for teachers? What methods and strategies can they implement into their classroom to best keep their students' attention? How should they alter their lessons to cater to the needs of today's students? Although it may seem like a lost cause, several strategies have been proven by research to better hold the attention of students and help them throughout their education journeys.

Research on Lowering Attention Spans

Before studying data collected on attention spans, the term attention span must be defined. Georgiou (2015) defines attention span as “the duration of time dedicated to a particular task before our mind drifts away from it” (p. 1). Although there are a vast number of causes and combinations of causes that result in lower attention spans and attention deficiencies, attention spans as a whole are almost always directly linked to technology. Since the mid-to-late 1900s, technology and its intelligence have skyrocketed. It has infused its way into daily living and is almost inescapable in today's society – at least in regard to American culture. According to the National Center for Education Statistics (NCES, 2023), “In 2021, some 97 percent of 3- to 18-year-olds had home internet access” (para. 3). This is an increase from 2016 and 2019, where 92% and 95% of the same age group had home internet access, respectively (NCES, 2023). Georgiou (2015) connected this trend in data to the statistics of lowering attention spans by

stating, “The average continuous attention span of Americans focusing on an Internet site in 2013 was eight seconds, a decrease in four seconds from 2000” (p. 1). Another area of technology that has impacted attention spans is television. Researchers suggested that the amount of television intake correlates with attention problems and deficiencies, especially within the first three years of a child’s life. Christakis (2004, as cited in “TV may cut,” 2011) explained that “for each additional daily hour of television that young children watched on average, the risk of subsequently having attentional problems (by age 7) was increased by almost 10...this means that 1- to 3-year-olds who watched eight hours of television a day would have an 80 percent higher risk of attentional problems compared to a child who watched zero hours” (p. 1). In a time when technology use was already on the rise, the COVID-19 pandemic proved to worsen time spent on technology and the impact that had on attention spans in the classroom. It also brought to light this severe underlying issue of lowering attention spans, which had been slowly shifting society over the past few decades.

In March of 2020, when the pandemic resulted in everyone social distancing at their own homes, teachers and school systems had to devise plans to continue learning even at home. This resulted in online learning, through programs such as Zoom, Microsoft Teams, and Google Classroom. Many teachers would meet virtually with their students, and students would spend hours, sometimes even an entire seven-to-eight-hour school day sitting in front of a computer, laptop, tablet, phone, or other digital screen. Whereas students used to spend a majority of the school day interacting in-person with their teachers and classmates and then could come home and use a tablet or watch TV, now students were already spending a minimum of several hours every day on devices. According to a survey conducted by Kapow Primary, “Of 504 primary and early years teachers in schools in England...84% agree that primary children’s attention spans is

‘shorter than ever’ post-Covid, while 69% say they have seen an increase in inattention and daydreaming since young pupils returned after the pandemic” (“Kids’ Attention Spans,” 2023, p. 1). This is a major problem in schools globally, as students are falling below grade-level in core subjects such as reading and writing. This is partially due to distance learning that occurred past March 2020, as students do not have the attention capabilities to focus even harder to now catch up in areas that they have fallen behind (“Kids’ Attention Spans,” 2023, p. 1). The COVID-19 pandemic abruptly brought to light an underlying issue that had been developing across the globe for decades – the attention span crisis in schools.

The Attention Span Crisis

Humans are noticing more and more frequently how difficult it is to pay attention for long periods of time. People pick up their phones an average of 144 times a day, spend time mindlessly scrolling on social media, stare at screens constantly throughout the workday, only to unwind at the end of the night by staring at a TV screen, watching – on average – 2 to 4 hours of their favorite TV show (Kerai, 2023; Stoll, 2023). In an article written by Georgiou (2015), she explained the mindset and struggle of our current society as this:

I have begun to notice that my own behaviours have changed. I often lose my train of thought in the middle of a sentence as I am easily distracted by some other thought. I find it very difficult to not pick up my smartphone and check my emails or social networks. It is often the first thing I do in the morning and the last thing at night. Even though I am educated and know that what I am doing is detrimental to my mental and physical health, I still continue to do it. Sounds a lot like an addiction, doesn't it? A very common addiction. (p. 1)

The attention span crisis is developing out of a global addiction to technology. Even if people are aware of the addiction, like Georgiou (2015) stated, they cannot seem to stop it. The four main reasons that Georgiou (2015) lists for this attention span crisis are: “Our reliance on technological devices, continuous-partial attention, increased stress, and information overload” (p. 3). Technological advances have allowed multitasking to become easier, but they have also caused society to feel more can be accomplished due to multitasking. This connects to the increased stress and information overload, all of which join together to worsen the global attention span crisis. The attention span crisis is concerning for the general population, but it is also highly disconcerting for children who are not yet fully developed and have been born into an already technologically dependent society.

Impact of Attention Spans on Future Skills and Achievements

Although it is nearly impossible to withdraw completely from technology and be unaffected by its impact on lowering attention spans, there is hope for students in this attention span crisis. Students can control their attention span-persistence and strengthen it with the help of their teachers and families. Scientifically, “attention span-persistence is an especially relevant aspect of cognitive or behavioral self-regulation and stems from the executive function processes of attentional or cognitive flexibility, working memory, inhibitory control” (McClelland et al., 2013, para. 3). However, in general, “attention span-persistence refers to selecting and attending to relevant information, such as listening to the teacher, and persisting on a task” (McClelland et al., 2013, para. 3). Attention span-persistence should naturally develop throughout one’s childhood, especially in the preschool years of one’s early childhood. McClelland et al. (2013) collected data on the impact of one’s attention span-persistence in their early childhood on academic achievements, developmental levels, levels of higher education, and even social skills.

McClelland et al. (2013) found that “teacher ratings of attention problems at age 6 significantly predicted math and reading achievement at age 17 after controlling for a number of background variables, including child IQ” (para. 8). They determined a direct correlation between attention struggles and lower academic achievements (McClelland et al., 2013). Although some aspects of attention span-persistence are genetic, it can be encouraged and best developed in children by family members or guardians who monitor their children’s screen time and encourage them to get engaged in activities they enjoy. They can help them build attention span-persistence by staying focused on one task for a predetermined period of time. Overall, McClelland et al. (2013) summarized their research best by saying this:

Together, this research supports the notion that paying attention and persisting on tasks are foundational skills that are critical early in life and continue to positively predict a variety of social and academic outcomes throughout childhood and into adulthood. For example, focusing attention and persisting through difficult tasks is especially important for accomplishing major life goals such as gaining a college degree. (para. 9)

Although attention issues may seem like a minor problem at a young age, if left alone, they will fester and result in major life-altering decisions. By encouraging and developing attention span-persistence in children, families and teachers will help to prevent them from continuing down a very unfavorable path which could result in detrimental effects to their future.

Impact of Social Media Development on Attention Spans

While analyzing strategies to help increase student engagement despite the ever-decreasing attention spans, it is important to study how technology has changed and why it is contributing to this issue. The internet has developed exponentially since the creation of the first network in 1969, which is now what we call the internet (Craig, 2024). Email was created in

1975, and AOL launched its platform in 1989 (Craig, 2024). These changed the way communication occurred and impacted the general public's use of the internet. The first webpage was created in 1991 along with the first webcam, and then in 1996, the first social media platform was established – Six Degrees (Craig, 2024). Since then, social media has transformed through platforms such as MySpace, Facebook, YouTube, Instagram, Pinterest, Snapchat, Vine, and – more recently, TikTok. Up until the creation of Snapchat in 2011, social media platforms did not market or utilize short videos with fast-paced styles. Snapchat changed this with its attention-grabbing 10-second snaps, transforming the way that social media was used (Craig, 2024). This was shown through Vine, a popular social media platform established in 2013, where users would create and post 6-second comical and entertaining videos (Craig, 2024). Although Vine was shut down in 2017, TikTok was created in 2016 and rose to immense popularity and world-wide use in 2018 (Craig, 2024). It became famous for its quick 15-second videos and its personalized content for every individual. Social media platforms such as the ones listed above have increased the amount of information that one can absorb in a short amount of time, and the longer the internet is around, the more that overabundance of information will increase.

The rise of the internet and social media so far has been gradual, but it has exponentially increased over the past 50 years. Society itself has been altered because of the rise of the technology, and it has changed the way humans learn, work, interact, and live. Behaviors have changed, students learn better through different strategies, and interactions with parents are different in today's day and age. Although teachers have to be very flexible and constantly improving and adapting their teaching strategies, students must help take charge of their learning as well. Students are often receiving too much information just by being on a phone or a laptop for a few hours—or even a few minutes—that they can lack engagement when learning in the

classroom. The technological advances that society has made cannot be undone, but the ways that teachers and students react to them can be changed and will affect the future impact that these technological advances have on attention spans. If not, then society will continue to have a handful of worsening problems that are all stemming from this one issue.

Effects of Lowering Attention Spans on Teachers

Lowering attention spans are not only affecting student engagement and participation in school, but they are also affecting teacher drop-out rates. According to Towers and Maguire (2017), “The UK Government statistics indicate nearly a third of teachers who joined the profession in 2010 had left teaching within five years” (para. 1). Although there are a handful of reasons as to why a teacher quits their job and possibly even leaves the education system entirely, statistics have shown a direct correlation between teachers leaving the profession and rising attention problems within students.

As stated earlier, low attention spans and low focus in the classroom typically result in higher behavioral problems within a school or class. According to Harrell et al. (2019), “Disruptive students are frequently cited as a reason for leaving the teaching profession, and severe behavior problems are negatively correlated with plans to remain in teaching” (para. 17). This data was also supported by a survey which discovered “disruptive students (58%) represented the number two reason, after salary, why teachers abandoned the profession” (Harrell et al., 2019, para. 19). Even though low attention spans are not always listed as the main cause for quitting teaching, it is ultimately the issues developing from a global attention span crisis that are causing teachers to quit the education system all over the nation and the world.

Many teachers do not want to deal with students who cannot focus or behave, but countless other teachers simply do not feel equipped to help students stay engaged and assist

them in maintaining good behavior. Redding and Harry (2019) explained this by stating, “Many initially teach in segregated schools that serve high concentrations of severely economically disadvantaged students who these novice teachers may not have been prepared to engage, support, or teach” (p. 205). Although teachers cannot handpick the students placed in their classroom and the specific strengths and weaknesses each student has, they can become equipped to best engage any student that steps into their classroom. By partnering with other school faculty, the students, and the students’ families, teachers can feel more confident in the future of their classroom and their students’ engagement and overall learning experiences.

Research-Based Predictions on the Future of Attention Spans If No Remediation Occurs

Although remediation strategies offer hope for the continuation of engaging and educating students, attention spans can and will continue to shorten if strategies are not implemented and changes do not occur. According to a study conducted by Microsoft and released by TIM, attention spans went from an average of twelve seconds in 2000 to an average of eight seconds in 2015 (Getahun, 2022). If factors such as technology development and the impact of social media on the decreasing level of attention spans continue at this rate, then the average human attention span will drop to four seconds by 2030. This statistic does not mean that humans can only focus for eight seconds currently before changing tasks, but it does mean that humans will, on average, spend only eight seconds on a webpage before looking at something else (Bradbury, 2016). For teachers, this means that as students continue to struggle more with focusing, they will increasingly struggle with keeping their class engaged. In order to combat the lowering levels of attention spans, students, families, teachers, and all school staff members must come together to develop and implement remediation steps that will help students to stay more engaged and focused.

School-Wide Remediation Steps for Lowering Attention Spans

It is important for schools to discuss as a body of staff and faculty members what their remediation goals are, and what they want good student engagement to look like throughout their classrooms. If schools do not decide what they want student engagement to become, then they will be unable to effectively implement it. Every classroom will look a little different and each teacher will have different strategies that will work better for their group of students and their specific teaching style, so it is important that schools set a solid foundation of what the engagement outcomes should be no matter the remediation steps implemented. By developing these plans with the entire school team, administration will also be able to better understand each classroom and can have more productive conversations when meeting with teachers periodically throughout the school year. They can discuss the specific strategies each teacher is implementing, what is working well from the strategy, and what could be improved. Rather than struggling and becoming frustrated independently, teachers and their administration can join together in this fight for student engagement and will be better equipped to help each other throughout this process. During monthly staff meetings, teachers and administration can confer and continue to develop and alter strategies to continue increasing student engagement levels. Schools can also work on increasing student engagement by hosting professional development workshops for teachers. These workshops allow teachers to learn about new strategies, foster thoughtful discussions, and obtain new tools to implement within their classrooms. By having school staff work together and assist students in developing their engagement while at school, they will feel more knowledgeable and capable of helping parents increase the engagement of their students while they are at home.

Family Involvement in Remediation for Lowering Attention Spans

Although families are not with students while they are at school, it is vital for them to get involved in their educational journey at home and to help their students increase their attention spans and engagement. As stated above, devices and technology are highly prevalent at home. Parents and families should not feel they have to remove technology from their homes, but they should be mindful of when, how, and how often or frequently they are used. Having boundaries with devices will not only help students to maintain their focus better, it will also help them to create good time management habits and develop a responsible attitude towards life. The American Academy of Child & Adolescent Psychiatry (AACAP, 2020) recommends screen time limits to be as so: “For children 2-5, limit non-educational screen time to about 1 hour per weekday and 3 hours on the weekend days” (para. 4). For children older than 5, they recommend setting appropriate limits. One example of this would be limiting screentime use before bed and while eating (AACAP, 2020). Problems from too much screen time have been studied for decades, and so far, there has not been a clear solution, answer, or response to the issue at hand. Studies showed an overabundance of time spent watching television resulted in “lower performance on simple imitation tasks, language learning, and emotional learning for children aged 2 years and younger, with imprecise long-term educational outcomes for children under 6 years, and poor longer-term educational achievement” (Hastie, 2022, para. 4). Although there is not one perfect solution to this issue, families should set limits on technology use to best support the development and academic achievements of their students. By doing this, they will assist teachers greatly in developing student engagement and helping them learn.

The Importance of Engagement

Engagement is a topic brought up in many different avenues of life, but particularly in the education system. If students are unable to stay engaged at school, then they will most likely struggle and will gradually lack more and more vital skills that they should be learning. Rimm-Kaufman et al. (2015) describes engagement as “the glue, or mediator, that links important context – home, school, peers, and community – to students and, in turn, to outcomes of interest” (p. 171). It is a key part of existence that is not only important for students to maintain at school, but in every area of their lives. Teachers should do their best to assist their students in developing and sustaining engagement, and students should do their best to aid their teachers throughout this educational endeavor. According to Rimm-Kaufman et al. (2015), “Existing research establishes that engagement is critical for learning and that engagement forecasts school success. Students who stay on task, attend to learning goals, and participate actively in the learning experience show better academic achievement in elementary school” (p. 171). Every aspect of engagement will help students to achieve academic success and develop positive characteristics that will help them throughout the course of their lives. Engagement can be developed at home or in other areas of life, but one of the most important places for engagement to occur and be advanced is none other than the core place of learning—the classroom.

Different Types of Engagement

Several different kinds of engagement can be found within the classroom. The four main engagement types are “behavioral, cognitive, emotional, and social” (Rimm-Kaufman et al., 2015, p. 172). All of these are important in the classroom for various reasons, and each of them impact the depth of a student’s education and overall understanding. The first type of engagement, behavioral, encompasses having good behavior in the classroom, focusing on the

teacher, and showing active cooperation and participation in class activities (Rimm-Kaufman et al., 2015). The second engagement type is cognitive engagement. When students are cognitively engaged, they are putting forth effort to learn and to complete what they are being asked to do (Rimm-Kaufman et al., 2015). The next engagement type is emotional engagement, which consists of students liking what they are learning, having a connection to the topic being studied or the concept being learned, and finding pleasure in the learning process (Rimm-Kaufman et al., 2015). Emotional engagement is important for education because if students do not enjoy what they are learning, they are most likely not going to stay focused and will not want to pay attention. The last of these structural engagement types is social engagement. Social engagement is not as centered around the content as the other engagement types, but instead it focuses on how students are interacting with their peers in regard to the content and instructional activities (Rimm-Kaufman et al., 2015). Teachers should learn what these different engagement types are in order to identify them in the classroom. By understanding what engagement types are lacking and in which ways students are effortlessly engaging at school, teachers can decipher what strategies to implement in their classrooms to best support student engagement.

Strategies to Increase Student Engagement within the Classroom

Physical Activities

One strategy found to keep students focused during instructional time is to incorporate physical activities such as physical education and recess throughout the school day (Ozkal, 2020). One reason why physical activity during the school day is important is because students spend a large amount of time sitting in their classroom each day, so it can become uninteresting over time. Allowing students to leave that space and play outside or run around in the gym will provide them an opportunity to focus on a different task and environment. If students are still

struggling to pay attention at certain points throughout the day, teachers and researchers have found that playing a short video where students can stand up, move around, and follow along to movements shown on the screen, helps students to refocus on a lesson once the video is done (Harris et al., 2018). These can be found on kid-safe sites such as GoNoodle and YouTube Kids. These videos also do not have to be long, as even two to five minutes of that has been shown to highly increase the focus levels of students. Physical activity during the school day is also beneficial to students as children have a “recommended daily amount of moderate-to-vigorous physical activity” that should be met each day for the benefit of their growth (Harris et al., 2018, para. 1). When students sit at a desk inside the same classroom all day, they will lack engagement with the tasks at hand, but they will also be lacking physical engagement as well. Recess, physical education, and movement videos all provide students with an opportunity to physically engage and exercise, both of which are positive for everyone, but especially for developing children (Ozkal, 2020). Implementing physical activities throughout the school day also gives students time to socialize with each other without being reprimanded. Social interactions are a large part of child development, so it is a vital part of the school day in some respects (Ozkal, 2020). By allowing students to socialize while participating in physical activity, they will not be as likely to try and socialize and distract others during a lesson. This will ultimately help them to stay more engaged and focused during the instructional parts of the day.

Technology and Hands-On Supports

Another strategy shown to improve student engagement during class is incorporating the use of technology. Technology is such a large part of today’s culture, and students often use it daily. Although it can be a distraction and is one of the reasons why attention spans are so short today, when implemented properly in a classroom, it can increase student engagement

immensely. One example of technology in particular that has risen in popularity among teachers within the past few years is Nearpod. If classrooms are provided with devices for each student, then software with learning tools such as Nearpod would be a benefit to those classes. It keeps students more engaged by providing them with independent work on their own devices, while still allowing teachers to control what is being shared on each student's screen. Research has shown that students are more engaged with a lesson when it is hands-on, so having scheduled moments for technology to be used by each student are important for teachers wanting to effectively instruct their class (Abdullah et al., 2022). Teachers can control what is shown on the screens of their students with programs such as Nearpod, so this allows teachers to make sure that the technology is not becoming a distraction to their class and hindering their learning rather than helping it. They can freeze screens, change what is being shown, and see each student's response to questions presented. Research has also shown that students are more engaged and motivated to learn while using technological tools such as Nearpod where they are able to see their peers' scores, as the competitive aspect compels them to work hard in order to have the highest score of their class (Abdullah et al., 2022). Time will have to be scheduled into the school day to teach students how to properly use technological tools and go over particular class rules with the site, but the outcome of raised student engagement levels supports the evidence that hands-on technology within a classroom is important for keeping student attention.

Small Group Instruction

Another method to better hold the attention of students during school is balancing large group instruction with small group instruction. Although a class cannot only consist of small group instruction, it is crucial that teachers implement it in some allotment throughout each week. Small group instruction is more engaging to students as they are able to participate more

with the teacher since there are typically 3-6 students rather than the average 18-22 students in an entire class (Ganske & Jocius, 2013). This time is also often filled with student-generated questions and provides students the opportunity to have more responsibility and control over their education (Ganske & Jocius, 2013). Small group instruction is also catered to the needs of a smaller group of students, rather than generalized instruction for an entire class of diverse learners. Each student has different learning needs and is on a different level, so incorporating small group instruction allows a teacher to better meet the needs of each student. Teachers can use different methods to personalize each small group and best engage the group of students they are meeting with during that time. By understanding which learning methods work best for every student in a class and what level each student is at, teachers can divide up their small groups accordingly. Because teachers are working with a smaller group of students, they are also able to better monitor each student and make sure they stay on task throughout the instructional time. The important part of small group instruction is making sure that the rest of the class has a predetermined assignment or task to be accomplishing while the teacher is working with a select group of students (Ganske & Jocius, 2013). If not, this time can result in more distractions and students being off task. The rest of the class should be within the teacher's sight so they can monitor their activity while focusing most of their attention on their small group. Overall, one of the most important parts of implementing small groups to increase engagement is the increased conversation between teachers and students. Small groups increase student engagement by allowing them to participate more and ask more detailed questions to their teacher. As Goldenberg (1992) stated, "The conversation is instructional, and the instruction is conversational" (p. 319). Rather than sitting and listening for most of the day, small groups allow

students to educationally converse with their teacher and stay more engaged on the subject at hand.

Shorter Lesson Times

One strategy studied by researchers and teachers for holding student attention has mixed results. This is the strategy of shorter lesson times. There is a consensus among many researchers that student attention spans decrease rapidly after the 10–15-minute mark of a lesson (Bradbury, 2016). However, other researchers have analyzed that decrease in attention does not result from the time length, but from the teaching methods and format (Bradbury, 2016). Although the teaching methods and format of a lesson are very important to holding the attention of students, the length of a lesson also seems to affect the engagement levels of students to some extent. Studies over the years have shown that during the first ten minutes of a lesson, attention spans will slowly increase (Bradbury, 2016; McKeachie, 1994). After those initial ten minutes, attention spans will slowly decrease and fluctuate throughout the rest of the lesson (Bradbury, 2016). This does not mean that every lesson must be stopped after 10-15 minutes, but teachers should be mindful of the methods through which they are presenting information, especially during longer lessons and chunks of instructional time. Having “brain breaks” where students are allowed to talk to their friends for a few minutes, go to the restroom, or stand up and move around the classroom, can be very effective in refocusing a distracted class (Nafisa et al., 2020). Differentiating a lesson can also help to retain student focus during instruction. Students will be more engaged with a lesson that is longer but varies and shifts to meet the needs of different learners than one that is stagnant. Overall, teachers can—and probably will—have lessons that go past the 10-15-minute mark, so they should be mindful of the methods they are incorporating with their class and intentionally use strategies that are beneficial to their class.

Making Intentional Mistakes

A simple but effective strategy that researchers Philip and Bennett (2021) analyzed is making intentional and deliberate mistakes within a lesson or lecture to increase student engagement and attention. One way that the researchers measured this was by teaching a concept, emphasizing important terms in bold, and then displaying statements to the students with the bolded words switched or altered and asking students if the statements shown are true (Philip & Bennett, 2021). This helps engage students while in class because asking them a question “is intended to bring their attention and consciousness back to the concept” (Philip & Bennett, 2021, p. 197). This will also help students to retain information because if students are unable to decipher the mistake, the teacher can have an open discussion with the class, explaining why it is incorrect and what is true. Students were also shown to be more engaged through the class participation. By providing students an opportunity to speak and explain their thoughts and ideas, they are able to gain more confidence by conversing with the teacher and having them either support their statements, or by having them explain what the correct response to the question should be.

Seating Placement and Flexible Seating

One strategy that has varying results like that of the shorter lesson times strategy is changing classroom seating assignments throughout the school year. Students can become stagnant staying in the same area surrounded by the same people for an entire year, so it is important for teachers to adjust and shift their classroom seats occasionally. This has contrasting results because some students may become more distracted and less engaged depending on who they are placed next to, and where in the classroom they are seated (Gao et al., 2022). For this strategy to be most effective, teachers should have a good understanding of their students and

know who they work best with, who they will not get distracted talking to, and where in the classroom they are best able to learn. This also ties into flexible seating, as some students learn better seated in something other than a traditional desk, such as on an exercise ball, bean bag, or stool. Cole et al. (2021) described the importance of flexible seating as followed:

The students in the classroom need to be comfortable in the place they are learning which will lead to students being more engaged. The students will then be more attentive and will be more likely to participate in discussions that create a more meaningful, impactful learning experience. (p. 62)

Flexible seating is a strategy that takes a significant amount of investment up front, but if implemented properly, can be very beneficial in the long run. Many schools will have funds in the budget for teachers to purchase flexible seating or will go ahead and purchase flexible seating for every teacher themselves, but sometimes teachers will be required to buy flexible seating with their own money. Even if that is the case, teachers have many opportunities available to them to fundraise for their classroom and have the public get involved in supporting their students as well. If they are unable to successfully fundraise money, many flexible seating options can be found online or in-stores for teachers to purchase at reasonable prices. Exercise balls, floor cushions, and stools can all be found at various stores for prices as low as \$5 to \$15. Flexible seating is a strategy that can gradually be implemented as teachers build up their collection of different seating options and can be fully implemented when they have enough options for every student to choose a flexible seat. If teachers desire to still keep traditional desks in their classroom, then they can incorporate flexible seating by having a designated corner or area of their classroom where students are able to go during indicated times to work on assignments and learn in a seat other than their desk (Alzahrani, 2021). This strategy can be

implemented in a range of ways, but no matter the degree to which a teacher adopts flexible seating within their classroom, it will provide students with an opportunity to stay more engaged through a new and more comfortable seating environment.

Differentiated Instruction

Implementing differentiated instruction is a topic that is highly discussed within the education system, but it is a vital strategy when attempting to increase engagement for students of any grade level. According to Sousa and Tomlinson (2018), “Differentiation stems from the research-based perspective that students will engage more fully with learning and learn more robustly when teachers proactively plan with their differences – as well as their similarities – in mind” (p. 27). Differentiation encompasses incorporating different strategies and methods to meet the needs of every learner when teaching one lesson, topic, or unit. Although this may take extra preparation time for a teacher, the heart of differentiated instruction is very simple: “It is simply teaching mindfully and with the intent to support the success of each human being for whom we accept professional responsibility” (Sousa & Tomlinson, 2018, p. 29). If teachers truly care for their students, then they should desire to differentiate their instruction and help every child to succeed. Differentiated instruction can only be implemented if teachers know their students and their unique learning styles and needs, so it is important that teachers develop an understanding of how each of their students learns best, and the areas in which each student struggles. Once teachers understand their students’ learning needs, they can begin differentiating their teaching and making the content more meaningful and personalized for each student. When studying the impact of differentiated instruction on student attention and engagement, Sousa and Tomlinson (2018) found that, “Because the brain is constantly searching for meaning, students will give their attention to what they find personally meaningful. And the more meaningful it is,

the more engaged they will become” (p. 38). Some students may enjoy learning and it may not take much for them to find the content meaningful, but other students may need more support to develop and further as a learner. Sousa and Tomlinson (2018) compiled a collection of strategies designed to differentiated classrooms for a wide range of learners, and they did this to assist teachers in increasing classroom engagement and to show them that there are many simple yet effective strategies for differentiation. One example of differentiated instruction is allowing students to present information they have learned in different ways (Sousa & Tomlinson, 2018). Although there are some instances where a school or district may require a test be given as an assessment, there are many opportunities within the classroom for students to demonstrate knowledge through a variety of forms. These include posters, speeches, art models, dioramas, skits, PowerPoints, and discussions – just to name a few. Some students may hate writing and will struggle to focus or find motivation to complete an essay assessment. However, that same student may thrive when given the opportunity to discuss the topic verbally. Overall, the key to having effective differentiated instruction and increasing student engagement is first and foremost, knowing the students in a given class. By knowing their interests, learning styles and needs, and individual personalities, teachers will be able to best structure their classroom to assist them and help them stay engaged.

Practically Implementing Strategies in the Classroom

Each class and every student will respond differently to each attention-enhancing strategy, but there are two overarching strategies teachers should utilize to best increase engagement and help their students. Maxim (2018) discusses these two important strategies for the classroom in regard to respecting various cultures. These strategies are also very helpful for respecting this new generation of students and gaining and holding their attention. The first is to

“know the students you teach”—learn what is important to your students, their family dynamic, their learning styles and needs, their culture, and what they like to do for fun (Maxim, 2018, p. 407). By knowing the students you’re teaching and using numerous strategies and various resources, teachers will be setting up their classroom for the best chance at success and great academic growth. The second strategy is to “use numerous and varied instructional resources”—implement different strategies, try new things and see what works, meet the needs of various learning styles and needs, learn from colleagues and others, and use various manipulatives (Maxim, 2018, p. 407). The majority of these strategies will take more preparation from the teacher, and it is important that teachers maintain balance throughout their lives and within the classroom. Although it is important to implement strategies that will best keep students engaged, teachers should be wary of overworking themselves as it can lead to burnout. It will take teachers time to develop a system that runs smoothly and works best for their classroom, and that system might change many different times throughout one school year. They must also come to the realization that they cannot implement every one of their favorite strategies at all times in the classroom, and that they should find balance between strategies that work best for their students and strategies that work best for them as teachers. There should be some overlap between the two, but there will ultimately also be differences between a teacher’s favorite strategies and the students’ favorite ways to learn. Teachers will have to learn how to find a healthy balance between the two, especially for their own sake. Many teachers do not want to implement new strategies into their classroom because of the extra time and work it requires, which is a valid concern. However, these strategies are beneficial to the teacher as well as their students. With more engaged students, teachers will have less behavior problems, better academic results, and better relationships with their students. It is important for teachers to maintain control of the

classroom and establish a comfortable balance between strategies that best help their students and methods that get information across in the easiest way. That balance will help both students and teachers to win – neither will feel lacking or overcompensated in the classroom.

Conclusion

In conclusion, the topic of lowering attention spans and the global attention span crisis is important and should be discussed within every content area, but especially within education. With the global average attention span being eight seconds—lower than that of a goldfish—there is a major issue at hand for teachers. How are they to hold the attention of a classroom with an average size of 15-20 students when they are unable to fully focus for much longer than eight seconds? By understanding what attention spans are, different types of engagement, technology's role in the lowering attention spans, and how everyone in relation to a student can become involved in the development of their attention and engagement, then teachers can begin experimenting with different strategies in their classroom that are meant to best help their students stay engaged for longer periods of time. The strategies proven to best increase student engagement in the classroom include incorporating physical activities, technology and hands-on supports, small group learning, shorter lesson times, making intentional mistakes as a teacher, flexible seating and adjusted classroom seating throughout the school year, and differentiated instruction. A key notion that teachers should have when researching and implementing these strategies is understanding their students, their backgrounds, their learning styles and needs, and how they interact in a classroom setting. By truly knowing and caring for their students, teachers will best be able to assist them in their learning journeys and create an encouraging space for them to grow in their academics. It is important for students to feel loved and cared for by their teacher, but also to show their teachers respect by helping them develop their personal

engagement skills and fighting to keep focused while learning. Parents can help their students with this at home by monitoring and limiting technology use, as that has been proven to be one of the root causes of the lowering human attention span over the past several decades. Although technology should not be abandoned completely, it is important to analyze its use in the classroom and in daily living, and then decipher when and how it can be best utilized to help students grow, develop, and stay engaged. Future research includes studying the use of different technological devices within the classroom and how they hinder or help a student's engagement and overall learning achievements. Research could also analyze the amount of time technology should be utilized in the classroom, and if any of these strategies have a differing impact depending on the number of students in a classroom. Educators are the key component in this fight for a child's engagement because they see students more than even their families do most days, and they are ultimately the ones who control the learning environment. They bridge the instructional gap between families and children by helping both parties do what is best for the students – work on improving their engagement despite the continually lowering attention spans. This will result in students that are more academically successful, confident, knowledgeable, socially aware, respectable, and persevering. By developing students who have improved engagement, this will cause a ripple-effect throughout society that alters the attention span crisis for generations to come.

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