## **REFEREED ARTICLE**

# Influencing Factors and Potential Solutions for Closing the Achievement Gap in Schools

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# Abstract

The widening achievement gap is a rising concern in schools that requires prompt attention. It is a result of differing opportunities and resources available to families and students. Present day factors, such as COVID-19 and varying instructional strategies, contribute to learning gaps. Socio-economic diversity, a global pandemic, and instructional strategies contribute to the widening expanse of achievement levels among learners. Potential solutions exist for educational staff, from classroom teachers who deal with students first-hand, to administrators and divisional staff responsible for funding. It is crucial that educational leaders are reminded of the severity of this issue in order to support classroom teachers in differentiating for many abilities, and ultimately for all students to experience success at their grade level.

For decades, educators have been working toward reducing the achievement gap within their classrooms and school districts. An achievement gap is defined as "the percentage of students who do not reach academic proficiency at grade level" (Bjorklund-Young & Plasman, 2020, p. 2) and is common in educational settings. As students continue to demonstrate belowlevel abilities (Bjorklund-Young & Plasman, 2020), it is unnerving to be reminded that there is no aolden rule in eliminating achievement gap completely due to the numerous factors that contribute to it. For example, families that measure lower on a social ranking scale may be less involved with their children's learning experiences and this can negatively contribute to student success (Lareau & Calarco, 2012). Bridging the gap between schools and families, in order to develop and maintain connections, can assist with increasing student success. Since the beginning of the COVID-19 pandemic, fostering strong connections and creating strong teaching moments between educators and students is more important than ever, as startling deficits have become visible in my own students' grade level abilities. This stress could create a downward effect on learning for a longer period of time (Bailey et al., 2021). Inconsistent learning experiences and instructional strategies can contribute to decreased skill retention (Lyle et al., 2020). Offering professional development opportunities that align teaching strategies to expected outcomes may benefit student progress (Bjorklund-Young & Plasman, 2020). For as long as these influencing factors of socio-economic diversity, a global pandemic, and various instructional strategies exist, achievement gap will be present. Reducing the gap is a harrowing, yet time-sensitive, responsibility of schools and districts to implement the necessary next steps to ensure that every learner has the chance to experience success.

#### Socio-Economic Status

Lower social ranking can influence interactions between parents and their children's schools, and this may pose a disadvantage to student success. Working-class parents may not have adequate access to resources, such as school services or opportunities, to benefit their children in a learning environment (Lareau & Calarco). Though this might not always be the case, families who have more support and understanding of their children's abilities may help their children progress their learning and work toward mastery at their grade level. It might be questioned whether working-class families, who may not be comfortable or confident interacting with schools, are receiving more or equal support in their children's learning.

To change the narrative about how low socio-economic status may contribute to larger achievement gaps, educators first need to understand how critical the relationship is between home and school. Then, through strategies that incorporate cultural backgrounds and practices in the school, parents are more likely to become invested in school and community events (Blandin, 2017, p. 289). School cultural days, holidays that are celebrated in the school community, and year-end celebrations are good opportunities to share information with parents or offer volunteering experiences in the classrooms. When educators communicate with families "both formally and informally" (Lareau, 2012, p. 75), through parent-teacher conferences, emails, newsletters and in-person communication, lower status families have a chance to advocate for their children. Parents who are consistently recognized in positive and diverse ways are more likely to initiate conversation, share their own opinions, and ask questions about their children's education. Sending a monthly email or newsletter with current units of studies, important dates, and student/class shout outs is a positive and comfortable way to bridge school and home communication. Often, I will receive a reply to these emails with a note of gratitude or guestion regarding a student. Had I not taken the time to send out an email, families may not realize that the door for communication is open and accessible. When the relationship between teacher and parent/school improves, families may be more involved in, and better understand, their children's learning. The students may feel a boost in self-confidence, have better attendance, display more attentive behaviour, and demonstrate more effort (Balfanz & Byrnes, 2006). To narrow achievement gaps in education, creating positive bonds and offering educational and non-academic support to lower socio-economic families is imperative.

#### **COVID-19 Pandemic**

The COVID-19 pandemic has placed heavy stress on the educational system due to lockdowns and school closures, and tension remains as students play catch-up in their current grade levels. Even if schools were closed for a short period of time and could transition to remote-learning effectively, students could not achieve as much as they would in a regular school year (Engzell et al., 2020). With other stresses that were brought on by COVID-19, many educators and students struggled to adapt to this worrisome and unprecedented time. Returning to the classroom was not a magic solution to these issues. After completing remote learning from home, for example, many students experienced an uneasy transition back into unfamiliar. protocol-filled environments and stressful test-taking situations in the classroom, which could alter test results (Engzell et al., 2020). In my own grade 5/6 classroom, I have observed student regression in skills such as mental math facts and basic writing, when comparing student scores at the beginning of grade five year with the beginning of grade six. On average, both writing scores for Conventions and Ideas and Mental Math scores dropped from a mark of 3 in Term 1 of last school year, to a score of 2 in Term 1 of the current school year. Noting that the pandemic ebbed and flowed, for the duration of both school years, is worrisome when considering long-term effects. To demonstrate the depth of the pandemic's impression, it was predicted by educational researchers that there could be wider achievement gaps in the spring of 2022 than the spring of 2021 (Bailey et al., 2021). The effects of COVID-19 school closures and protocols could therefore affect education and achievement gaps for a long period of time.

As classes return to in-person, or perhaps continue to flip-flop between remote and inperson, the most important focus should be on social-emotional needs. Virus transmission is not the only, or biggest, concern in schools during the pandemic. It has been shared that students made little academic growth during remote learning stints, calculating to a loss of one-fifth of the school year, with much higher losses for lower socio-economic families (Engzell et al., 2020). Despite this, standardized test-scores should not be the main priority this current school year. Educators need to take mental wellness seriously and allow time to teach and practise wellness strategies and techniques that can be used in the classroom and out of the schools, such as stress relief breathing, journaling, and reflecting. Without burdening the children with an intensive workload to make up from remote learning or long absences, students must be met exactly where they are, emotionally and academically. For this to be achievable, individualized supports and abilities should be considered and extra funding provided to hire more teachers and educational assistants. When a safe and comforting environment is offered, students are more likely to feel like themselves, understand their value and worth, and then begin to focus on the strengths and weaknesses in their learning. Professional development opportunities should be consistently available for staff to learn effective strategies for implementing remote learning and for mentoring students who are at higher risk of larger gaps in their achievement (Bailey et al., 2021). Amid the ongoing pandemic, social-emotional wellness should take precedence over test-scores because healthy and happy students learn best.

## **Instructional Strategies**

Inconsistent learning experiences and instructional strategies can inhibit or enhance skill retention, thus student success. For example, repetitive drills and redundant worksheets may not prepare students to remember a specific skill, becoming an obstacle in achieving optimal success (Georges & Pallas, 2010). Increased spacing between opportunities to practise specific skills can positively influence retention, while offering recurring opportunities to practise the skill may not be as successful (Lyle et al., 2020). Considering the use of technology, middle school students have demonstrated that both online and face-to-face environments provide equal learning experiences in terms of retention of mathematical skills (Edwards et al., 2017). It is equally important to recall that being familiar with the content does not make the educator an expert in how to implement the lessons in a way that will benefit all students' abilities to remember the information (Georges & Pallas, 2010). From year to year and subject to subject, students are exposed to multiple teachers and teaching styles, making it difficult to transition to new grades and classes, which is a contributing factor in long-term achievement gaps.

Today, students are learning differently than before, so instructional strategies need to evolve as well. Often, teachers are stuck in their own classrooms, with their own resources and personal teaching styles, and do not adapt how they teach a specific skill. Educators who host classrooms of diverse needs should focus on including supports in their classes to assist a wide range of learners through differentiated instruction. It is the teacher's responsibility to provide experiences for each student to feel successful by offering levels of activities that students can excel at, while also providing activities that are more challenging (Woodward & Brown, 2006). Using diagrams and other visuals is a successful strategy in expanding student memory (Edwards et al., 2017). Providing opportunities for students to work in partners or groups with various support tools presents students with a chance to collaborate, discuss, and practise necessary skills in problem-solving (Woodward & Brown, 2006). Having educators collaborate by sharing resources and implementation strategies can increase grade-to-grade consistency, teacher motivation, and access to resources. Personal experience has led me to believe firmly that the relationships and collaboration with colleagues, grade level teammates, and administrators are invaluable in reflection, preparation, and planning. Regularly available professional development on concepts such as teaching to multiple intelligences, improving working memory, differentiated learning, small-group teaching and learning, teacher preparation and planning, and cultural understanding could promote achievement for all learners, improve retention, and lessen some of the pressures of achievement gaps (Bjorklund-Young & Plasman, 2020). Educators must adapt their teaching styles to meet the needs of evolving learners and schools should be supporting their staff with these changes in every way possible.

#### Conclusion

There is no proven remedy to abolish achievement gaps completely. It is vital that educators prioritize reducing the gap for as many learners as possible (Bjorklund-Young &

Plasman, 2020). It is important for schools to persevere in finding out where students are behind, in order to advocate for what they need most. Gaps in achievement will remain in schools if socio-economics of diverse families, the long-term impression of the COVID-19 pandemic, and inconsistent instructional strategies are present. Observing and reflecting on this lost ground in student learning is critical. Measuring student achievement will most likely continue to be procedural in education. However, the methods to collect this data, and discussions on its accuracy, should be up for debate (Bjorklund-Young & Plasman, 2020). If schools are not committed to narrowing these gaps in learning, a much more serious result could appear and students could experience negative effects in their financial status and well-being years from now (Bailey et al., 2021). Though the expense of implementing programming and professional development that align with narrowing the achievement gap may be overwhelming, "the costs of not making these investments could be far larger and long-lasting" (Bailey et al., 2021, p. 11). The investments are necessary to prioritize solutions for reducing underachievement and offering students a higher chance of success.

# References

- Balfanz, R., & Byrnes, V. (2006). Closing the mathematics achievement gap in high poverty middle schools: Enablers and constraints. *Journal of Education for Students Placed at Risk, 11*(2), 143-159. https://doi.org/10.1207/s15327671espr1102\_2
- Bailey, D. H., Duncan, G. J., Murname, R. J., & Au Yeung, N. (2021). Achievement gaps in the wake of COVID-19. Annenberg Institute at Brown University. www.edworkingpapers.com/sites/default/files/ai21-346.pdf
- Bjorklund-Young, A., & Plasman, J. S. (2020). Reducing the achievement gap: Middle grades mathematics performance and improvement. *Research in Middle Level Education Online*, *43*(10), 25-45. https://doi.org/10.1080/19404476.2020.1836467
- Blandin, A. (2017). The home/school connection and its role in narrowing the academic achievement gap: An ecological systems theoretical perspective. *Journal of Research on Christian Education*, *26*(3), 271-292. https://doi.org/10.1080/10656219.2017.1386146
- Edwards, C. M., Rule, A. C., & Boody, R. M. (2017). Middle school students' mathematics knowledge retention: Online or face-to-face environments. *Journal of Educational Technology & Society, 20*(4), 1-10.
- Engzell, P., Frey, A., & Verhagen, M. (2020, October 29). *Learning loss due to school closures during the COVID-19 pandemic*. https://doi.org/10.31235/osf.io/ve4z7
- Georges, A., & Pallas, A. (2010). New look at a persistent problem: Inequality, mathematics achievement, and teaching. *Journal of Educational Research*, *103*(4), 274-290.
- Lareau, A., & Calarco, J. M. (2012). Class, cultural capital and institutions: The case of families and schools. In H. R. Markus & S. T. Fiske (Eds.), *Facing social class: How societal rank influences interaction* (pp. 61-86). Russell Sage Foundation. (EbscoHost eBook)
- Lyle, K. B., Bego, C. R., Hopkins, R. F., Hieb, J. L., & Ralston, P. A. S. (2020). How the amount and spacing of retrieval practice affect the short- and long-term retention of mathematics knowledge. *Journal of Psychology Review, 32*(1), 277-295.
- Woodward, J., & Brown, C. (2006). Meeting the curricular needs of academically low-achieving students in middle grade mathematics. *Journal of Special Education, 40*(3), 151-159.

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Chantalle Crepeele is in pursuit of her Master of Education degree with a focus on inclusive education. She is a middle years teacher in the Brandon School Division and a yoga instructor in the community. Chantalle creates an inviting classroom and enjoys sharing mindfulness and gratitude practices with her students.