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(See the back cover for a description.)

INTRODUCTION BY THE EDITOR

Marion Terry, Ph.D.

Welcome to the thirty-first issue of the *BU Journal of Graduate Studies in Education*, devoted to rural, northern, and Aboriginal education. Our authors for volume 14, issue 2, are current and past BU Faculty of Education graduate students. I thank these educators for sharing their work. Together, they have produced a collection of articles that examine various topics of interest to Manitoba educators.

- Myles Brown's refereed article proposes strategies to meet students' social/emotional needs in the absence of specialized behaviour programs.
- Taylor Marks' refereed article discusses the effects of shifting the learning environment to lessen mathematics anxiety in students.
- Jonathan Nairn's refereed article recommends a Multi-Tiered System of Supports (MTSS) to address chronic absenteeism from school.
- Jennifer Metelski's refereed article highlights the need for extra supports to serve twice-exceptional (2e) students who are both gifted and have areas of struggle (such as learning disabilities or emotional and mental health issues).
- Caitlyn Munro's refereed article focuses on interventions to reduce the summer learning loss that results in cumulative achievement gaps in school.
- Michelle Levesque's refereed article reports the benefits of having a therapy dog in the classroom: enhanced self-regulation, interpersonal skills, and readiness to learn.
- Allison Ward's refereed article challenges educators to change their practices in response to student needs as schools emerge from the COVID-19 pandemic.
- Shannon Dube's refereed article urges Canada to updating its sexual health education curricula as one means to support LGBTQ+ students in elementary school.

TABLE OF CONTENTS

REFEREED ARTICLES

Addressing the Social/Emotional Needs of Students in a Future Without Specialized Behaviour Programs

Myles Brown

Abstract

With the current provincial government intent on making changes to education in Manitoba, teachers need to know how this will affect their classrooms. It is today's reality that programs directed at managing student behaviour are being closed. Without these programs, classroom teachers will need to use several strategies to support a greater range of student behaviour. Proactive measures can meet the needs of students with Emotional Behaviour Disorders (EBD) by minimizing conflicts and by providing routine and structure. Reactive measures are vital in establishing expectations for students re-entering mainstream classrooms and creating a plan for teachers to follow. The universal school strategies outlined below offer viable whole-school approaches to addressing the behavioural and educational concerns of students.

When it was proposed by the Government of Manitoba, Bill 64 raised a clear concern among inclusion support staff that low-enrolment programs are on the chopping block. Such uncertainty arises from the proposed defunding of education, and the recent closures of specialized and local programs throughout Winnipeg (Sala, 2021). Despite the rescindment of Bill 64, it seems only a matter of time before these educational support programs are closed to save costs and to promote inclusion through fully integrated classrooms. Many approaches can lessen the potential hazards upon removal of support programs. Teachers can use proactive strategies to minimize potential conflict, and to maximize student participation and success in and out of learning opportunities. Within integrated classrooms, reactive planning will be essential to respond to the needs of all students. Such planning will establish a reference system for staff to respond to incidents with consistency and confidence. Universal school supports will be vital in transitioning away from specialized programming. Such supports can broaden service to students and alleviate the stress of already overloaded teachers.

Proactive Strategies

There are many proactive strategies that teachers can employ to support the needs of newly integrated students and make them feel valued. An ideal inclusive learning environment should instill in students a sense of safety and acceptance within various social and learning opportunities (Stegemann & Jaciw, 2018). For students previously enrolled in specialized low-enrolment programs, coping in a new environment with a larger population can be daunting. Educators will need to take the time to build relationships with these students so as to find their strengths and to provide support for students who lack self-regulation skills (Savina, 2020). Once teachers know what does and does not work for their students, they can make adjustments such as minimizing needless transitions, offering more time for assignments, and minimizing the sensory output of the classroom environment. What is more, teachers can begin to determine which skills and coursework are most important for individual students (Kurth et al., 2020). Narrowing the focus of learning and skills development can help a student to achieve meaningful goals and alleviate the anxiety of trying to match the pace of the classroom.

Because of stricter scheduling and limited physical space, it will be impossible to operate a mainstream classroom as current specialized programs function. A whole-school approach can be much more efficient in managing resources to support all students (Crone et al., 2004).

Positive Behaviour Intervention Support (PBIS) schools operate on a tiered system with a primary school-wide focus and planned preventions for students deemed both at-risk and high risk (Centre on PBIS, 2021). These initiatives aim to minimize time-consuming individual strategies and modifications (Crone et al., 2004). The design is to establish clear expectations and to reward consistent behaviour and achievement rather than respond to negative performance. Having these guidelines clearly posted and practised provides all students with reminders and general limitations. The positive behaviour of students can serve to reinforce expectations for all learners, and targets individual problem behaviours only when necessary.

In low-enrolment programs, supporting students with emotional and behavioural disorders, teaching social skills, emotional regulation, and coping strategies are a priority over academics. Teachers will need to develop lessons dedicated to ensuring that all students learn these critical social and personal management skills to reduce conflict (Neale, 2019). Among younger primary students, social stories and the discussion of real-life situations, both at school and at home, can help to develop positive coping and social skills (Zimmerman et al., 2020). For intermediate students, case studies and honest discussions about emotional regulation can help students to identify their own triggers and personal strategies. Within larger class sizes, there will exist unplanned learning experiences that will help to develop social skills during ongoing interaction among peers (Kurth et al., 2019). These experiences are vital in shaping social and self-management skills by having students learn to wait patiently and to cooperate with others.

The physical and metaphysical learning environment can also have a major impact on students. A learning environment that values cooperation, civility, and respect can lead to a stronger sense of worth among students and a reduction in aggression (Neale, 2019). Teachers need to create and maintain a positive learning environment, and to be aware of the needs of their students. While it may be difficult, and even impossible, to control the sounds, lighting, or temperature of classrooms, these variables can have a great affect on a student's temperament. Students who put their heads down on a desk may appear to be frustrated, but could instead be avoiding noise or brightness (Delahooke, 2019). More than ever, teachers will need to understand that behaviour, as troublesome as it may seem, is not always intentional and can provide insight into the and feelings of struggling students. Being aware of the needs of students and having the skills to address those needs enable teachers to provide better care and avoid addressing natural coping mechanisms as negative behaviour. Over time, all students can learn to replace their instinctual and ineffective self-management strategies with more socially responsible positive coping skills.

Effective teachers try to engage students by making their classrooms and lessons more reinforcing. The first step in determining how to improve the success of students with specialized needs is to establish their learning and social goals for each term (Kurth et al., 2020). For these students, especially students with emotional and behavioural disorders (EBD), building supportive and high-interest lessons is crucial to their success in an integrated classroom. Building confidence in their own skills is a vital step before students can begin to build meaningful academic achievement (Oberle et al., 2016). Cross-curricular activities provide greater opportunity for developing specific academic skills. Using embedded instruction is one way to develop the abilities of a student who is at a lower achievement than their grade level (Kurth et al., 2020). A teacher can expand the reading opportunities of a student during a science period by assigning reading and comprehension activities based on the curricular lesson. This can be helpful because students with learning disabilities and attention deficits may not be able to practise specific skills within an allotted time.

These strategies are not instant solutions, but they can provide the teacher with the awareness required to minimize incidents, to make students feel welcome, and to maximize learning engagement. By making students feel safe and valued in the classroom, we can begin to build their social and academic confidence.

Reactive Strategies

Even with the consistent use of proactive measures, students will inevitably struggle to manage themselves in their new learning environments. There are too many variables in the lives of students for a teacher to control completely. It is my experience that even in a low-enrolment program with heightened routine and structure, students become defiant and have emotional outbursts. Thus, it is essential to have plans in place to respond effectively to problematic behaviours as they occur.

Stress tools can be a useful resource to help students regulate and achieve greater focus. Teachers will need to set clear instructions and expectations for students when using stress tools, especially during work periods. The Active Response Beads -Time-Out (ARB–TO) strategy is an excellent way of not only supporting student regulation, but also enabling independence and their ability to follow instructions (Grskovic et al., 2004). For this strategy, students who are showing signs of frustration or dysregulation are asked to go and collect the active response beads from an accessible part of the classroom. These are a set of beads, usually 10 or 20, along a piece of string that is placed in a container. Once the students have collected the beads, they will place their head down at their desk and begin moving the beads from one end of the string to the other, counting off each bead. This type of strategy is considered an inclusionary time-out because the students do not have to be removed from the learning environment to regulate themselves (Ryan et al., 2007). This strategy empowers them to narrow their focus and transition themselves back into learning mode. Students prefer it because they do not have to leave the lesson or their classmates.

When students become defiant or dysregulated in the classroom, an inclusionary timeout may not always be effective. These students need an alternative space to calm their bodies and to regulate themselves. The implementation of a regulation space should be used as a temporary break to meet the needs of a student, rather than an ongoing exclusionary timeout (Manitoba Education, 2020). This should be a pre-planned collaborative measure to provide respite to overloaded students. It is an effort to avoid sending students home, by giving them a chance to manage their emotions and reset before returning to class. Support staff must accompany and supervise students in these spaces to address their emotional and sensory needs as defined in their specific planning (Manitoba Education, 2020). Schools will need to be resourceful in establishing these spaces with recommendations from clinical specialists. Without programs the opportunities will be limited. However, having support staff take struggling students for walks can provide enough of a setting change to enable the student to adjust.

Collaboration among teachers and paraprofessionals will be critical in creating and maintaining a whole-school behaviour system (Crone et al., 2004). Beyond teachers and educational assistants, clinicians and parents will need to assume an even larger role to ensure that these students have the greatest chance for success. Together, they should form support teams for each student deemed in need of individualized behaviour and educational plans. In a Positive Behaviour Intervention and Supports school, these students, whose behavioural support must be more individualized, would fall into tier 2 and 3 (Centre on PBIS, 2021). These plans provide teachers with appropriate strategies and responses (as agreed upon by clinicians and parents) to address problematic behaviours and set attainable academic goals.

Universal School Strategies

It is apparent that education is evolving, especially over the past 10 years. Such evolution is necessary not only to meet the behavioural needs of all students, but also to support the vast learning styles of children today. Peter Liljedahl (2021) has done exceptional research into mathematical thinking that challenges the traditional classroom, both in the way it is arranged and in the way it functions. His research has determined that when students get out of their seat and work on vertical surfaces to solve problems with minimal support from teachers, learning

and retainment is improved. Liljedahl has suggested a break from the old standard of textbooks and worksheets by replacing them with rich problem-solving skills that require students to continue developing their skills to find success. This method of instruction can be applied to any subject where students can work within a group to cultivate multiple solutions, to appreciate perspectives, and to develop their creativity. The lessons are low floor/high ceiling, meaning that they are designed to engage all learners at all levels, and they maintain student engagement. Because of the nature of the lessons, the time students need to complete tasks and demonstrate comprehension is more flexible.

Some teachers who experiment with this method of instruction in their classrooms have found success, while others have been reluctant. The issue is that many educators "teach the way they were taught" and need to develop skills and confidence themselves before altering their instruction (Oleson & Hora, 2013). This new critical thinking and problem-solving style of classroom requires a complete shift in pedagogy and a redesign of the physical learning space. As with most shifts in education, teachers will need to be compelled to develop these new methods (as was the case with the development of technological skills during remote learning). Because of this, student-led critical thinking classrooms will inevitably become the responsibility of future generations of teachers. The success of inclusive education hinges on the effective implementation of many teaching skills, such as behaviour management, diverse instructional methods, and professional synergy at the university level (Walton & Rusznyak 2020).

One final model to support learning is a rotating resource model that is open to all students who require periodical one-on-one support. Rather than having students designated with the Inclusion Support Services (ISS) label, which follows them through grade 12, the centre should be open to all students for as much time as required. The goal here is to identify the needs of students and to set goals for them to achieve in a classroom with their peers. Rather than completely removing students from their class and placing them in a program, this model would instead facilitate students to meet with a resource teacher at scheduled times during the school day cycle. Together with the resource teacher, students could work on developing the social and academic skills needed to be "participating members" of their classroom and to "make progress in the curricula" (Kurth et al., 2020, p. 141).

The resource teacher would act as a case manager who meets with each student to debrief and to review progress. The students would remain in this model until their academic or behaviour goals (set by the classroom and resource teachers) have been achieved. This would be cost effective because all schools, big and small, already have resource teachers with the required training to support teachers and students directly. With proper scheduling, educational assistants could remain in the classroom supporting the students. As with most programs, this system could be modified to meet the needs of each school.

Conclusion

The closure of specialized programming is a harsh reality that educators have to confront. As a special education teacher, I have had the threat of losing my low-enrolment program made clear to me over the past ten years. Only last year, with the amalgamation and Bill 64 looming, was I told in no uncertain terms that the 2020/2021 school year would be our last. In a perfect world, programs would continue to support students by developing their skills and preparing them to return to mainstream classrooms. Unfortunately, this is not often the case and the best we can do is to prepare ourselves for a truly integrated learning model. The strategies outlined above, if consistently used by teachers, will help to prepare staff in supporting the diverse needs of their students. These proactive measures will help to build relationships and to provide a clearer image of the strengths and challenges of each student. The systematic and reactionary planning will fortify support for both students and teachers, and ensure that fixed responses are fair and consistent. A successful integrated classroom will depend on the ability of many

professionals to depart from the traditional model of instruction and incorporate new delivery models to engage and support all students.

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About the Author

Myles Brown is currently a teacher in an intermediate low-enrolment program supporting a variety of wonderful students. His passion is working with at-risk students and advocating for their needs. He is enrolled in the inclusive education M.Ed. program at Brandon University.

Anxiety in Mathematics:
Change the Narrative, Change the Environment

Taylor Marks

Abstract

Life experiences can affect students' educational experiences as they continue through the middle years (grades 7-9). Children carry negative experiences, societal and family influences, and early educational experiences with them. All of these factors can contribute to student anxiety while learning mathematics. Anxiety in mathematics may present at any point throughout children's education and can prevent students from having successful and positive experiences. Long-term effects could prevent a student from pursuing certain careers involving mathematics. By shifting the environment in which students learn, and the conversations around those experience, educators also have the potential to shift the mindset of students, creating a positive learning environment that lessens anxiety surrounding mathematics education and opens doors for further mathematical education after high school.

In my conversations with students over the past five years, mathematics anxiety – which is defined as worry or concern about doing math, learning math, and being assessed on performance in math (Markman, 2021) – appeared to be ever growing in students in the middle years (grades 7-9). Math seems to be the most daunting of all the subjects. Most students either love math and look forward to that challenge, or have developed a hatred of math from past experiences. One of the first assignments that I have my students complete at the beginning of the year is to tell me how they feel when learning math. Common responses are "Math makes my brain hurt" and "I'm afraid to answer questions in math class." It is rare when students say that they enjoy math and want to continue learning about it. This has led me to question how educators can support students in overcoming their anxiety. Often, the conversations about math revolve around future education and career prospects. I believe that the conversations that influence students the most tend to happen around the negative math experiences that occur in their early life. These experiences come from societal pressures, family, and early level teachers. In order for educators to take on this challenge, it is important to understand where mathematics anxiety comes from. By doing so, educators can shift the narrative on how we address the importance of learning math to how we can change the learning environments that educators create for their students.

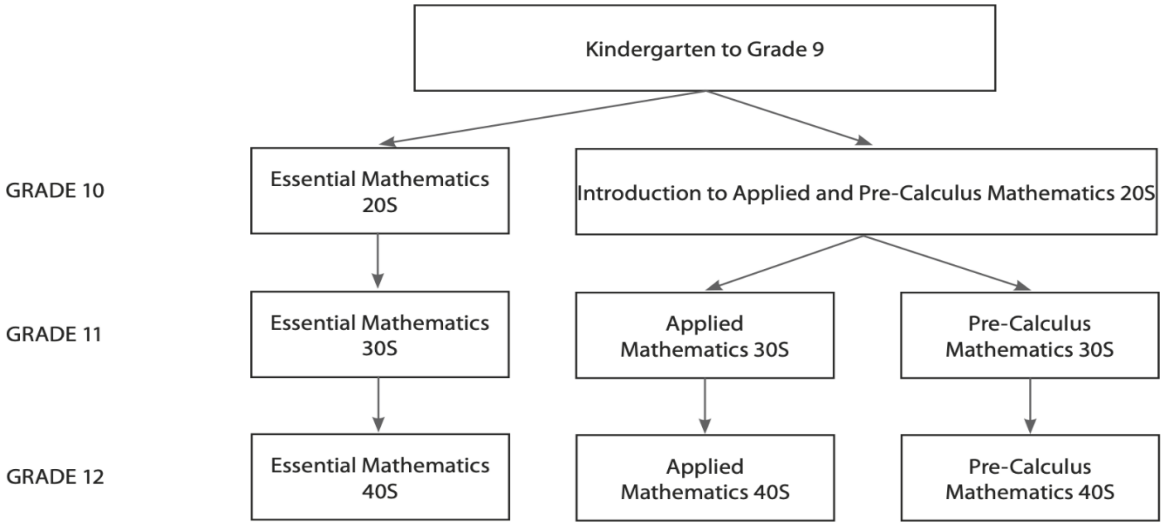
Addressing the Negatives

When students experience anxiety, they fixate on the negative or threating math tasks at hand (Barroso et al., 2021). When fixated, they are not able to think about the math problem they are trying to solve. Rather than focussing on the task at hand, the focus shifts to the negative ramifications of failure. The focus shift may be attributed to an interruption to a student's working memory (Ramirez et al., 2013, 2018). Students with a higher working memory have the capacity to deal with anxiety in an educational setting. Students with lower working memory struggle when overcoming anxiety, causing an interruption or a stop in their thinking. When students have continuous failures or negative experiences, they are likely to experience higher level anxiety on future tasks (Lewis, 2019). When the focus shifts to negative thoughts of failure, students stop thinking and stop learning (Liljedahl, 2021).

Societal Pressures

Children are often taught that in order to get a high-paying and respectable job they need higher level math courses at post-secondary institutions (Markman, 2021). In my middle years school that includes grade 9, many of the conversations about students' future are based upon preparing for high school. This includes helping students choose which courses are going to be the most beneficial for them depending upon their career goals. Once students reach high school in Manitoba, they are required to choose which math course or courses are going to benefit them after graduation. There are three streams of mathematics in Manitoba: Applied, Essential, Applied, and Pre-Calculus (see Figure 1). While any of the three streams are required to graduate, there is often an emphasis on students to take Pre-Calculus because it applies to more career options and prevents limiting future choices.

Figure 1.
Essential, Applied, and Pre-Calculus Mathematics in Manitoba



From "Conceptual framework for grades 9 to 12 mathematics," by the Government of Manitoba, 2014, *Grades 9 to 12 mathematics: Manitoba curriculum framework of outcomes,* p. 16.

Students who struggle with math quickly say that they will drop math as soon as they are able. At one point, these conversations led me to having a poster in my classroom with a headline similar to "Thinking of Dropping Math, Say Goodbye to These Jobs …" The poster listed jobs that students would not be able to work toward if they did not do well or continue to study math in their senior years (grades 9-12). If students have high levels of math anxiety, it is very likely that they will also have low math achievement. Low math achievement may lead students to avoid higher level math learning opportunities in secondary and post-secondary education (Barroso et al., 2021). It seems reasonable to argue that as students begin to limit themselves by their educational choices, they could feel like they are not living up to societal pressures because their career choice may not be considered a successful one. Young children do not inherently know about these societal expectations. Most often, they are learned through conversations with family.

Family Pressures

Families, specifically parents, have the potential to cause young students to begin to feel mathematics anxiety or worry (Harari et al., 2013). In experiences such as parent-teacher or student-led conferences, I have come across three types of parents: parents who were successful in math and expect their children to be successful, parents who struggled in math and believe that they have passed their struggles onto their children and parents who only hope that their children are working to their best ability. The two that I find most concerning are parents who expect success and parents who struggled themselves.

Thinking back to that first assignment, one of the questions I ask students is how their parents feel about math. A common response is "My parents feel that math is important because it will help me have a good job in the future." Many parents believe that in order for their children to have high-paying jobs they need to be successful in math and need to pursue courses related to science, technology, engineering, and math (STEM). If students are experiencing anxiety that goes unchecked during early or middle years education, they are less likely to pursue courses related to STEM during secondary or post-secondary education (Dunin, 2021). Avoiding STEM courses and any other situations that require math skills is the most common consequence of anxiety (Ashcraft, 2002). In an elementary or middle years school setting, avoidance might present itself as students speeding through work. I have also experienced students using strategies such as asking to use the washroom, asking to call home because they aren't feeling well, and asking to visit the school's guidance counsellor to avoid math tasks.

Younger students might also have seen parents or older siblings struggle with mathematics. Only 7% of Americans adults claim to have had positive experiences in mathematics, and two thirds of American adults say they are afraid and hate mathematics (Harari et al., 2013, p. 538). Many teachers hope that parents will become involved in their children's education. However, if the majority of parents experienced math anxiety during their own education, attempting to support their children with math homework may cause more harm than good (Maloney, 2015). During attempts to support their children, parents may exhibit math anxiety that the children pick up on. Parents may have inadequate knowledge about the outcomes students are learning in class or the parents may have been taught by using different strategies. Students witness their parents' frustration and can internalize similar feelings. Even if parents successfully support their children while still experiencing math anxiety, they can transfer their anxiety to their children through their language as they express their feelings toward math.

Early Education

Mathematics anxiety begins to show in grade 6 (Harari et al., 2013) and grade 7 (Barroso et al., 2021). However, adults have also shown anxiety when performing basic numerical tasks, leading to the idea that anxiety might be prevalent prior to middle school years (Harari et al., 2013). Early level teachers can therefore have a significant influence on their students' attitudes toward how they learn and experience mathematics. Educators spend a lot of time with students and have the potential to influence them in their learning styles and habits. If elementary teachers suffer from mathematics anxiety or worry, it can be passed on to their students (Barroso et al., 2021). As a personal example, I always struggled with mental math as a student growing up. This influences my ability to teach mental math skills to my students.

The middle years are often students' first school transition going to a new school, from an elementary school to a junior high school (Madjar et al., 2018). In a two-year study where students self-reported their own feelings about being in a new school, it was found that students exhibited higher anxiety in their first year following the transition. In the early years, students are in the same classroom for most of their classes, with the exception of subjects such as music

and physical education. When they move to middle years schools, different classrooms have different functions and many teachers specialize in fewer subjects. Math anxiety can also be triggered by entering a math classroom. Not only are students experiencing moving to a new school, they are also experiencing having to move to different classes more frequently during the day.

Becoming More Positive

In order for students to overcome their challenges around math anxiety, early interventions can be the most beneficial. Parents and teachers need to increase their awareness on how anxiety affects children (Dunin, 2021).

Changing the Narrative

One of the first solutions to support students in overcoming math anxiety is to change the way we talk about learning math. Thinking back to the poster that used to hang in my classroom, I have reflected on the way students may have looked at it, listened to the conversations, and felt defeated. Every day when they walked into my classroom, they saw a long list of jobs that they would never qualify for due to their low achievement in math. While the intent was to motivate students to work harder, I realize now that my good intentions may have had a negative effect. When students come to middle and senior years, teachers stress the credit system and how failing a course can change future course selection. This causes stress and anxiety for students. Rather than viewing repeating a course as a positive experience that can alleviate anxiety in future courses, it is usually portrayed as a negative consequence of not being an active or engaged learner (Marsh et al., 2017).

It is important to view math as a language unto itself that teachers and students are comfortable with. Teachers want to help students understand what they are saying by using informal language, but I have noticed how that may be having the opposite effect in my own classroom. Students are not aware of the difference between informal and formal math language, because many teachers use too many terms to mean the same thing. Switching between informal and formal math language confuses students. In my school with a large number of immigrant and English as a Second Language learners, [small letter] there are instances when teachers attempt make things easier to understand by using common language. By using informal math language (multiples vs. skip counting), inconsistent language (solving vs. evaluating), or not teaching math language at all, teachers risk making it more confusing for students in future math courses. In math, there are also many words that have multiple meanings. For example, the word square could mean the shape or multiplying a number by itself twice (Powell et al., 2018). I have seen the benefits of daily practices such as discussions about math and direct vocabulary instruction. Modelling and expecting students to follow these practices can alleviate students' fear about asking questions, because they know they are using proper terminology and will be understood (Powell et al., 2018).

Changing the Environment

Most math education is done in the classroom. It is important to take into account the type of environment in which students are learning and the types of teachers who are leading the classes. The traditional environment, where students come into the classroom and sit down to start busy work, promotes disengagement (Liljedahl, 2021). Some students feel that if they are quiet and do not ask questions, they can hide their struggles from their teachers. Practices such as working on rote memorization with textbooks is no longer effective for retaining information (Ramirez et al., 2018). Instead, teachers should shift toward a conceptual understanding

approach to teaching math. Students who understand ideas, rather than just being able to follow step-by-step processes, can have open discussions with each other using their math language more often. They can also apply their knowledge to higher level math problems. Desk work does not always promote thinking and does not create an environment wherein students feel that they can ask questions about what they are learning. I have recently adopted a "Thinking Classroom" model whereby students are encouraged to collaborate in groups (Liljedahl, 2021, p. 45). Classroom engagement has increased, and students are asking to learn standing up in small groups rather than sitting at a desk.

A positive learning environment is one wherein teachers work hard to ensure that students understand concepts. Students need to feel secure, knowing that they will not be punished if they fail a math task (Aldrup et al., 2019). When teachers show higher levels of sensitivity, fewer students feel anxious in class. Promoting discussion in my classroom has also increased the number of students who are willing to ask questions and offer ideas. My goal has been to create an environment that normalizes making mistakes and learning from them, rather than turning mistakes into lasting negative experiences (Harari et al., 2013). Students are braver as a result of creating an environment wherein discussion is encouraged rather than getting a question right the first time. Promoting discussion among students in classrooms also creates opportunities for teachers to get to know their students better. This can result in teachers accurately picking up on students' signals on how they are feeling that day and offer extra support as necessary (Aldrup et al., 2019). It is also important that communication between teachers and students begin at the start of the year for it to be the most beneficial (Lewis, 2019). A welcoming classroom wherein discussion is encouraged, and teachers normalize making mistakes, can make all the difference.

Another classroom environmental change that could benefit students is reassessment and keeping students back if they need to repeat a grade (Marsh et al., 2017). It is common practice to place students in the next grade regardless of whether they have been able to demonstrate sufficient understanding of the outcomes. Students' social growth is often the most important factor when placing a student into the next grade. In Manitoba, students are not required to repeat a course until they are in grade 9. By normalizing this practice in early and middle years, it may come as less of a shock for students in senior years. Reassessment could also be done at the classroom level rather than grade level. When children first begin reading, a common method of teaching is to have them practise reading and writing words repeatedly. This practice can be transferred to math education, as well. Teachers could permit students to complete reassessments on tasks such as daily assignments, quizzes, or tests. When students know that they have the possibility of reassessment to replace a previous grade, it takes the pressure off the first assessment, which can lessen their anxiety (Lewis, 2019).

Conclusion

If educators fail to recognize the early signs of mathematics anxiety in young students as early as grade 1 (Harari et al., 2012), then the learning loss that occurs will progressively increase over subsequent years (Markman, 2021). When we add pressure from society and families to be successful in mathematics education, to the learning loss that starts in early years education, we risk seeing a higher number of students exhibiting anxiety. Students who have continuous failures or negative experiences can also experience higher level anxiety on future tasks. When the focus shifts to the negative thoughts and the potential of failure, the thinking stops, and the learning stops. By incorporating early interventions, such as changing the narrative around the importance of math for one's future, parents' past experiences, and how educators experience and teach math, we can start to shift the mindset of students away from their negative experiences in math toward a more positive outlook.

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Chronic Absenteeism:
Far-Reaching Consequences and No Easy Solutions

Jonathan Nairn

Abstract

Chronic absenteeism from school is a serious and common problem. Students miss school for many reasons, and the combination of factors that lead to absences are unique for each student. The only way to stop chronic absenteeism is to address the underlying causes, such as school avoidance, health-related issues, parental issues, and homelessness. Because these factors come from all aspects of the students' lives, solving the problem requires teamwork from students, schools, parents, and communities. A Multitiered System of Supports (MTSS) will ensure that students get support they need to solve their unique attendance problem. Chronic absenteeism must be curbed, because students who are chronically absent are subject to experiencing negative consequences throughout the rest of their lives.

The problem of students' chronic absenteeism from school must be addressed. While the point where a student's attendance becomes chronic is difficult to define, statistics surrounding the issue indicate the seriousness of the problem. The consequences of poor school attendance are far-reaching and affect every aspect of students' lives. School attendance is affected by factors that are unique to each student. The students' family situation, the school they attend, the community they live in, and their own actions all play a role in determining whether they go to school regularly. Preempting absenteeism and stopping minor attendance problems from becoming worse works better than reacting to problem absenteeism. To address the problem of chronic absenteeism, the root causes of the issue must be determined and solved. This requires many people working together to solve each part of the problem. A Multitiered System of Supports (MTSS) brings the student, their family, the school, and the community together to work toward a solution to the student's absenteeism.

The Problem of Absenteeism

Regular school attendance is a key factor in a child's success in school. While 100% attendance is rare, the number of school days that must be missed for a child to be deemed chronically absent is not defined. Despite the lack of a firm standard, there are trends and statistics about which students can be expected to be chronically absent, and when. Missing school on a regular basis can have negative consequences for those children, not only for that school year but for the rest of their lives. Schools aim to set their students on a path to success and they cannot do this when students are absent.

The number of school days that must be missed in order to differentiate between chronic absenteeism and regular attendance is fluid. Most researchers deem missing 10% of school days as chronic (Allison & Attisha, 2019, p. 1). Others define it as missing 25% of school time (not necessarily whole days) for at least two weeks, or missing 10 or more school days during any 15-week period (Kearney, 2016, p. 4). For the purposes of this article, chronically absent students are defined as those who are at academic risk due to either prolonged absences or regularly occurring absences. Attendance problems include leaving early, arriving late, missing individual classes in the day's timetable, or full-day absences (Kearney & Graczyk, 2020). Absences may be excused by students' guardians for legitimate reasons or otherwise, or unexcused, which are cases when the child should be in school but is not (Kearney, 2016). In cases when attendance is not taken at every class, such as most primary and middle schools, students who arrive on time and are marked present may then leave the classroom but not necessarily the school, and not attend for a period of time without their record showing it.

Though it may be difficult to define, chronic absenteeism is a worldwide problem (Kearney & Graczyk, 2020).

Significant trends surrounding when problem absenteeism occurs are found when school attendance is examined. School attendance problems are common in preschool, kindergarten, and first grade before dropping in elementary school (Kearney & Graczyk, 2020). During kindergarten and first grade, at least 10% of students can be expected to miss a month or more of school (Allison & Attisha, 2019, p. 2). Attendance issues decline during elementary school, then rise sharply in middle school and continue to rise through secondary school, peaking in grade 12 (Kearney & Graczyk, 2020). Attendance problems are most likely to occur after school holidays or after the student has been absent for other prolonged periods, such as due to illness (Gentle-Genitty et al., 2015). Absences beget absences, because students who have a pattern of absences in first grade tend to be the students who later stop going altogether (Manitoba Education, n.d.). These trends show that children are most at risk for absenteeism during certain grades and at certain times of the year, and that missed school tends to lead to more absences.

The number of students who are chronically absent is difficult to pinpoint, particularly in Canada where attendance statistics are missing from the academic literature. Without a set definition of problem attendance, schools and divisions set their own (Gentle-Genitty et al., 2015). Statistics of chronically absent students are therefore gathered from populations defined by using different benchmarks. However, the prevalence of chronic absenteeism is still illustrated by these statistics. In the United States, roughly 15% of students are chronically absent (Skedgell & Kearney, 2016, p. 46). Students in American high school are absent 19% of the time (Allison & Attisha, 2019, p. 2). Groups of students that show higher rates of absenteeism are minority or multi-racial students, female secondary students, and students with disabilities (Kearney & Graczyk, 2020). Of students who are chronically absent, 30% are afflicted with some sort of mental disorder (Knollmann et al., 2019, p. 399). These percentages of chronically absent students are greater in low-income nations (Kearney & Graczyk, 2020). These statistics show that chronic absenteeism is a widespread problem.

Being absent from school has many consequences, both short and long term. A short-term consequence that arises during the child's school years is lower academic achievement (Allison & Attisha, 2019). This is intuitive; students who are not in school are not being taught and even insignificant absences add up: 10 minutes late every day is equal to 6 full days throughout the year, missing 10% of classes equates to 4 weeks absent, and 15 days missed per year is equivalent to an entire school year by graduation (Manitoba Education, n.d., paras. 1-3). Chronic non-attenders have lower math and literacy skills, and are more likely to fail grades or courses (Skedgell & Kearney, 2016). These issues begin early. Students who miss a significant number of preschool classes score lower on kindergarten readiness tests (Kearney & Graczyk, 2020). Students who miss a lot of school generally do worse academically.

However, the greatest short-term consequence of absenteeism is that it leads to more absenteeism. Chronic absenteeism in preschool and kindergarten is related to future chronic absenteeism (Kearney & Graczyk, 2020). Chronic absenteeism in United States students as young as sixth grade indicates a higher likelihood of dropping out (Allison & Attisha, 2019). In fact, students who miss more than seven days of school in two years are more likely to drop out (Kearney, 2016, p. 4). Only 64% of students who miss 10 or more days in grade 10 will graduate (Kearney, 2016, p. 7). It may be assumed that in Canada, as well, missing school tends to lead to more missed school, which tends to lead to not completing school.

Failure to graduate, whether due to dropping out or poor academic performance, has negative consequences for the rest of the students' lives. Those without high school diplomas have unemployment rates double those of graduates (Manitoba Education, n.d.). Those with jobs are less likely to have fulfilling ones (Allison & Attisha, 2019). Students who drop out of school have less money and are more likely to be divorced, end up in prison, be on social assistance, and be single parents (Kearney, 2016). The less education people have, the less

healthy they are because they are more likely to smoke and less likely to exercise (Allison & Attisha, 2019). Simply put, students who fail to graduate high school are less likely to thrive in any aspect of their life, be it socially, occupationally, or any other aspect of a quality life (Kearney, 2016).

Regular school attendance is a key indicator of a student's academic success. Despite a lack of consensus of an exact definition of chronic absenteeism, it is a prevalent problem in schools. Regularly missing days of schools, or portions thereof, can have profound negative effects on children. Students who are chronically absent may feel the effects for the rest of their lives, in all aspects of their lives.

Causes of Absenteeism

Chronic absenteeism is a difficult problem to address. There are numerous categories of absenteeism, and students' symptoms may be different even though they are in the same category (Skedgell & Kearney, 2016). Despite these variations, absentee students do display some common characteristics. Determining the reason for their absenteeism is difficult, given the shear number of risk factors. However, there are some definite causes of missed school. To solve the problem, the underlying reasons must each be addressed because chronic absenteeism is rarely caused by one factor.

Categories

Absentee students can be categorized into a few distinct groups. Historically, students missed school because of general anxiety, social or academic anxiety, sadness, illness, to get attention, or to do something more enjoyable (Kearney, 2016). While those are all still relevant reasons for absences, the categories are outdated. Today, there are two different ways to categorize absentee students. They can be grouped based on the reason behind the absence or based on who initiates the action. The differences are semantic because the risk factors and causes behind the absences are the same.

If students are categorized by the reason they are absent, students may be presumed to miss school because they cannot go, because they do not want to go, or because they would rather do something else. Students may not be able to go to school if they do not have transportation, if they are involved in the justice systems, or if their parents do not let them. Students who are bullied at school, who are embarrassed by their academics, or who attend an unsafe school will want to avoid it. Students who would rather hang out with their friends, have a job, or whose parents do not see the value in going will miss school not because they necessarily dislike it but because they like something else more (Allison & Attisha, 2019). Students may miss for reasons in one category or for reasons in each; there is overlap between these areas (Kiani et al., 2018). Indeed, students may move between categories during the course of one day.

Grouping students based on who initiates the action results in three categories. Absenteeism may be initiated by the school, the caregiver, or the child (Kearney & Graczyk, 2020). School-initiated absences are when a child is not allowed to attend school. Often this is due to disciplinary actions, such as expulsion or suspension, or health reasons, such as lice or Covid-19 symptoms. Parent-initiated actions include keeping the child home to help with childcare, to hide mistreatment, or to go on holiday. Child-initiated reasons can be boiled down to two categories: truant and school refusing. These are differentiated based on reinforcement. School refusers see school as negative and want to avoid it; truants see missing school as positive because they get attention from parents, access to electronics, income from a job, or high from a substance (Kiani et al., 2018). Again, there is overlap. A student could miss three consecutive days, each initiated by a different player. However, no matter how chronically absent students are categorized, many factors underly their absences.

Common Characteristics

Chronically absent students, even those who share a category, are all different. Their academic status, behavioural profile, and their attendance history will be unique (Skedgell & Kearney, 2016). However, within this heterogeneity, there are some common characteristics (Kiani et al., 2018). Absentee students tend to suffer from high rates of substance abuse and display high rates of psychiatric disorders, such as depression, separation anxiety, and oppositional defiance disorder. Students who are school refusers tend to be younger and display psychiatric disorders. Truants tend to be older and to abuse substances. Truants also have higher rates of poverty and lower rates of parental supervision (Knollman et al., 2019). The highest rates of all issues have been found among students who display signs of both truancy and school refusal. Students who are chronically absent, like their reasons for being absent, are difficult to categorize.

Risk Factors

Myriad risk factors play a part in absenteeism. The children, their family, their friends, their peers, their school, and their community all play a role (Kearney, 2016). Children from certain demographics display higher rates of absenteeism. Not all risk factors are equal; some are more robust predictors than others. Risk factors are correlations: a student with good attendance may experience similar risk factors to a non-attender. However, these factors are numerous and widespread, and play a definite role in absenteeism.

Every aspect in a child's life can play a part in determining whether the child attends school regularly. These factors can be grouped into four categories: individual, family, school, and community. Individual factors include internalizing problems (anxiety, depression), externalizing problems (behaviour problems, hyperactivity), and health problems (chronic illness, disability) (Skedgell & Kearney, 2016). Family factors include divorced parents, over-protective parents, and violence (Knollmann et al., 2019). School factors include everything from bullying, to the structure of the school schedule, to transitioning to high school (Kiani et al., 2018). Community factors include gang activity, social support services, and the school division's policies regarding absenteeism (Kearney, 2016). The factors that put children at risk are numerous. Students may experience any number of risk factors and they may experience them at different times.

Demographics may also predict absenteeism. Students who live in poverty are more likely to be absent because they experience associated problems such as poorer health, transportation difficulties, and unstable housing conditions (Allison & Attisha, 2019). Poverty is a greater risk factor when it is paired with food insecurity, domestic violence, incarcerated parents, and substance abuse (Kearney, 2016). Indeed, students who have witnessed domestic violence, or have experienced other major traumas like natural disasters, are more likely to be chronically absent. Another demographic at risk are students from ethnic or racial minority groups (Allison & Attisha, 2019). Not all students who live in poverty or are part of a minority will be chronically absent, though those groups display higher rates of absenteeism.

While all risk factors have the potential to lead to missed school, some are more robust predictors than others. Students with substance abuse problems, low grades, and low educational ambitions are mostly like to miss school (Kearney, 2016). The best predictors of the severity of absenteeism are behaviour problems, family work, family health, and school environment (Skedgell & Kearney, 2016). Conversely, the best predictors of good attendance are having college-educated parents, limited time unsupervised, good grades, and a safe feeling at school (Kiani et al., 2018). Again, risk factors are correlates, not causes, and these are simply the most common attributes of chronically absent students.

Causes

Risk factors become causes when they are the reason for a student to miss school. These causes can be categorized, they are many, and they are all dependent on the context they occur (Kearney, 2016). The causes of absenteeism are age dependent. Among all the reasons, one factor always leads to attendance issues. Students who are chronically absent miss school for any number of reasons and their particular combination will be unique.

Students miss school for a reason. Risk factors predict which students are more likely to experience the underlying reason. The actual reasons for absenteeism can be grouped into five categories: health concerns, lack of consistent transportation, stress, activities outside of school, and the student's or student's family's personal opinions about the value of school (Eklund et al., 2020). The reason a student has missed school will fit into one of the categories but the underlying cause of the student's stress, for instance, will be unique to that child's life. Absences do not just happen, and why they do will be because of one of the five reasons given by Eklund et al. (2020).

The cause of absenteeism is somewhat age dependent. Younger students are most likely to be absent because of health concerns (Balu & Erlich, 2018). Younger students' absenteeism is far more dependent on parents' decisions than older students. It is the parents' decision whether their child is sick enough to stay home and their opinion about the value of school will determine how often a child is absent. Parents may not realize that missing two days a month is a problem, they may think that excused absences are not a problem, or they may not realize the importance of attendance in the younger grades (Allison & Attisha, 2019). The reasons older students miss school tend to fall under the categories of attitude toward school and activities outside of school. Secondary students cite jobs and helping their family as the primary reason for not attending (Balu & Erlich, 2018). However, there is another reason, one that falls under the health category: becoming a parent. Indeed, pregnancy is the number one reason female students drop out (Allison & Attisha, 2019). Males will also cite becoming a father as the reason they left school (Balu & Erlich, 2018). Younger and older students' reasons for missing school will be different, but they fall under the same five categories.

One factor leads to greater absenteeism independent of other factors. Students who are homeless miss more school (Kearney, 2016). Students may experience multiple risk factors from every category and not have their school attendance affected, but a student who is homeless is going to miss some school.

Summary

The reason chronic absenteeism is difficult to solve is because of its variety. Students who miss school do it for any number of reasons. While they may display some common traits, they are motivated to miss school for factors unique to them. The fact that there are so many risk factors that may lead to absenteeism is daunting, but each student will miss school for a reason. To get that student to attend school regularly, the reason, and the factors behind it, must be determined.

Solutions to Chronic Absenteeism

As long as the school system (as we know it) has existed, there has been absenteeism (Jacob & Lovett, 2017). Efforts to solve the problem have so far been futile because chronic absenteeism remains widespread. Determining the best way forward can be daunting because of the number of programs available and the lack of evidence around what works. However, a multitiered system of support (MTSS) will ensure that students get the assistance they need to address their risk factors. Within MTSS, there are strategies that teachers can use in their classroom to help combat the problem. Schools can tackle some of the root causes. Since each

absentee student's profile is unique and involves so many factors, having them attend school regularly requires effort from the student, the family, the school, and the community. These stakeholders each play a role in the student's absences, and each will benefit from the student being successful in school.

Historical Efforts

Despite schools trying to combat absenteeism for centuries, it is still a problem. Early solutions included jailing the truant (Jacob & Lovett, 2017). Historically, attendance interventions focused on the students and their parents (Young et al., 2020). Behaviour interventions, such as social skills training, relaxation techniques, and family therapy, were the norm (Kiani et al., 2018). Any effort to involve the wider community were inefficient, uncoordinated, time consuming, and ineffective (Young et al., 2020). Had these efforts worked, the problem would be gone.

Problems With Interventions

Part of the problem for educators is the number of interventions proposed by numerous experts and academics (Skedgell & Kearney, 2016). Another problem is the lack of evidence for whether these attendance interventions are effective (Eklund et al., 2020). The strategies that educators use to combat absenteeism tend to be understudied, have small effects, or both. Past practices, such as intervening only with individual students and their families, have a small to moderate effect on attendance (Eklund et al., 2020). Proof that targeting only single risk factors does not work is demonstrated by the fact that using pharmacological treatments to treat underlying mental health concerns has no effect on attendance (Kiani et al., 2018). However, pharmacological treatments combined with behaviour interventions are associated with better attendance (Kiani et al., 2018). To address absenteeism effectively, each of the factors that lead to missing school must be addressed.

Multitiered System of Support

The MTSS approach unites the school, parents, and community in trying to address factors that affect students' success at school, of which a big one is their attendance. It matches interventions with their needs from the domains that affect attendance (Kearney & Graczyk, 2020). Since causes of absenteeism tend to occur simultaneously across the different domains (individual, family, school, community), MTSS can focus on numerous areas at one time. At its core, MTSS is essentially a Positive Behavioural Intervention and Support (PBIS) system combined with a Response Through Intervention (RTI) system (Kearney & Graczyk, 2020). PBIS is a tiered approach to promoting positive behaviour, rather than punishing negative behaviour (Sugai & Horner, 2006). An RTI system is also tiered and is designed to identify and help struggling students (Hughes & Dexter, 2011). Because many schools already have these programs in place to target other areas of need, the approach naturally fits into the school's existing improvement plan. MTSS, as described by Kearney & Graczyk (2020), is a three-tiered system. Tier 1 focuses on promoting attendance to the entire student population. Tier 2 involves early interventions with the student and their family to address developing attendance concerns. In Tier 3, students who display chronic absenteeism undergo intensive interventions involving the student, parents, school, and community. Teachers and schools try to solve issues they can address at the first and second tiers. The third requires outside agencies.

The factors that schools and individual teachers can address are those that occur under their watch. Teachers can promote the importance of attendance, set up incentive programs for attendance in their class, and ensure that their classroom environment is not causing students to be absent. Schools can work to address myths around attendance, such as excused

absences do not matter and the link between attendance and academics; barriers that prevent attendance, such as transportation; and the students' and parents' opinions about school (Balu & Erlich, 2018). Schools are already often the primary means of social services and mental health services, so these programs can be part of the interventions (Kearney & Graczyk, 2020). Factors such as homelessness, poverty, and parents' divorces are not going to be effectively addressed by schools and teachers alone.

Tier 1

At the Tier 1 level, the focus is on preventing absences (Kearney, 2016). The school and individual teachers have roles to play in prevention. Incentive programs are one way to promote attendance and prevent absences. Tier 1 is proactive, rather than reactive, so students who are experiencing attendance issues will move on to Tier 2.

At the schoolwide level, the school needs clear policies, rules, and expectations for students' attendance, and these need to be communicated to students and parents (Kearney, 2016). As part of these policies, there must be a continuum of consequences for absences. Schools need to develop a system to identify students who display signs of an attendance problem and to notify parents about their concerns as soon as possible. Beyond these administrative steps, schools can involve parents in the school culture through concerts, bingos, newsletters, tweets, and plays. Parents could also be given information about some of the causes of absenteeism (sleep habits, screen time, etc.) and strategies to improve them (Sprick & Berg, 2019). Schools can address health concerns by providing hand sanitizer, teaching safe sex, and addressing headlice (Kearney, 2016). Strategies to improve students' mental health, from yoga to social-emotional training programs, can be made available to all students (Kearney, 2016). These training programs could address problems as diverse as difficulty making friends or handling uncomfortable situations. Students who are not at risk of absenteeism will still benefit from having clear expectations, parental involvement in the school culture, better health, a safer school, and better mental health.

Teachers are the first line of defense against absenteeism in a MTSS model. The first step to solving an attendance problem is knowing who is having problems, and that requires teachers' accurate daily attendance records (Sprick & Berg, 2019). Teachers need to greet their students each day; a simple check-in can reduce absenteeism (Young et al., 2020). Teachers need to analyze their own attendance records monthly and identify any students who were absent two or more days (Sprick & Berg, 2019). Simply informing parents about their child's attendance record can boost attendance by 10 percentage points (Balu & Erlich, 2018, p. 96). Finally, teachers need to teach their students the importance of attendance and the problems associated with poor attendance (Sprick & Berg, 2019). Teachers cannot solve chronic attendance problems on their own, but simple procedures in their own classroom can have a large effect.

One strategy to promote attendance, which schools as a whole and individual teachers could both use, is incentive programs. Rather than punishing students who fall short of expectations, these programs celebrate students who meet them (Kearney, 2016). In order to work, the incentives need to be clearly linked to attendance, given as soon as expectations are met, be large enough to be worthwhile (but not so large that the cost is untenable), and given to the person in control of the behaviour (Balu & Erlich, 2018). Schools and classrooms may find that having three separate incentive programs may be necessary. One could target individual students, one the whole class, and one the students' families. Small gift cards could be rewards, though rewards do not have to be financial. Photos of students who met the goals could be displayed, classrooms could receive extra recess time, and families could be recognized in the school newsletter. For the systems to work, students and families must be aware of the attendance goals and associated rewards, and only those students meeting the expectations should receive the award (Sprick & Berg, 2019). Incentive programs have been shown to work

and they need not be expensive (Young et al., 2020).

In addition to promoting attendance to a wide audience, the first tier of MTSS serves another purpose. Through accurate record keeping, analysis of the records, and noticing which students do not receive incentives, students who are at risk of absenteeism are identified. Early identification of at-risk students and continued record keeping through the year will show whether the interventions are working, both of which are required in MTSS (Kearney & Graczyk, 2020). Students who are deemed at risk will move on to Tier 2.

Tier 2

Tier 2 interventions do not involve the entire school population. Interventions at this stage are delivered to small groups or to individual students. The school leaders, involved teachers, families, and the student work as a team to develop an action plan to improve attendance (Sprick & Berg, 2019). Students at this stage should not yet be considered chronically absent; the goal is to prevent an attendance problem from getting to that point.

Interventions at Tier 2 need to be targeted to students whose attendance issues are caused by the same factor. Because reasons for missing school are so numerous and diverse, the students may require individualized interventions. However, students who are pregnant, are substance abusers, or are low academically would benefit from the same interventions and could be grouped together. To decide on the issue or issues to target, antecedents of absenteeism must be identified (Kearney, 2016). Once the underlying cause is known, the interventions can work to eliminate those (Sprick & Berg, 2019). These interventions can have myriad forms.

Like most interventions, classroom teachers will start the process. Tier 2 begins with a phone call to parents and a one-on-one meeting with the student (Sprick & Berg, 2019). It may be that the root cause of the worrying absences can be identified and eliminated at that meeting. However, if the teacher discovers something beyond their scope, or if the attendance does not improve after the meeting, the teacher will need to enlist school leaders for help. The team involved will then develop an action to address the concerns and will explain the consequences of continued absences, as laid out in the school plan. The student will then begin the plan and its effect will be monitored.

Tier 2 interventions can address underlying causes from most of the domains. These causes can be student focused, family focused, and school focused, but not community focused (Kearney & Graczyk, 2020). An example of a student-focused intervention would be a tutoring program to address grades, when lack of academic success or stress around marks is the cause of absenteeism. Family-focused interventions could be home visits, information on substance abuse programs, or delivery of a bus pass. School-focused interventions include teacher training in behaviour management or collaboration time to share ideas for preventing absences. Students whose attendance issues stem from community issues and those students whose attendance does not improve from Tier 2 move on to Tier 3.

Tier 3

Tier 3 interventions are the final resort. Tier 3 is reserved for students who are chronically absent by whatever definition the school uses. These interventions will be intensive and individualized (Kearney & Graczyk, 2020). Tier 3 involves parties from all aspects of a student's life (student, family, school, community) working together to identify the problem and eliminate it. Some of these interventions may require the student to leave the school environment. These interventions represent the last hope to solve the problem of absenteeism.

Tier 3 interventions will look different for each student. They first involve intensive assessments to identify what factors are preventing school attendance (Kearney & Graczyk, 2020). Once these are identified, they are each addressed. Since each student's absenteeism is

caused by a unique mix of factors, how they are addressed will differ. However, the plan will always involve more people than Tier 2.

The student's reasons for missing school will all be addressed in turn. Family and student-focused interventions often involve cognitive behaviour therapy (CBT). CBT aims to change beliefs and attitudes toward school (Kiani et al., 2018). Parents are key to CBT as they learn to reinforce attendance, ignore improper behaviour, and change the home environment to one where school is emphasized. Interventions addressing problems in the school domain could involve credit recovery plans, Individualized Education Plans, or a modified schedule (Kearney & Graczyk, 2020). Community-focused interventions may involve individualized transport, arranging childcare, or securing housing. Whatever issue is preventing the student from coming to school, Tier 3 needs to find it and solve it.

Tier 3 interventions may involve the student leaving school. Where possible, practices that keep students at school are preferred (Kearney & Graczyk, 2020). However, some students may need to be absent from school for specialized mental health care. They may need to rehabilitate from injuries or substance abuse. They may be on their way to prison. In cases when students will be absent from school, focus should shift to completing academic outcomes while the student is absent.

Summary

Chronic absenteeism has been a problem in schools as long as there has been school. Efforts to curtail it have not worked. The fact that there are many programs purporting to solve the problem, and not much research on their effectiveness, is part of the problem. MTSS brings together students, teachers, schools, parents, and the broader community to solve an individual's attendance problem. These stakeholders should all be invested in school attendance because the consequences of absenteeism can affect all aspects of a person's life.

Conclusion

Chronic absenteeism is a serious problem. The point when attendance becomes a chronic problem is difficult to define and may be different for each student. However it is defined, chronic absenteeism is a problem because roughly 3 of every 20 students are chronically absent (Skedgell & Kearney, 2016). Students who are chronically absent tend to have have worse outcomes in various aspects of their lives than students who attend regularly. Though it is acknowledged to be an important issue, the sheer number of variables that cause absenteeism prevent it from being adequately addressed. The way to solve the problem of chronic absenteeism is to eliminate every factor that prevents the student from regularly attending school. This will require teamwork from the students, their educators, their family, and their community. A MTSS approach can bring these stakeholders together to address the factors behind the students' absenteeism. Absenteeism is a difficult problem, and it is a huge problem. These teams need to work to make sure every student attends school every day because attendance problems can have negative consequences for the rest of that student's life.

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Erasure of Exceptionality:
How Manitoba's Twice-Exceptional Learners Lose Out

Jennifer Metelski

Abstract

Twice-exceptional (2e) students are a unique group at risk for social/emotional difficulties and disenfranchisement in schools. These students' profiles combine giftedness with areas of struggle such as learning disabilities, social impairments, emotional and mental health issues, or behavioural problems. Supporting 2e students requires developing and delivering learning plans that address both their gifted needs and areas requiring support. When their giftedness goes unaddressed, 2e students are particularly susceptible to negative school outcomes. Currently, Manitoba does not recognize giftedness as a criterion for academic consideration; therefore, 2e students in the province are not assured appropriate educational support.

A unique population of young people at special risk for social/emotional difficulties and underachievement at school are referred to as twice-exceptional (2e) learners (Reis et al., 2014). These students have profiles that combine superior ability in one or more areas and disabilities that may be areas of specific learning disabilities, behavioural or attention deficits, or social impairments. Educators frequently have little knowledge or understanding of 2e learners and are therefore limited in their ability to meet the unique needs of this group (Ronksley-Pavia et al., 2018). Many 2e learners become disenfranchised at school; the remedial instruction and intervention they receive fails to address their strengths, talents, and interests (Gierczyk & Hornby, 2021). Negative school experiences have lifelong ramifications for these students: they continue to feel insecure, undervalued, and like they do not belong (Ronksley-Pavia et al., 2018). Unless Manitoba educators are aware of the existence of twice-exceptionality, and policy is written to recognize the needs of these students, 2e learners will continue to struggle in the province's schools. This discussion posits that each of these problems has a solution, moving from individual teacher choices to broader professional development and legislative remedies.

Describing Twice-Exceptionality

The term *twice-exceptional* was coined to describe students who demonstrate superior ability in one or more areas, but who also have one or more disabilities; their performance falls on both ends of the learning spectrum (Neihart, 2018). Much literature on 2e learners focuses on gifted individuals with specific learning disabilities. Other challenges, such as attention deficit hyperactivity disorder, autism spectrum disorder, physical disabilities, and behavioural and emotional disorders, are also included under the 2e umbrella (Baldwin et al., 2015). Understanding 2e students begins with identifying how their performance exceeds that of their age peers, how their disability is manifested, and how the characteristics of each part of their profile interact (Reis et al., 2014). The complex interplay between giftedness and disability means that these individuals require multifaceted plans combining seemingly contradictory interventions; discrete solutions intended to address giftedness or disability in isolation fail to address the wide range of 2e learners' needs.

Identifying Twice-Exceptional Learners

Educators frequently are unaware of or unable to identify 2e learners. Their learning traits – whether advanced or remedial – may be missed for a variety of reasons (Baldwin et al., 2015). Some 2e learners achieve average grades because their superior talents and disabilities are counterbalanced in a manner that masks both high potential and areas of weakness (Neihart,

2018). Due to strong compensatory strategies, their grades are unremarkable despite exhibiting learning patterns common to disabled children (Gilman et al., 2013). Students initially identified as gifted may not be assessed for learning disabilities because of the common perception that failing or working below grade level is a prerequisite for diagnosis (Reis et al., 2014). For others, because the focus is on their deficits, their particular strengths and talents are ignored in favor of remediation (Baum et al., 2001). In Bishop and Rinn's (2019) study, at least one professional believed that youth with high IQ were always happy and sociable; according to this stereotype, students with social or emotional disabilities would be precluded from inclusion in high-ability categories. Without sufficient training, teachers' stereotypes of giftedness and disability limit the interventions they select to address the needs of 2e learners.

Teachers must be prepared to identify and meet the learning needs of 2e students during pre-service training, where courses in gifted education must be the rule rather than the exception (Peters & Jolly, 2018). Because educators execute programs in accordance with their level of training, it is essential that they develop perceptions of and dispositions toward 2e learners that will serve as catalysts for differentiation rather than barriers (Heuser et al., 2017). Courses about gifted students, which should be required for graduation, should address inaccurate perceptions, incorrect beliefs, and opinions about giftedness that may be grounded in partial truth but cannot be relied upon or used as specific guidelines for informing educational experiences for gifted students in general (Tirri & Laine, 2017), and 2e learners in particular. Teacher training, knowledge exchange, and continuing education for the enhancement of pedagogy and instructional skills are necessary to ensure that teachers are properly equipped and appropriately motivated to engage effectively with gifted and 2e learners (Heuser et al., 2017). When teachers possess strong skills related to differentiation – identifying individual needs, responding with effective teaching strategies, and assessing student progress in multiple ways to further drive instruction (Tirri & Laine, 2017) – they are prepared to successfully address 2e learners, who otherwise might succumb to underachievement and the problems associated with lack of challenge.

Moving From Disenfranchisement to Enchantment

Feelings of disenfranchisement from school are common in 2e learners. Though they can think abstractly, process complex concepts, engage in authentic problem solving, and communicate their ideas creatively, development of their strengths and talents is thwarted by educators who see the mastery of basic skills as prerequisite for more advanced learning (Baum et al., 2001). Successful identification and interventions for 2e learners depends on understanding the effects of intersectionality between giftedness and disability (Baldwin et al., 2015). Learning problems often become the primary focus for educators, and 2e learners are denied the opportunity to participate in advanced learning opportunities that address their giftedness. When schools do not provide access to appropriate intellectual challenge for these students, poor outcomes can accrue: 2e students may become depressed, anxious, withdrawn, angry, discouraged, disinterested, and upset about school (Neihart, 2018). Because they tend to evaluate themselves based on their deficiencies rather than their strengths, 2e learners often have low self-esteem (Webb et al., 2019). They commonly see themselves as inadequate impostors, and their academic self-concept tends to be very low (Baldwin et al., 2015). This is particularly true when interventions intended to address their gifted needs go unmet.

Providing resources and supports for teachers of gifted and 2e students is essential in assuring that appropriate differentiation takes place in our province's classrooms. Many school leaders and teachers prioritize addressing academic weakness; this is neither good nor bad, but it does leave less instructional time for students requiring attention because the standard curriculum is inadequate (Peters & Jolly, 2018). Heuser et al. (2017) stated that because the vital task of implementation rests with teachers, they must be provided with sufficient time, funding, and support to actualize effective differentiation strategies in practice. As more

resources are allocated to programming for gifted students, the more formalized, appropriate, and sophisticated their programming becomes. Today's classrooms present a wide range of student academic readiness (Peters & Jolly, 2018), and we cannot assume that teachers are capable of limitless adaptation without sufficient assistance.

Directing Educators From Above

Though they may have adequate training and support for classroom differentiations, Manitoba teachers still lack legislative direction to accommodate this group of students. As it is written, the Public Schools Act (PSA) does not allow gifted students to be identified as 2e, because only disabilities are considered grounds for adaptation and differentiation (Manitoba, 2020) while giftedness is not. This deficit-based model emphasizes weakness and the need for lowering the bar, while effectively erasing needs that exceed what students at a particular age are expected to understand, know, and do. Teachers and schools, guided by our province's legislation, look for learning problems and try to fix them – a noble cause. However, when the root of a learning difficulty lies in the gap between a student's high intellectual capacity and the lows of their cognitive profile, the PSA essentially directs educators to consider only one source of the 2e learner's difficulties. It is not common for giftedness to be considered within the realm of special education (Gierczyk & Hornby, 2021), but the needs of 2e learners are effectively erased when only their disabilities are considered significant for instructional planning purposes.

Manitoba must define giftedness as a criterion for educational accommodation, recognizing that which students are identified for assessment and served by programming depends largely on the definition that is used (Dole & Bloom, 2017). Incorporating a definition of giftedness that is both scientifically accurate and socially responsive (Heuser et al., 2017) into the PSA can help to secure 2e learners equal access to appropriate educational programming. The presence of a carefully crafted, broadly accepted definition of gifted and 2e learners in legislation will support teachers and school leaders, and guide their decision-making (Tirri & Laine, 2017). In other jurisdictions, new approaches for identifying giftedness have broadened the range of students included under the 2e umbrella; by recognizing social constraints and other disadvantages, these new, more inclusive definitions serve a wide range of students who may not have been identified by more traditional approaches (Lo & Porath, 2017). Because government initiatives and policies are intrinsically and explicitly linked to funding allocation, enrichment programming would be more likely to receive financial support (Brown & Wishney, 2017). Formalizing a definition of giftedness in the PSA is the first, crucial step in providing training opportunities for teachers and funding to support their efforts with 2e students.

As a group, 2e learners deserve to have their unique needs understood and met; they are part of the overall student population, and deserve thoughtful and strategic consideration when educational priorities are identified (Brown & Wishney, 2017). Policy-makers and educators in Manitoba have not yet embraced the concept of twice-exceptionality; without the requisite knowledge and skills for identifying and serving these students, educational systems will continue to fail to support 2e learners (Baldwin et al., 2015). We may need to grapple with the fact that our educational systems have underlying inadequacies that exacerbate the difficulties of 2e learners (Foley-Nicpon et al., 2013). The social, emotional, and educational implications for 2e learners whose needs are unmet are far reaching (Ronksley-Pavia et al., 2018), and include the possibility that these students will be prevented from reaching their full potential.

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Jennifer Metelski is an M.Ed. student at Brandon University. She has an interest in learning about gifted children and adults, and is particularly interested in understanding how lack of gifted identification and gifted-specific education in schools affects adult outcomes. She edited this paper with a pug puppy nibbling on her toes. Welcome to the family, Gertie!

Learning Loss: A Summer Problem

Caitlin Munro

Abstract

Regions with a lengthy summer break can create negative outcomes for learners; this problem is referred to as summer learning loss, summer learning gap, or summer slide. Summer learning loss is loss of academic knowledge and skill that accumulates over the break from school. When students return to school after the summer break, teachers need to re-teach previously taught material. The academic loss may result in achievement gaps that widen each year for students. Government-implemented interventions and voluntary summer programs have potential to limit summer learning loss, and hence decrease the achievement gap. Summer learning loss is a critical problem that has long-term consequences. However, there are solutions that can limit learning loss for students.

Summer vacation is a time that most teachers and students look forward to, because it brings opportunities such as camping, staying up late, and hanging out with friends. Reading assessments, math quizzes, and science experiments are quickly forgotten when summer break begins. Although summer brings a much-needed break for teachers, students, and support staff, the break from school creates a problem for some learners. This problem is referred to as summer learning loss, summer learning gap, or summer slide (Meyer et al., 2017). Summer learning loss occurs in regions with a lengthy summer break, which results in a loss of academic knowledge and skills. The school year acts as a great equalizer because it creates equal learning opportunities for students (Coley et al., 2020). The summer months do some students a disservice because these equal opportunities are no longer available. Without the same opportunities, these students can fall behind. This requires teachers to re-teach previously covered material. Although loss of learning varies throughout all subject areas, the highest areas of loss occur in math and literacy. Additionally, this loss may result in achievement gaps that widen each year. However, addressing poverty and compensating for unequal opportunities throughout the summer months can limit learning loss. Offering literacy and numeracy programming through at-home instruction and summer programming will also limit learning loss, while shrinking the achievement gap. Summer learning loss is a critical problem, and although there are limitations to the variety of possible interventions, there are attainable solutions to limit this loss.

How Summer Learning Loss Impacts Academic Success

Although summer learning loss typically affects most students, the extent of knowledge loss varies throughout math, science, reading and writing. Typically, greater losses are seen in math than reading, and it is not uncommon for students to lose two months of previously learned math skills every summer (Boulay & McChesney, 2021). Such loss can be attributed to students viewing math as a school-only concept, and therefore being unable to connect math with their everyday lives. This disconnect limits students from practising math skills throughout the summer, which directly affects the knowledge loss that they bring into the next school year. Although opportunities for reading appear to be more abundant during the summer months, there is no focus on accuracy, fluency or comprehension, which contributes to loss (McDaniel et al., 2017). For students from more affluent families, literacy opportunities may present themselves through trips to the museum, for example, where they are reading text to learn about what they are viewing. For students from less advantaged families, these opportunities can come from texting friends, reading signs from the local mall, or even finding programing on television. Although summer learning loss affects most students, the variety of experiences

available to students impacts the type and degree of learning loss.

Students who come from families with low economic status can be disadvantaged by not having the same summer learning opportunities as those from upper income families. Schools work tirelessly to provide equal opportunities for children. However, when a child leaves the school, the inequities among students are evident. This is exacerbated throughout the summer months: disadvantaged families may be unable to make up for the lack of school resources, whereas families with higher incomes have the means to provide a richer learning environment from home (Meyer et al., 2017). Unfortunately, economic status is directly linked to opportunity (Boulay & McChesney, 2021). Summer camp, museums, libraries, and family camping are only a few examples of opportunities typically offered to middle or high-income families. These learning opportunities expand a child's knowledge base and give practice in literacy and numeracy skills, which are not as accessible to their peers from low-income families (Coley et al., 2020). Furthermore, for those students from low-income families who enter the summer already behind their peers, the summer only adds to the achievement gap, with those students starting the next school year even further behind their higher income peers (McDaniel et al., 2017).

Children from low socio-economic status households often start their academic years behind in math, reading, and science, and this learning gap continues to grow as students advance into the next grade (Coley et al., 2020). Summer learning loss has been found to create an achievement gap with an average of three months between students from high and low-income families (Meyer et al., 2017). By the time students begin middle school, this achievement gap can put students from low-income families one or two years behind grade level (McDaniel et al., 2017). As time goes on, the achievement gap widens, which affects formal education after high school, employment opportunities, and ultimately the income that an adult will make (Augustine et al., 2013).

Interventions To Limit Summer Learning Loss

Families with low economic status can struggle to provide the same summer learning opportunities as those from higher economic status. Government interventions and summer programming have potential to limit summer learning loss.

Government-Implemented Interventions

Government and policy makers can compensate for the unequal opportunities offered to lower income families that take place outside of regular school days (Davies & Aurini, 2013, such as by financially supporting lunch programs. Another approach that government and policy makers can take, in order to ensure that all children receive more time of equal opportunities in school, is to change the traditional school year calendar. Removing the two-month summer break and putting in smaller breaks throughout the school year would eliminate the long stretch of time away from school and the unequal opportunities that accompany such a break (Leefatt, 2015).

Voluntary Summer Programs

Voluntary summer programs are another targeted strategy that can work toward reducing summer learning loss. Although many children would benefit from attending a voluntary summer program, those from low-income families need to be targeted because high-income families tend to enrol their children in quality programming with greater frequency (Alexander et al., 2007). Notifying families early in the year, little or no enrolment cost, accessible transportation, and meal programs reduce barriers that families from low-income face when enrolling their children in summer learning programs (McCombs et al., 2012).

Community School Investigators (CSI) is a program of the Boys & Girls Clubs of Winnipeg, which provides summer learning opportunities to students from low-income families in the Pembina Trails and Winnipeg One School Divisions (Manitoba Government, 2013). Academic Summer Program Including Recreation and Education (ASPIRE) is a similarly run program based in the Louis Riel School Division, which offers free programming for students in grades 1-6 (Louis Riel School Division, 2021). Although poverty directly impacts opportunity, it is possible to offer students from low-income families summer learning opportunities that can limit the amount of learning loss.

Schools can play an active role in limiting summer learning loss in literacy by providing families with rich literacy activities to engage in over the summer break. Summer learning loss occurs throughout all subject areas, with the highest losses occurring in math and literacy. Increasing the availability to reading material encourages children to read over the summer, which reduces learning loss (Leefatt, 2015). Children who receive books, postcards, and letters from their teachers before the summer begins spend more time engaging in literacy activities over the summer months, compared to their peers who do not receive the same type of intervention (Kim, 2007).

Providing reading material for children to practise accuracy and fluency is an imperative strategy to combating loss acquired in reading. However, equally as important is providing activities to support comprehension for reading materials (McDaniel et al., 2017). ASPIRE instructors are Faculty of Education students in Winnipeg, who lead children through various activities to engage and build skills in literacy, math, and problem solving (Louis Riel School Division, 2021). CSI also provides literacy, numeracy, and science activities; children report leaving the summer program with a substantial increase of literacy and numeracy skills (Boys & Girls Clubs of Winnipeg, 2012). Access to reading material, literacy activities, and summer programs that engage children in rich learning opportunities are strategies for limiting summer learning loss.

In order to address the achievement gap from summer learning loss, education must be viewed as a year-round commitment (Leefatt, 2015). Pre-school, whole-day kindergarten, after-school, weekend, and summer programs are strategies to combat summer learning loss (Davies & Aurini, 2013). Participating in summer learning programs limits learning loss and can even produce gains for children (McCombs et al., 2012). Results from summer learning program studies confirm that the effects of the summer learning can stay with children for up to two years (McCombs et al., 2012). Prioritizing learning as a year-round commitment, and implementing programs that support summer learning, limit summer learning loss, which in turn reduces the achievement gap.

Limitations to Summer Learning Interventions

Although research supports the interventions to limit summer learning loss, there are limitations associated with the interventions. Providing lunch programs to students from low economic status households for example, is a costly endeavor on a school-based level. Many schools apply for grants to receive funding for their programs, but not all schools apply for or receive such grants, which further reinforces unequal opportunities for students. Providing students with literacy interventions facilitated by teachers over the summer has limitations because teachers and support staff are not paid employees over the summer holidays. Therefore, staff are either volunteering their time over the summer break or administrators need to provide time for teachers and support staff to prepare before the summer begins; these options may not be sustainable long term and many schools may choose not to participate. Lastly, voluntary summer programs have limitations associated with them. For example, in 2012 the CSI program was supported by individual donors and 18 group donors (Boys & Girls Clubs of Winnipeg, 2012). Without the donors' financial support, the program would not be able to run. Furthermore, not all children are able to attend such programming, reinforcing the inequities for

students who need extra support.

Conclusion

The end to a school year brings the excitement of summer vacation because students and teachers look forward to putting the previous year behind them. Although this break provides an opportunity to rest and re-charge, it brings what we know as summer learning loss. Summer learning loss is connected to reduced exposure to learning opportunities at home, socio-economic status, and poverty. The school year provides a balance of instruction and opportunity in an attempt to give all students what they need to succeed academically, but not all students are afforded the same types of opportunities during the summer months. Learning loss differs across the different subject areas of math, science, reading, and writing, creating a learning gap that widens each year. However, providing opportunities to those affected by unequal opportunity can limit learning loss. Although there are limitations to summer learning interventions, providing rich literacy and numeracy instruction and activities limits learning loss while decreasing the achievement gap. Summer learning loss is a critical problem, but solutions can be implemented to meet the needs of students.

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A Literature Review on the Effects of Learning with Therapy Dogs in Schools: Social and Emotional Learning and Readiness To Learn

Michelle Levesque

Abstract

The presence of a dog supports self-regulation, interpersonal skills, and readiness to learn in and out of the classroom. Somehow, dogs are able to improve student learning, sometimes through dog-student or dog-teacher interactions, and at other times by simply being present in the room. Most research has focused on the positive effects of having a dog in the classroom. It would be interesting to note what dogs do to affect students positively.

Learning is a complex process. Teachers are spending more and more time on supporting student regulation and readiness to learn in the classroom, in order to improve student learning. Cesar Millan, a famous dog trainer, believes that dogs have "become the world's foremost experts on every type of human behavior" (Millan & Pelletier, 2017, p. 15), and so dogs are apt at supporting people. This review of the literature explores how the presence of a dog, paired with thoughtful instruction, has the potential to produce significant results in developing social and emotional learning skills (SEL), and in being ready to learn.

SEL with Dogs

The benefits dogs have on SEL has been studied in a variety of settings. Notably, studies have been done in schools, clinical settings, and a pediatrician's office. In schools, the focus was on self-regulation and social education. The clinical setting assessed physiological responses. The pediatric study investigated physiological responses and behavioural measures. Across all settings, people have benefitted in SEL that incorporated dogs.

SEL in the Classroom

Student regulation is improved by the presence of a dog in the classroom. An American research teacher studied this phenomenon in a self-contained classroom with students ages six to eleven years (Anderson & Olson, 2015). All six students were present because they did not function successfully in a normal classroom setting. Notably, all students had clinical diagnoses and had displayed emotional crises in both the previous classroom settings and the self-contained classroom. The teacher provided a behaviour baseline of two months without a dog, followed by two months with a pet dog that resided in the classroom during the school day. For all four months, social skills were taught, directly incorporating the dog in the last two months. The results were significant, showing a drastic decrease in emotional crises for all six students. Notably, the most dysregulated student went from 16 crises in the first two months down to 7 crises in the following two months. It is apparent that daily interactions with a pet dog, coupled with lessons in social skills, have the potential to improve student regulation for students with the greatest emotional needs.

In Austria, a study focused on the benefits of providing social education curriculum to third-graders at three schools. One group of children had no dog, a second group had a therapy dog present, and the third group incorporated dog interactions with the social curriculum (Tissen et al., 2015). Measures assessed social behaviour, impulsivity, empathy, risk behaviour, and relational aggression. The results were positive in all three groups, showing improvements in social behaviour and empathy. However, the group that integrated the therapy dogs with the curriculum showed improvements across all targeted areas. Therapy dogs are proven to support children in achieving higher scores for learning and applying SEL curriculum.

Other studies on SEL also found positive results. For classroom behaviour assessment, one study found that students attended to the teacher more, and that student behaviour improved overall (Brelsford et al., 2017). In addition, there was an increase in social interactions for students who were usually withdrawn. Common elements across studies included more peer social interaction and an increase in student regulation (Kropp & Shupp, 2017). In one school, a teacher used her dog to aid students in regulating and as an incentive for good behaviour (Coleman & Coleman, 2016). The same teacher used the dog as a third point of reference, whereby the student and the adult would look at the dog, rather than each other, to promote regulation. The CARing Kids curriculum was tested in Hong Kong with therapy dogs. Students who worked with the dogs and the curriculum were found to have less aggression and more self-control (Ngai et al., 2021). In all studies, the presence of a dog supported an increase in regulation, student SEL, and application of the curriculum.

SEL in a Clinical Setting

Dogs support regulation in the classroom; they also support regulation in clinical settings under stricter scrutiny. In one South African clinical study, subjects who interacted with a dog had a decrease in blood pressure and an increase in bonding/affiliation neurochemicals (Odendaal & Meintjes, 2003). One theory is that dogs (and other animals) calm a person by providing comfort through physical contact and a redirection of focus away from the source of stress.

In a study conducted in Germany and Austria, male children with insecure or disorganized attachment were to determine the calming effects of dogs (Beetz et al., 2012). The children were asked to finish a story and complete math tasks with unfamiliar people in an unfamiliar classroom. One group had a friendly girl, the second group had a toy dog, and the third group had a dog. The group with the dog had cortisol levels that were significantly lower, the students were much calmer, and the cortisol levels were lower the more students pet the dog prior to the test. Regardless of the how, the presence of a dog is proven to support a calmer nervous system and a decrease in anxiety.

SEL in a Doctor's Office

Reducing behavioural distress during a doctor's visit is a goal for many pediatric doctors. In an American study, it was found that the presence of a therapy dog greatly reduced the visible distress of children during doctor's visits (Hansen et al., 2015), which increased the cooperation of many of the children during the exam. Interestingly, a few parents commented on the drastic and positive difference in their child's behaviour during the exam. Since therapy dogs greatly reduced anxiety in children, doctors were able to view patients in a more natural state. In addition, patients were more likely to cooperate with the doctor, increasing the amount of information at the doctor's disposal, aiding in diagnosing patients. While SEL was not taught in this setting, the presence of the therapy dog decreased anxiety in all children, resulting in a decrease in heightened emotions and an increase in self-control, two important aspects of SEL.

SEL Summary

Dogs provide successful SEL support to students across locations. While SEL was directly taught in the classroom, the clinical study and doctor's office showed that patients had reduced distress. The presence of a dog had a positive effect on subjects, increasing self-regulation and improving interpersonal skills. In addition, the active participation of a dog with the curriculum increased student learning across all targeted areas of SEL. This has significant implications for educators in the classroom. If dogs can support regulation, students will be set up for success when learning in the presence of a dog.

Readiness To Learn with Dogs

Anxiety and attentional difficulties are common challenges for students today. Since dogs are proven co-regulators, the introduction of a dog into a classroom has shown potential to result in student readiness to learn. Studies have shown that dogs support improvements in brain function. Dogs also support students when reading, with positive results showing in assessments, and attitudes and behaviours during reading. Literacy programs with dogs have met with increased reading scores. The results demonstrate that therapy dogs support learning and readiness to learn.

Therapy Dogs Affect Human Attention, Concentration and Executive Functioning

Dogs positively affect brain functioning in areas of attention, concentration, and executive functioning. A Swiss study used a robotic dog and a therapy dog with two groups of children (Hediger & Turner, 2014). The researchers found that the robotic dog did not affect attention and concentration, but the therapy dog positively affected children's attention and concentration for almost an hour after they spent time with the dog. It was hypothesized that dogs have a relaxing effect on children. Hediger and Turner (2014) also disproved the common misconception that therapy dogs distract students from attending to a task. Simply having a therapy dog in the room provided an increase in test scores.

Dogs support improvements in executive functioning skills, such as prioritizing and planning, using working memory, and controlling emotions. In an American study, it was found that college students who received stress management with therapy dogs showed improvements in executive functioning (EF) skills of the at-risk students (Burt, 2021). At-risk students who received stress management training that was delivered through direct instruction did not show increases in EF. Students who were not considered at risk did not benefit from any of the interventions. For at-risk students, using a therapy dog results in improvements in EF, supporting student readiness to learn.

Testing: Reading to a Dog Instead of a Teacher

Therapy dog reading programs have seen results of increased reading scores. In the United Kingdom, it was found that when reading to a dog instead of the teacher, student reading scores increased, including increases in fluency and pacing (Barber & Proops, 2019). However, intonation showed no significant change in score. In addition, students self-reported that they gained emotional benefits such as feelings of being calm or happy. Connecting this to prior studies, it is plausible that dogs reduce student stress, which results in an increase in scores. This would mean that regular testing does not reveal the true ability of students due to stress.

Reading with a Dog: Risk-taking, Student Confidence, and Reading Interest

Not all studies show benefits in test scores; some show only regulatory benefits. A study in the United States used therapy dogs in small homogenous groups of readers, followed by writing activities (Kirnan et al., 2016). Results for the kindergarten to fifth grade students showed a statistically significant increase in reading scores for kindergarten students, but not for grades 1-5. However, students were noted to take risks more often, and had more interest and confidence in their reading. Students with special needs had improvements in reading, and were able to sit for increased periods of time. While statistically significant reading benefits occurred only with the kindergarten class, it was noted that the kindergarten and grade 1 classes integrated the dog reading program into the ELA curriculum, while the higher grades did not. As well, the teachers had numerous concerns, including the ineffectiveness of the program and implementation challenges such as accommodating student needs and preferences.

Literacy Programs with Dogs

Numerous studies found therapy dogs a beneficial pairing with literacy programs. Two American programs, R.E.A.D. and Tail Waggin' Tutors, were found to increase reading scores for comprehension, reading speed, and accuracy (Kropp & Shupp, 2017). Yet another study found that the R.E.A.D. program provided higher scores in reading rate, accuracy, and comprehension scores when compared to control groups that read to either teddy bears or humans (Brelsford et al., 2017). In one study done with students with learning disabilities, the students assessed with a dog had higher reading scores in comprehension, reading rate, fluency, and accuracy (Brelsford et al., 2017). However, this study was problematic because interventions were provided to students prior to the study start date. A Canadian program, Paws to Read, found anecdotal increases in reading motivation in reluctant readers (Barrett, 2003). Overall, most studies found benefits in student reading scores with a dog present, including common increases in comprehension, reading rate, and accuracy.

Readiness To Learn Summary

The benefits of having a dog present for testing and/or reading practice showed improvement in reading for most students. All research reports that mentioned students with additional needs stated that having a therapy dog supported the student in reading behaviours and reading scores. Since having a dog present is found to improve EF, attention, and concentration, students have the potential for greater success when learning to read by removing stressors that would normally hinder the learning process, with at-risk students or students with disabilities showing the greatest benefits.

Conclusion

The simple presence of a dog has been found to change the way humans interact. Dogs not only aid humans in increasing self-regulation and improving interpersonal skills; they also support readiness to learn. The presence of a dog supports increased test scores and abilities in concentration, attention, and EF. Essentially, the dog may optimize some students' learning ability. Without a dog, students may not be demonstrating their true potential, or learning, as well as they are able.

There are other areas to consider when looking at capitalizing on the benefits of therapy dogs in schools. Studies exploring the following questions would shed more light on the topic. Can therapy dogs support students who are afraid of dogs? If not, how will those students receive equitable supports? How can therapy dog programs best support students who have dog allergies in an inclusive manner? How do negative teacher and parental attitudes and perceptions affect the results of therapy dog interventions? Should the demonstrated benefits of therapy dogs outweigh people's fears, dislikes, or disinterest? How do dog literacy interventions compare with other literacy interventions? Is there transferrable information from studies done with support dogs? Since dog interventions are increasing, but not yet commonplace in North America, there is much to learn on this topic.

Of great interest is the *how* of therapy dogs. In the above studies, dogs positively supported students by simply being in the room. The dogs sat or laid down in the room. They were touched, pet, or did tricks in between bouts of learning. A few studies included the dogs interactively in the curricula. While it would be easy to pass of these dogs as passive participants, a closer look may reveal new understandings. Dogs are experts at nonverbal communication: "dogs do speak, but only to those who know how to listen" (Pamuk, n.d., as cited in Millan & Peltier, 2017, p. 68). While the current studies focused on the benefits of dogs to SEL and readiness to learn, it would be interesting to learn what dogs do that sets students up for success. Perhaps it is the *how* and not the *who* that is the key to improving regulation and

learning in school. While dogs obviously contribute positively to student learning environments, it could be that teachers can provide similar results through improved nonverbal communication.

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The Role of School Leaders in Building a "New and Better Normal" as Schools Emerge From the COVID-19 Pandemic

Allison Ward

Abstract

The COVID-19 pandemic has deeply impacted the field of education, highlighting many problems to be considered by educational leaders as schools emerge from the pandemic. In planning to address challenges and consider innovation, school leaders are encouraged to implement changes in curriculum and assessment to meet the needs of contemporary learners, build strong home-school relationships by honouring the voices of all stakeholders, encourage direct social and emotional instruction, and execute a systemic mental health action plan. At this pivotal moment in history, school leaders play a critical role in the transformation of the current system, acting as catalysts for change in the pursuit of a new and better normal.

As schools emerge from the COVID-19 pandemic, the profound effect of public health orders and restrictions, school closures, and remote learning has highlighted many problems in the educational system, requiring thoughtful consideration by school leaders. Problems in the areas of academic achievement, curriculum and assessment, home-school relationships, social and emotional learning, and mental health have emerged as significant concerns in the educational system. As a result of these situations, school leaders are encouraged to engage in critical reflection as they plan a response to these problems in order to restore school climate and culture. This is a pivotal time in educational history. Educational leaders have an opportunity to think deeply about the current system and consider positive actions to address the significant areas of concern that have come into view. As schools emerge from the COVID-19 pandemic, education can be reimagined. School leaders can play a critical role in spearheading a transformation as the system evolves into a "new and better normal."

Academic Achievement

The negative impact of COVID-19 on academic achievement is a problem requiring consideration by school leaders around the world (Harmey & Moss, 2021). Although it existed prior to COVID-19, the academic achievement gap has been exacerbated by school closures and lack of access to educational opportunities (Javurek & Mendenhall, 2020). COVID-19 has highlighted inequities in the current educational system, and contributed to an academic gap that has grown exponentially throughout the pandemic (Fisher et al., 2021). In order to plan for effective rebound learning, and work toward closing the academic gap, addressing systemic and societal inequities is an area of concern for school leaders.

Identifying and responding to systemic and societal inequities, including access to basic needs, health, wellness and technology (Shah & Shaker, 2020, p. 37), is critical for school leaders as they work to close the academic achievement gap (Fadlallah, 2021). Honest and open performance conversations between school leaders and educators through an equity lens can help identify strengths along with areas of growth in this area (Fisher et al., 2021). In this moment in time, there is a unique opportunity to transform by critically reflecting, identifying, and challenging current practices that contribute to the marginalization of students (Katz et al., 2018). To close the academic achievement gap, it is important for school leaders to ask critical questions in order to recognize and address inequity while engaging and empowering all stakeholders.

In the return to a new normal, school leaders must implement a systemic intervention model to diagnose academic gaps efficiently and address closing the gaps through effective instruction (Hattie, 2021). High expectations are required for all students, along with targeted

interventions carefully designed to accelerate learning and close academic gaps (Javurek & Mendenhall, 2020). It is critical for school leaders to provide instructional leadership, as well as responsive and enriched professional development opportunities (Fadlallah, 2021), in order to encourage teachers to reduce less effective instructional strategies such as lecturing and teacher-centred questioning (Hattie, 2021). Effective instruction occurs when educators facilitate learning by curating resources and actively engaging students in student-centred, inquiry-based learning (Zhao & Watterston, 2021). With student voice in both learning and decision making, academic gaps can be closed as students become engaged in meaningful, personal learning rather than learning based on age and grade level (Javurek & Mendenhall, 2020). School leaders who promote effective instructional strategies will encourage acceleration of the closing of academic achievement gaps through student engagement in meaningful learning experiences.

In order to enhance effective instruction, school leaders may consider leveraging what has been learned about technology throughout the pandemic (Javurek & Mendenhall, 2020). Thoughtful consideration and use of digital products and technology can be implemented by educational leaders to promote inquiry-based, student-centred learning (Zhao & Watterston, 2021), and to accelerate learning to close academic gaps (Harris & Jones, 2020). Through ongoing professional learning and collaborative teacher inquiry (Katz et al., 2018) in the areas of digital resources and technology, educators can continue to develop effective pedagogy and targeted interventions to accelerate the closing of the academic achievement gap (Fadlallah, 2021). With a goal of supporting engagement and academic achievement through a student-centred approach, effective pedagogy can be enhanced through technology and digital resources, including clear success criteria and ongoing evaluation to determine the effectiveness of instruction (Hattie, 2021). As a key to addressing academic gaps and accelerating learning, school leaders must reflect on the area of effective instruction and ensure that transformative instructional strategies are in place in schools.

Curriculum and Assessment

School leaders must consider addressing the problems that have emerged around a knowledge-based curriculum. Throughout the COVID-19 pandemic, teaching of curriculum has often required memorization of facts and worksheets (Fisher et al., 2021), highlighting content designed to prepare children to enter a workforce of the past with an emphasis on the acquisition of skills needed for jobs that are no longer relevant (Mitra, 2020). The focus on task completion teaching has resulted in the disengagement of a significant number of learners (Zhao & Watterston, 2021). In planning for a new and better normal, addressing concerns related to content-driven curriculum is important for school leaders.

In seeking to transform the system, an area of consideration for school leaders is the implementation of a thinking curriculum, whereby students can work independently and collaboratively (Hattie, 2021). Rather than teacher-directed instruction of a knowledge-based curriculum, school leaders are encouraged to implement a curriculum focused on competencies such as creativity, curiosity, critical thinking, collaboration, communication, growth mindset, and global citizenship (Mitra, 2020). Students will engage enthusiastically in personalized, project-based learning (Fadlallah, 2021). A curriculum with a student-centred focus on content through rich learning experiences (Hattie, 2021, p. 15) is designed to promote creative thinking, deep questioning, and challenging of current norms (Tarc, 2020). School leaders are urged to support teachers in the implementation of a thinking curriculum, built on a foundation of essential skills and knowledge, encouraging student voice and choice in learning (Zhao & Watterson, 2021). As the system transforms, school leaders can spearhead a curriculum for students to learn to think critically and analyze multiple perspectives while building a lifelong love of learning (Shah & Shaker, 2020). School leaders have the opportunity to implement a new and better curriculum, one that is designed to instill in all children the ability to contribute to humanity, and to empower

the next generation of adults with the skills necessary to make the world a better place.

Schooling during the pandemic has reinforced the need for school leaders to address concerns that have emerged around assessment and grading (Fisher et al., 2021). Content-driven curriculum lends itself to assessment that is designed to determine the ability of the student to memorize facts (Mitra, 2020) along with practices that promote measuring students, rather than learning (Flanagan, 2020). In a context wherein students have access to the internet and do not need to know facts but only how to find them (Mitra, 2020), current assessment practices are a problem for school leaders to explore.

School leaders are encouraged to challenge educators to implement assessment practices designed to eliminate bias and foster student development in order to measure growth (Fisher et al., 2021). Quality assessment practices offer students the opportunity to demonstrate proficiency when they are ready, promoting the communication of mastery (Javurek & Mendenhall, 2020). As schools emerge from the pandemic, it is essential to implement accurate assessment in a timely manner in order to identify student needs and performance related to the acquisition of skills such as skills such as comprehension, communication and computing, rather than grade level expectations (Mitra, 2020). School leaders have an important role in ensuring the implementation of high-quality assessment practices, used by teachers to drive interventions and learning.

For some educators, the impact of COVID-19 on schools created an opportunity to re-think assessment and engage in powerful assessment practices. Pandemic teaching for some educators has included frequently using a variety of multi-model assessments for a range of purposes, including to guide instruction, to evaluate the quality of their teaching, and to identify student growth (Fisher et al., 2021). In order to enhance collective efficacy, school leaders are encouraged to leverage the work of these educators by establishing and supporting a culture of learning through professional learning communities (Katz et al., 2018). School leaders are encouraged to build assessment literacy and common understandings among educators. By challenging teachers to examine assessment practices and to apply critical feedback, school leaders can work to enhance assessment processes.

Home-School Relationships

Experiences throughout the COVID-19 pandemic highlight the importance of the home-school relationship. Impacted by many different stressors as the system navigated school closures, isolation and remote learning, the home-teacher-school connection has often been challenged, and in many cases broken, as families disengaged with the school (Harmey & Moss, 2021). It is critical for school leaders to acknowledge and rebuild broken relationships (Fisher et al., 2021). School leaders will need to begin with open and honest communication combined with collaborative decision making (Grooms & Childs, 2021). It is important to meet parents and guardians where they are at, first by listening, and then by finding out what each family needs (Flanagan, 2020). Transformation can occur as school leaders reengage the community through partnerships forged through open communication and collective action.

School leaders are encouraged to use home-school relationships to leverage community resources, expertise, and knowledge (Harris & Jones, 2020). Relationships with the wider community can expand opportunities for learning experiences beyond the walls of the school, both by enhancing student strengths and by assisting in the closing of learning gaps (Javurek & Mendenhall, 2020). Strong community connections can further school-based efforts to examine and improve equity (Fisher et al., 2021). Powerful home-school connections can support the development of student identity and honour the diversity of the school community by acknowledging and celebrating differences (Shah & Shaker, 2020). School leaders can successfully strengthen the home-school relationship by increasing the voice of stakeholders in terms of equity, community connections, and cultural awareness.

Throughout the pandemic, many parents and guardians have been involved in critical conversations around learning (Hattie, 2021). School leaders are encouraged to expand on this dialogue, moving parent advisory councils beyond the typical role of fundraiser into one wherein parents and guardians hold a valued voice as stakeholders in the areas of curriculum and instruction (Fisher et al., 2021). Taking inspiration from the work done during the pandemic, school leaders are urged to enhance partnerships with the home by asking critical questions around how best to support student learning and by working together to determine student needs (Grooms & Childs, 2021). It is essential for school leaders to continue investing in home-school relationships as powerful partnerships, while also creating a climate wherein community engagement and family advocacy are deeply valued.

Social and Emotional Learning

School leaders must have a plan to address the significant deficits in the area of social and emotional learning that are a result of the COVID-19 pandemic. The pandemic has resulted in reduced opportunities for socialization and connection, both in the classroom and on the playground (Flanagan, 2020). As school returns to in-person learning, problematic and anti-social behaviours will be evident in both the school and the wider community (Fisher et al., 2021). School leaders must have a plan to address deficits in social and emotional learning.

Children need to learn how to be with each other in their school communities, as well as in the wider world (Tarc, 2020). School leaders can promote a new and better normal through a school-wide focus on building relationships and intentionally fostering social and emotional well-being (Zhao & Watterston, 2021). School leaders must encourage educators, who are commonly focused mainly on academic gaps and a need for students to catch up on lost learning, to slow down and take time to build relationships (Tarc, 2020). Before focusing on academic achievement gaps, it will be imperative to provide direct instruction of self-regulation skills and most importantly, to respond to the social and emotional needs of students (Harmey & Moss, 2021). Strong self-regulation skills are directly connected to student engagement and academic achievement (Hattie, 2021), making a primary focus on social and emotional teaching a priority (Carrington, 2021). It will be well worth the effort for school leaders to prioritize social and emotional learning as the system transforms in the wake of the pandemic.

Throughout the pandemic, it has been difficult to provide critical instruction in the social and emotional domains to address challenging behaviour. Instead of addressing negative behaviour, many students with challenging behaviors have simply been removed from virtual meetings (Fisher et al., 2021). As students return to in-person learning and challenging, anti-social behaviors increase, school leaders must encourage teachers to develop an understanding of challenging or dysregulated behaviour as a desire by students for connection (Carrington, 2021). Through honest professional dialogue and reflective conversations (Katz et al., 2018), school leaders can support educators to challenge deficit thinking around student behaviour by bringing compassion and grace to teaching (Grooms & Childs, 2021). School leaders are advised to embed school-wide restorative practices with a focus on relationships, in order to encourage students to develop an understanding of the impact of their actions on others (Carrington, 2021). School leaders play a critical role in encouraging educators to view challenging behaviours through an empathy lens, and in ensuring that structures are in place to provide significant support for students as they re-engage in developing citizenship and personal management skills through direct social and emotional instruction.

Mental Health

The mental health of students and staff has emerged as a key concern for school leaders (Harmey & Moss, 2021). Students and staff members are returning to schools with feelings of isolation, stress, anxiety, and depression as many continue to process trauma related to the

pandemic (Flanagan, 2020). Schools play a vital role in helping not only students and staff, but also wider communities, to address the mental health needs that have arisen (Harmey & Moss, 2021). School leaders are encouraged to acknowledge the trauma (Carrington, 2021) and to provide professional development to educators in order to facilitate the implementation of trauma-informed practices (Grooms & Childs). Students will require education about COVID-19, along with time to process their experiences, with an understanding by school leaders that the effects of trauma, and the implementation of trauma informed practices may be required for months, and even years, to come (Harmey & Moss, 2021). School leaders must plan to address the mental health needs of all stakeholders by acknowledging trauma and implementing trauma-informed practices in schools.

Countless individuals throughout the school system may be hesitant to return to in-person learning because they do not yet feel safe in school buildings (Fisher et al., 2021). It will be important for school leaders to implement strategies and structures to ensure that everyone feels safe at school and to communicate these clearly to all stakeholders (Flanagan, 2020). Timely and carefully planned multi-tiered support will be required for students and staff (Grooms & Childs, 2021) from trained professionals, including social workers, school counsellors and other clinical team members (Shah & Shaker, 2020). In addressing the mental health needs of the school community, school leaders will need to execute both a systemic and individualized response to mental health needs. It is critical for school leaders ensure students and staff receive significant emotional support in a timely and intentional way.

Conclusion

School leaders are in the unique role of spearheading a transformation in the educational system as they begin to address many problems that have emerged or been exacerbated due to the COVID-19 pandemic. An outdated curriculum, compounded by unfair assessment practices and an achievement gap impacted by inequities, requires school leaders to consider curriculum planning designed to meet the needs of contemporary learners, and assessment practices that measure growth and foster learning. School leaders are encouraged to address the need to repair broken home-school relationships through honouring the voices of all stakeholders. School leaders play a critical role in implementing direct social and emotional instruction in schools to address the impact of missed social opportunities for children. Planning for a systemic response to the impact of COVID-19 on the mental health of students and staff is also crucial for school leaders. In this pivotal moment in history, through planning to address these many challenges and the consideration of systemic innovation, school leaders are in the unique position of acting as catalysts in the transformation of schools into a new normal, one that is even better than before the COVID-19 pandemic.

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Teaching Elementary Sexual Health Education: The Importance of Keeping It Current

Shannon Dube

Abstract

At the rapid rate that language. content, and preferences are changing around topics related to sexual health education, it is no wonder that curriculum in Canada is lagging behind. With a focus on the elementary classroom, this paper analyzes the problems associated with sexual health education in elementary classrooms and also takes a close look at some solutions for these issues. The purpose was to look at how outdated curriculum, heteronormative bias, and the negative messaging or outdated language have adverse consequences for LGBTQ+ students and the school space. Solutions include creating explicit policies within the school division that support inclusivity, continuous professional development opportunities for staff, and having active Gay-Straight Alliances that support safe spaces.

Sexual health education in elementary school is a hot topic issue in Canada. There are many different views about what is considered appropriate content at varying grade levels. Parents, teachers, trustees, and government all have opinions about what children should and should not be taught. One of the difficulties is that there is no standardized Canadian curriculum; each province is left to create their own. Often, these curricula are long outdated and school divisions are then left to fill in gaps to create policy that supports inclusivity. To solve the problem, updated curriculum and more professional development can be game changers. With ongoing training, teachers become aware of their own "heteronormative bias" (Bryan, 2012, p. 44), and this alone can create very meaningful change. As more educators understand how crucial it is for them to create safe spaces for all students through supporting Gay-Straight Alliances, stating pronouns, and using picture books to create opportunities for explicit conversation about diversity, the more students are going to be positively affected.

The Issues With Current Practices

Canadian students deserve the most up-to-date sexual health education curriculum. When current information is taught in the classroom, this alone can lead to safer and more responsible student sexual decision-making (Alberta Health Services, n.d.) throughout their lives. In many curricula across the country, even when outcomes were reviewed by education ministries in the past, they were drafted with no requirements for review or rewrite (Robinson et al., 2019). This leaves students behind in areas such as current social practices, vocabulary, and information. This also means that existing curricular resources can be limited (Frohard-Dourlent, 2018). In my own first years of teaching, I struggled to reconcile what I knew was current and inclusive, versus what I was reading in the sexual health outcomes of the grade I was teaching. This lack of current curriculum can affect the very important formative years as students learn about who they are on the sexual and gender spectrum and their role within the classroom, school, and even society. Students will have a hard time to begin on equal ground when, for many, sexual health education in early elementary school is usually the first school-based curricular introduction that they receive (Slovin, 2016), and is potentially being taught with a biased perspective or not taught to the depth it was intended.

When left unreviewed, the way the curriculum is taught is left open to heteronormative bias. Canadian elementary students are not being given explicit opportunity to analyze, discuss, or be aware of how the society in which they live is influencing their beliefs about their sexual health or gender identity (Robinson et al., 2019). Because heteronormativity continues to be the prevalent model for society, it remains difficult, even impossible, to ensure that sexual health

education curriculum and outcomes are being taught explicitly, in full and free of bias. Teachers will lean toward teaching topics that are within their comfort zone, and there becomes a difference between what the actual outcomes in the curriculum are and what is being delivered (Robinson et al., 2019). Sometimes unintentionally, educators assume bias in both what they teach and what they do not teach. This influences the messaging that students receive about what is considered by society to be normal or accepted (Slovin, 2016). All one has to do is look around and see that gender norms themselves define educational institutions, between gendered washrooms, lack of widespread pronoun use by educators, and forms and reports requiring an identification of the students' sexual biology (Frohard-Dourlent, 2018). With all of these things that get in the way of students receiving objective sexual health education, it is undoubtedly going to have an effect on them. It is simply a reality that gender norms continue to play a dominating role in the society in which we live.

Canadian classrooms consist of a variety of students with varying ranges of ability academically, socially, emotionally, and physically. Students also vary on the spectrum of gender and sexual identity. The students we teach are unique and they do not always fit in the boxes that society wants them to. For example, for trans students, the underlying messaging of cisnormativity that is pervasive in the sexual health curriculum negatively impacts them (Frohard-Dourlent, 2018). It also creates classroom spaces that may not feel safe or welcoming for all. The reality is that children are already in a constant state of experimentation with gender roles when engaged in play (Bryan 2012). It is actually the adults who project their fear of the unknown about the "impermanence and uncertainty" (Frohard-Dourlent, 2018, p. 336) of the curriculum, its outcomes, and the ever-changing world and language of gender and sexual identity onto the day-to-day practices of the school space. I will never forget the time in 2017 when a brand new school in the school division I work for opened with gender neutral washrooms. However, due to parental fear and complaints, the gender neutral signs were covered over with printed paper that had male and female bathroom symbols on them. I felt disappointed, frustrated, and heartbroken. Students in elementary schools need not only the most up-to-date and comprehensive sexual health education but also inclusive spaces for gender diverse students because they are extremely important to students' personal health and how they grow and learn socially (Alberta Health Services, n.d.).

Finding Solutions to Outdated Practices

In order to practise healthy and positive personal sexual health, students need to acquire "sexual self-efficacy" (Grace, 2018, p. 491). This happens when they have access to accurate information, have had appropriate behavioural skills modelled, and have the confidence necessary to execute their learning within their own personal sexual health experiences. Vocabulary and content change very quickly within the realm of sexual health education, and there are simply not enough curriculum updates or reviews happening fast enough (Robinson et al., 2019). Gender and sexually diverse inclusive curriculum would support educators to have discussions with students around homophobia, transphobia, and the inequalities that are produced around gender and sexuality norms within North American culture (Meyer et al., 2015). Teachers support current curriculum content that removes the shame and stigma about sexuality, and teaches students to accept and respect others, regardless of the personal choices that they make (Bialystok, 2019). When curriculum is left outdated and the implicit message sent by ministries is that the subject is not important enough to update, school divisions are left to make policy decisions that ensure safety for all. Explicit policies that fight against harassment based on diverse gender and relationship styles create and protect school spaces, and are essential in the protection of LGBTQ students (Swanson & Gettinger, 2016). Policy also helps to make everyone in the school building clear on the rights of LGBTQ students and the responsibility of the adults in the building to protect those rights. Once the policies are in place, there needs to be a continued effort to promote learning through professional

development.

Ongoing professional development will help to light the way for many educators who wish to be current and who want to be supportive allies for all students. With dialogue and authentic learning opportunities about one's own beliefs and socialization, we can become aware of our own role in maintaining heteronormativity (Bryan, 2012) and cisnormativity. Educators need opportunities to struggle with where they stand, and time to reconcile this notion that there is going to be uncertainty between what they believe personally and what they are committed to do professionally (Swanson & Gettinger, 2016). It is only with time, reflection, and training that greater strides will be made toward delivering effective sexual health education content with more confidence (Bialystok, 2019). Having professional guest speakers in to speak to staff about topics related to acquiring accurate information can also be really meaningful (Grace, 2018). Just a few years ago, the school leader whom I worked for brought in a guest speaker to share his professional expertise in order to deepen our understanding of a topic. It was one of the most relevant and effective learning opportunities that I have engaged in as a professional. When teachers are open to looking at their own cisgender and heteronormative belief systems, it creates a wonderful opportunity to start creating more purposeful safe spaces for sexual and gender diverse students and staff.

Being in a safe space can mean different things to different people. In an educational system where curriculum that represents diversity is lacking, creating spaces for all to feel safe and welcome is crucial. It can actually help to save someone's life. One way to do this is to support students in the creation of a Gay-Straight Alliance (GSA). GSAs are school-based groups where LGBTQ students and their allies can go for support, for friendships, and for advocacy for social change (Lapointe & Crooks, 2018). The result of all students being able to participate in such a group is extremely positive: less anxiety to hide students' true identity, higher self-confidence, new relationships, and better school attendance (Government of Alberta, n.d.). Students deserve to feel like they have an equitable place in the world regardless of how they identify or whom they love, as well as a place to go to affirm their own identities (Lapointe & Crooks, 2018). Consistently using the personal pronouns that individual students prefer (he/him, she/her, they) is also a way to create an inclusive environment that helps others to feel safe and respected (Sakurai, 2017). It can be harmful to assume others' pronouns based on their names or on the way that they look. Sharing our pronouns first or including them in email signatures, for example, makes it more commonplace when identifying ourselves to others. There are even curated picture book lists for elementary classrooms about pronoun use and gender norms. This creates a safe way for students to see themselves and their world reflected (Elson & Nash, 2020). There is huge value in talking explicitly about pronouns as well as gender and relationship styles, not only to give students opportunities to see and experience many different gender expressions, but also to give them permission to be fully themselves.

Conclusion

Many people are doing their best to honour their authentic selves. This includes students and staff. Educators have a unique opportunity to shine a mirror at students and show them who they are fully capable of becoming - with only pride and no shame. When sexual health education curriculum is lagging and professional development and training may be scarce, leaders have the ability to create change by creating inclusive policies and practices. Just the same, teachers can effect change simply by being a known supportive ally within the school, using inclusive language, and developing diverse classroom libraries. These may seem like easy ways to create safe and inclusive learning environments for all; however, it still remains a challenge to break the societal hold that remains on the majority of heteronormative and cisgender world views.

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BISON STOPPED DEAD
sculpture by Eric Lowe

This sculpture reflects what happened to the Canadian prairie bison population. Around 1500 AD, somewhere between 30 and 60 million bison ranged free on the western prairies. Bison were the main food source of the Indigenous peoples for thousands of years. Their hides and skeletons also provided clothing, shelter, carrying vessels, tools, and accessories. The bison were spiritually respected because they supported all life.

By 1910 AD, there were only about 1000 bison left. *Bison Stopped Dead* is Eric Lowe's statement on this tragedy. Surveyors divided the open land into squares, and then the European settlers fenced in the squares. The bison were a nuisance. They did not respect fences or railway lines. They were killed by the hundreds and left to rot. They were no longer respected, and neither were the people who revered them.

The sculpture's barbed wire naturally formed a cone-like pattern for the dream catcher, like the manmade tornado that killed off the bison. Black leather bands hang in mourning. The black leather hanging from the mouth of the skull symbolizes the blood that spilled and turned black as it dried. The bison skull was chosen for its size to represent the small innocent bison that were killed indiscriminately.

Bison Stopped Dead is an artistic statement of how colonization destroyed prairie Indigenous peoples' traditional food supply and way of life. It was featured in an online exhibition that brought together northern and rural artists in Manitoba, and it was featured in the *Winnipeg Free Press* "Arts Life" on July 16, 2021. It also won the 2021 William J. Birtles Award for Sculpture.