CASE 13: From Bench to Classroom: Knowledge Translation in School Mental Health Initiatives

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CONTENT WARNING: the following case references self-harm/non-suicidal self-injury (NSSI). The content of this case may be emotionally and intellectually challenging for students. Although the goal is to make the classroom a space to empathetically and thoughtfully discuss the content, students are invited to step out of the room and/or discontinue reading the case if they wish.

Avery McCann leaned back in her chair, feeling the warmth of the scarce February sun on her face. Three years into her position as the lead mental health researcher at Georgian Bay Health Unit (GBHU)[1], she had been given her most challenging task yet: to direct the Georgian Bay Adolescent Self-Harm Steering Committee. A few months ago, GBHU received a call from Patric Andersson, the Director of Student Wellness at Georgian Bay District School Board (GBDSB)[1], expressing concern over the number of students within the district exhibiting self-harm behaviours. Unfortunately, Patric had limited knowledge and experience pertaining to self-harm and thus sought external help for this initiative. Given her extensive experience in youth mental health research, Avery was assigned to take the lead on the project. Immediately, Avery began to talk with teachers and principals to grasp a better understanding of the issues at hand.

After piecing together each teacher's testimony, Avery knew three things. First, self-harm was significantly more prominent in Georgian Bay's high school population this year than in any previous year. Second, it did not appear to be single occurrences of harming in these teenagers; rather, it seemed to be repeated incidents. Finally, although none of the teachers quite knew how, social media was a huge aspect of the students' harming. Although these conversations had been helpful, Avery found her mind kept wandering to the same question—would the research translate well into comprehensible knowledge for the schools and students? How could she ensure her research could be taken and applied to these students' lives (see Exhibit 1)? She thought back on the experience that had led her to the position; she had completed nearly a decade of research on adolescent mental health at a large university in Central Ontario. Gazing out her small office window, Avery knew she had the right knowledge for this project, but she worried about how well she could articulate it to her new partners.

In collaboration with GBDSB, Avery selected eight members to work with her on the Georgian Bay Adolescent Self-Harm Steering Committee. The committee members varied widely in their knowledge and experience. The members consisted of Patric, two teachers, two students, one of Avery's colleagues from GBHU, and two counsellors from GBDSB. The students, Sydney and

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[1] *This organization is fictitious, created solely for the educational purposes of this case. The organization is loosely based on the equivalent counterpart in Simcoe County, Ontario*

Jake, had been selected because they had each independently approached guidance counsellors in their schools with concerns about peer self-harm. Sydney, a grade 11 student in the district, also indicated she had lived experience with self-harm and with online communities/forums related to self-harm. The teachers, counsellors, and students were all specifically chosen to represent different schools in an effort to include attitudes, needs, and values from throughout the district. In 10 days, the committee would present its final findings to Marc-André Lavoie, the Director of Education at GBDSB. With the research completed, all that remained was for Avery and the committee to select the final knowledge product. This product or tool, in whatever format they select, should be able to convey their research to Marc-André and the students of Georgian Bay.

GEORGIAN BAY REGION

Situated along the coast of Lake Huron's Georgian Bay, just north of Toronto, the Georgian Bay region encompasses a diverse set of urban and rural centres. The region is home to more than 550,000 residents, with many more who make Georgian Bay their summer home during cottage season[2]. As a result of urban sprawl from the Greater Toronto Area, the population of Georgian Bay is increasing rapidly, with projections estimating that the region will be home to more than 750,000 residents by 2040[2]. Currently, children 0 to 14 years of age live predominantly in urban, Southern areas of the region, and account for approximately 16% of the total population[2].

Georgian Bay also encompasses three school boards, including GBDSB. Georgian Bay District School Board, the focus of the present case, serves an estimated 51,500 students ranging from kindergarten to grade 12[3]. Spread across 4,700 square kilometres, the board oversees 85 elementary schools and 16 secondary schools in a variety of urban and rural settings[3].

CURRENT HEALTH EDUCATION

In her discussions with Patric, Avery learned of his background in kinesiology, which logically contributed to GBDSB's recent focus on physical health. While he expressed interest in expanding mental health education throughout the school board, Patric acknowledged that he had limited awareness of what this might entail. In her informal conferences with teachers and counsellors, Avery deduced the information students might receive about mental health largely depended on the backgrounds of their individual teachers and counsellors. Furthermore, the Ontario curriculum did not mandate a specific mental health curriculum; rather, it presumed such topics were interwoven into other units. However, the current Ontario grade 9 health curriculum contains a technology unit, which was a seemingly perfect place to add the committee's research findings on the influence of social media on self-harm.

SELF-HARM

Self-harm, also known as self-injury, refers to "deliberate acts that cause harm to one's own body, mind, and spirit" (Canadian Mental Health Association [CMHA], 2020). This behaviour may take many forms, with the three most common in Canada being cutting (75% of those who self-harm), hitting (30%), and burning (28%) (Centre for Suicide Prevention, 2016). Adolescence represents a critical time for interventions relating to self-harm because the onset of such behaviour is typically between the ages of 12 and 15 years of age (Centre for Suicide Prevention, 2016). Recent estimates suggest that 1% to 4% of the Canadian population self-

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[2] *Given the fictitious nature of GBHU, the statistics and descriptions in this section are extrapolated from data from Simcoe Muskoka District Health Unit (Simcoe Muskoka District Health Unit, n.d.).*
[3] *Given the fictitious nature of GBDSB, the statistics in this section are extrapolated from data from Simcoe County District School Board (Simcoe County District School Board, 2020).*

harms, whereas rates in adolescents specifically range from 14% to 39% (BC Partners for Mental Health and Addictions, 2013). Four major reasons for self-harm are described in the literature—to feel better (e.g., to release pent-up feelings or to feel something); to communicate emotional pain; to provide a sense of control; or to self-punish (Centre for Suicide Prevention, 2016). Typically, people who self-harm are not trying to cease all feeling, but this harm can lead to suicide if the self-injurious behaviour is no longer effective at offsetting feelings (Centre for Suicide Prevention, 2016; CMHA, 2020).

SOCIAL MEDIA USE

In today's world, it is no secret that Canadian youth are readily incorporating technology into their daily lives. According to Statistics Canada (2019), nearly 100% of adolescents use the Internet on a daily basis. Further, 93% of Canadians 15 to 30 years of age use social networking sites, which is creating a world connected on an unprecedented level (Statistics Canada, 2019). Not only are today's youth present on social media, but this presence is substantial, with 86% reporting daily social media use (Boak et al., 2018). In 2017, 20% of Ontario teens reported spending five or more hours per day on social media, which was up 9% from just four years before (Boak et al., 2018). This excessive social media use has been specifically outlined as a public health concern by the Canadian Centre for Addiction and Mental Health (Boak et al., 2018). Social media has drawn scrutiny from health professionals given its aptitude to promote unattainable lifestyle and body ideals, and to increase feelings of anxiety and depression, while also displacing positive health behaviours (Boak et al., 2018). However, the effects of such media sites are not all negative. Social media can extend and strengthen social support networks, promote self-expression, and provide access to health information and services (Boak et al., 2018).

RESEARCH FINDINGS

Leaning back in her chair, Avery thought about what she had learned in the past few months of researching. It seemed that what was happening at Georgian Bay secondary schools was not unique; instead, it followed a pattern seen around the world. Adolescent self-harm was seemingly linked to social media use for a variety of reasons. Picking up a marker and walking over to the whiteboard on her wall, Avery began to write a list: 1) cyberbullying; 2) social media dares and challenges; and 3) online friends/communities. "There," Avery thought, "focusing on those three topics should give the committee more than enough to work with."

1. Cyberbullying

Starting at the top of her list, Avery sat back at her desk, pulled out a notepad and began to jot down everything she knew. With the new age of technology and nearly every adolescent in the country using the Internet daily, what once was a school yard problem had quickly found its way home. The most recent figures Avery found showed that 17% of Canadian youth had been cyberbullied or cyberstalked within the past five years (Statistics Canada, 2019). Analogous to traditional styles of bullying, this variant can intensify feelings of emotional distress, depression symptoms, psychological distress, and hopelessness (Richards et al., 2015).

However, what had grabbed Avery's attention was the way in which the literature indicated that cyberbullying may actually be worse for adolescents than other forms of bullying. In all the papers Avery read, the online form was indicated as worse by students and more strongly linked to suicide and self-harm (Aboujaoude et al., 2015; Hamm et al., 2015; Le et al., 2017). From these robust findings, it was clear that any comprehensive adolescent self-harm curriculum would need to discuss cyberbullying. Avery was not worried about explaining this aspect to

Marc-André or anyone at GBDSB; understanding and responding to bullying had long been an important component of teacher training.

2. Social Media Dares and/or Challenges

Moving on to the second item on her list, Avery took a deep breath and began to write. Throughout her research, Avery had come across a number of online "challenges" that involve participants (usually adolescents) completing tasks that result in severe burns, fatalities, and other self-induced injuries. She read about the "salt and ice challenge", the "fire challenge", the "blackout game", and the "Blue Whale Challenge." As Avery kept researching, more and more challenges kept appearing. It seemed there was an endless supply of ideas on the Internet for adolescents to harm themselves for "fun". Avery realized this breadth of information could pose some difficulties for proposing ideas to Marc-André for a concise curriculum. How, she wondered, could the wide array of challenges be reduced into a single understanding and lesson? The challenges range in intensity and popularity but, generally, the objective is for the youth to undertake some risky task (such as lighting oneself on fire) and see how long they can withstand the pain (Roussel & Bell, 2015). Participants are expected to film themselves completing the task and then post it to their social media. However, what stood out most to Avery was the way in which the social media posts seem to glorify the acts while concealing their true danger. Youth who were badly injured or unable to complete the challenge generally did not post their video online; a fear of admitting "failure" prevented others from seeing the true dangers of attempting such feats (Avery et al., 2016).

3. Online Communities

Given the popularity of social media among today's youth, it came as no surprise to Avery that numerous online imagined communities have formed to discuss self-harm. Imagined communities are online societies and groups based on the affirmation of arbitrary similarities between group members (Coles & West, 2016). These communities take many different forms, using various networking sites, but ultimately, they serve the same purpose: to connect like-minded individuals (Boak et al., 2018). In her years of working in mental health, Avery had come across many similar online communities for youth, including those for depression, anxiety, phobias, and many others. Unfortunately, the common rhetoric seemed to reinforce the myth that these types of communities encourage negative health behaviours, including initiating normalization, contagion, or competition (Marchant et al., 2017). However, Avery knew from her extensive research that online mental health communities have numerous benefits including crisis support, reducing social isolation, and outreach, among others (Marchant et al., 2017).

In her previous job, Avery had completed a significant amount of research on online adolescent anxiety forums, finding that these communities were highly beneficial for youth. As it turned out, these online self-harm communities were no different. After combing through dozens of scientific articles and organization websites, and even doing some browsing of her own on forum websites, Avery saw the power of these communities to bring youth together. Research has indicated these discussions had the potential to increase anxious or depressive feelings in adolescents, or increase exposure to cyberbullying (Boak et al., 2018); however, Avery could simply not ignore the numerous benefits they offered.

Online communities are appealing to adolescents given that isolated youth often feel more comfortable opening up and expressing their feelings virtually rather than face-to-face (Ali & Gibson, 2019). This provides youth who might otherwise be silent with a voice to speak about their experiences and concerns, with the option of staying anonymous. In turn, interacting with others who understand and have had similar experiences provides a sense of belonging for

these youth (Dyson et al., 2016). Many active users in these communities are able to build friendships that are open, honest, and provide mutual support. This feeling of community and friendship is very important in self-harm prevention and reduction because loneliness and a lack of connection to others are two of the most prominent reasons adolescents indicate for wanting to harm themselves (Ali & Gibson, 2019). In fact, one of the predominant studies Avery read in her literature review reported that 41.8% of adolescents indicate their involvement in an online community was able to reduce their self-harming behaviour (Dyson et al., 2016). Avery knew that regardless of the final knowledge product the committee created, it should include both the positive and negative aspects of online communities.

SELECTING A KNOWLEDGE PRODUCT

In the previous meeting, the committee had compiled a list of four possible knowledge product options but could not reach a consensus on which one to choose. Unfortunately, because of time and budget constraints, only one could be selected. Tomorrow, the committee would meet again to select which plan to create. As she prepared for the meeting, Avery wrote out the four alternatives again: 1) a formal report; 2) presentations; 3) infographics and posters; 4) booklets. Each option would require different resources as well; fortunately, GBDSB had approved funding for resources regardless of the option selected.

First, Avery's colleague and fellow researcher at GBHU, Dominik Straka, proposed compiling a formal report for the Director of Education. Following the format of a literature review, the report would outline key themes regarding social media use and self-harm in adolescents. Recommendations could also be provided within the report proposing future programs and/or interventions for GBDSB to implement. The first step, Dominik argued, was to educate the Director of Education and other leaders at GBDSB on the topic, before focusing on creating materials for students to use.

Erica Murray, a grade 9 health teacher on the committee, proposed creating presentations. A series of PowerPoint presentations, she reasoned, could be easily assimilated within school health classes. The slides would provide the basic information so even someone with no background in mental health education could properly deliver the knowledge and materials to students. Most health teachers, herself included, already use PowerPoints to deliver the health curriculum to students, so the implementation would be simple, she said. Further, the presentations could be posted online or offered outside of school hours to parents, if there was interest, to further spread knowledge on the topic.

Another suggestion, proposed by Sydney and Jake, was to create a series of infographics and posters that could be distributed and/or put up around the schools. These forms of visual information could then easily be posted to the school website and social media accounts, which many students, parents, and community members follow. "Although not all students will stop to read the posters in the hallways," Sydney had said, "most will at least read the titles. Then they know where to find more information if they need or want it." The students could also be given the posters as handouts so they could read them at home if they wanted to do so more privately. However, what stood out to Avery most about this option was a statement that came from Jake late in the meeting, "if we know that the students who are self-harming are using social media, why don't we use that as a way to access them?"

The fourth and final idea presented to the committee was the creation of educational booklets for students. Proposed by Patric, the booklets would be filled with information pages, worksheets, resources, and even journals that students could use to keep track of their mental

well-being, regardless of whether they self-harm. The booklets, he suggested, could be given out during health lessons and completed either during class or at home by the student—depending on what the health teacher wanted to do.

CONCLUSION

Each alternative offered unique advantages but also presented potential barriers to implementation and uptake. Fortunately, the cost of resources needed to make each option was not an issue, as funding had already been approved by the committee and GBDSB. Regardless of which option would be selected, the decision was not an easy one. Although she would rely on the committee's discussion and vote tomorrow morning as the designated leader of this project, Avery knew her recommendation would be heavily valued. Looking at the thick yellow notepad on her desk, full of notes from committee meetings, Avery reflected on the choices before her. Four options remained, and she had to endorse one. A formal literature report, PowerPoint presentations, infographics and posters, or booklets —which would best educate the students? However, it was not just a question of displaying the material best, but it was also a question about how to engage the students so that they wanted to learn. Which option would the students respond to most? Avery let out a sigh and glanced at the clock on her computer screen; it was the end of the workday. As she shut down her computer, and packed up her notepad and belongings, Avery made herself a silent vow: before she went to sleep tonight, she would have made up her mind for the morning meeting.

EXHIBIT 1
CIHR Model of Knowledge Translation
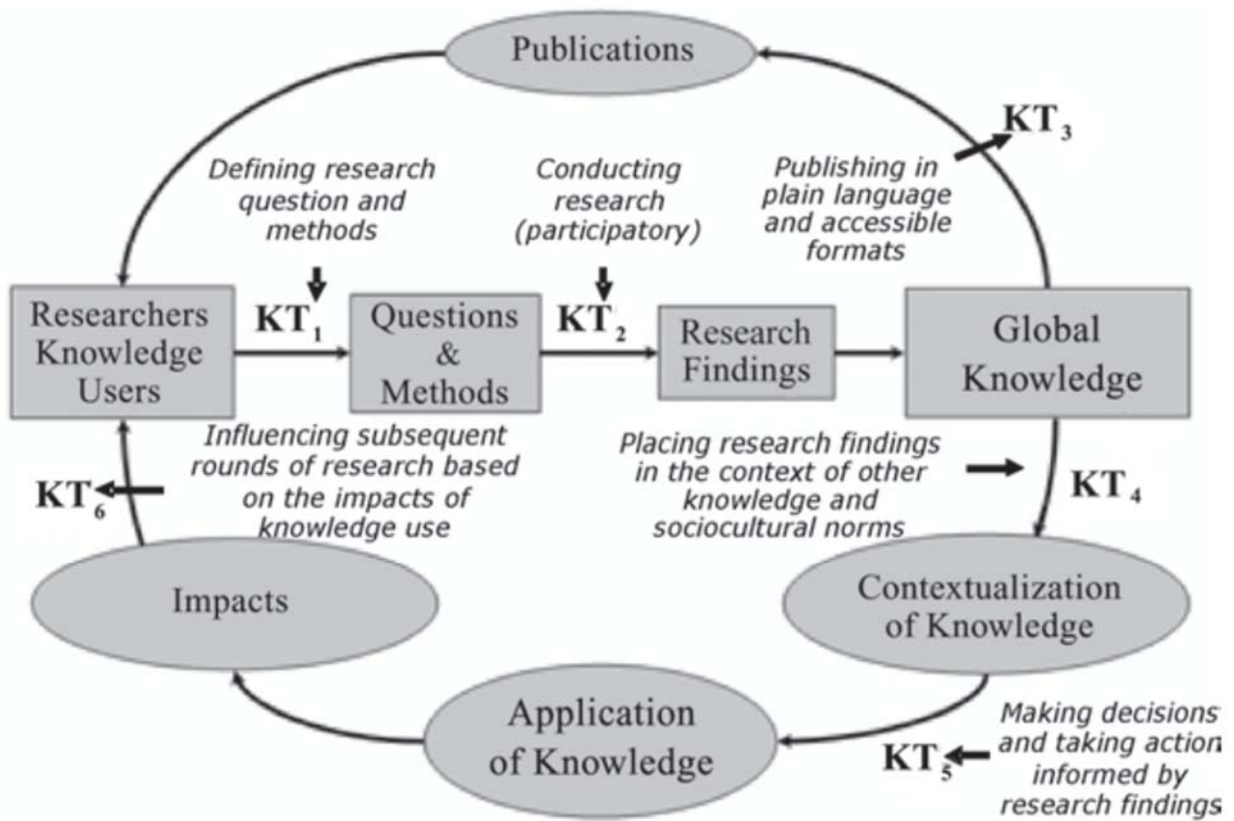
Source: The National Center for the Dissemination of Disability Research (Sudsawad, 2007)

REFERENCES

1. Aboujaoude, E., Savage, M. W., Starcevic, V., & Salame, W. O. (2015). Cyberbullying: Review of an old problem gone viral. *Journal of Adolescent Health*, *57*(1), 10–18. doi: 10.1016/j.jadohealth.2015.04.011

2. Ali, A., & Gibson, K. (2019). Young people's reasons for feeling suicidal: An analysis of posts to a social media suicide prevention forum. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 40*(6), 400–406. doi.org/10.1027/0227-5910/a000580.

3. Avery, A. H., Rae, L., Summitt, J. B., & Kahn, S. A. (2016). The fire challenge: A case report and analysis of self-inflicted flame injury posted on social media. *Journal of Burn Care & Research, 37*(2), e161–e165. Doi: 10.1097/BCR.0000000000000324

4. BC Partners for Mental Health and Addictions. (2013). Learn about NSSI. Retrieved from https://www.heretohelp.bc.ca/sites/default/files/NSSI.pdf

5. Boak, A., Hamilton, H. A., Adlaf, E. M., Henderson, J. L., & Mann, R. E. (2018). The mental health and well-being of Ontario students 1991–2017: Detailed findings from the Ontario Student Drug Use and Health Survey (OSDUHS). Retrieved from https://www.camh.ca/-/media/files/pdf---osduhs/mental-health-and-well-being-of-ontario-students-1991-2017---detailed-osduhs-findings-pdf.pdf

6. Canadian Mental Health Association. (2020). *Self-injury*. Retrieved from https://cmha.ca/understanding-mental-illness/self-injury

7. Centre for Suicide Prevention. (2016). NSSI and suicide. Retrieved from https://www.suicideinfo.ca/wp-content/uploads/2016/10/NSSI-Toolkit.pdf

8. Coles, B. A., & West, M. (2016). Weaving the internet together: Imagined communities in newspaper comment threads. *Computers in Human Behavior*, 60, 44-53. doi: 10.1016/j.chb.2016.02.049

9. Dyson, M. P., Hartling, L., Shulhan, J., Chisholm, A., Milne, A., Sundar, P.,...Newton, A. S. (2016). A systematic review of social media use to discuss and view deliberate NSSI acts. *PloS One*, *11*(5), e0155813. doi.org/10.1371/journal.pone.0155813

10. Hamm, M. P., Newton, A. S., Chisholm, A., Shulhan, J., Milne, A., Sundar, P., … Hartling, L. (2015). Prevalence and effect of cyberbullying on children and young people: A scoping review of social media studies. *JAMA Pediatrics, 169*(8), 770–777. doi:0.1001/jamapediatrics.2015.0944

11. Le, H. T. H., Nguyen, H. T., Campbell, M. A., Gatton, M. L., Tran, N. T., & Dunne, M. P. (2017). Longitudinal associations between bullying and mental health among adolescents in Vietnam. *International Journal of Public Health, 62*, 51–61. doi: 10.1007/s00038-016-0915-8

12. Marchant, A., Hawton, K., Stewart, A., Montgomery, P., Singaravelu, V., Lloyd, K., … & John, A. (2017). A systematic review of the relationship between internet use, NSSI and suicidal behaviour in young people: The good, the bad, and the unknown. *PLoS ONE, 12*(6). doi: 10.1371/journal.pone.0181722

13. Richards, D., Caldwell, P. H. Y., & Go, H. (2015). Impact of social media on the health of children and young people. *Journal of Paediatrics and Child Health, 51*(12), 1152–1157. doi: 10.1111/jpc.13023

14. Roussel, L. O. & Bell, D. E. (2015). Tweens feel the burn: "Salt and ice challenge" burns. *International Journal of Adolescent Medicine and Health, 28*(2), 217–219. doi.org/10.1515/ijamh-2015-0007

15. Simcoe County District School Board. (2020). About. Retrieved from https://www.scdsb.on.ca/about

16.   Simcoe Muskoka District Health Unit. (n.d.). Health stats. Retrieved from
        http://www.simcoemuskokahealthstats.org/topics

17.   Statistics Canada. (2019). A portrait of Canadian youth. Retrieved from
        https://www150.statcan.gc.ca/n1/en/pub/11-631-x/11-631-x2018001-
        eng.pdf?st=JrkEAP1D

18.   Sudsawad, P. (2007). *Knowledge translation: introduction to models, strategies, and
        measures.* The National Center for the Dissemination of Disability Research. Retrieved
        from https://ktdrr.org/ktlibrary/articles_pubs/ktmodels/ktintro.pdf

INSTRUCTOR GUIDANCE

From Bench to Classroom: Knowledge Translation in School Mental Health Initiatives

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BACKGROUND

The case outlines the journey of Avery McCann, a researcher at Georgian Bay Health Unit. Avery has been asked to create a knowledge product for the local school board, Georgian Bay District School Board (GBDSB), to teach about adolescent self-harm and how social media may influence this behaviour. Formatted as a decision-making case, four potential options are proposed: a formal literature review report for the Director of Education, PowerPoint presentations, infographics and posters, or educational booklets. The head of the committee in the case details the relative benefits and drawbacks to each possible option because they offer different solutions to the same problem. Limited by time and budget constraints, the researcher, along with her team, must choose a single knowledge product to use, hopefully selecting the option that creates the most positive change.

Along with her team, Avery must determine which option is best for conveying their findings to the students, parents, and teachers of Georgian Bay so that tangible change is created. Unfortunately, the Director of Student Wellness at GBDSB, Patric Andersson, does not have extensive knowledge about mental health, making the selection of a knowledge translation method even more critical. It is vital that the students receive the appropriate messaging regardless of the medium (online or written communication) or person presenting it to them (i.e., teachers, counsellors, etc.). The issue at hand is very pressing. Although self-harm is not usually fatal, it can create lasting damage to the physical, emotional, and mental well-being of those who engage in it, as well as to their loved ones. Further, self-injurious behaviour can be fatal, meaning that a delay in acting could be incredibly costly to the lives and well-being of the students at GBDSB. Ultimately, the case presents students with a complex and important decision that requires detailed consideration, planning, and evaluation in order for a successful outcome to be reached.

OBJECTIVES

1. Understand and explain the concept of knowledge translation.
2. Apply frameworks/models of knowledge translation to understand, justify, and plan for a knowledge product that enables adolescents to research and learn about self-harm.
3. Use behavioural theories to understand the rationale for knowledge translation and to enhance the quality of knowledge product creation by using the case as an example.
4. Compare alternatives for a health communication strategy using knowledge of health literacy and knowledge translation principles.

DISCUSSION QUESTIONS

Pre-Class Discussion
1. How would you describe knowledge translation to someone who has never heard the term before?
2. Which of the four proposed knowledge products would you select? Why?
3. Do you know of any other knowledge translation strategies that Avery and the committee did not consider?

Class Discussion
1. Briefly summarize the case, outlining the key challenges or issues being faced.
2. What stood out to you as good knowledge translation practices undertaken by the characters in the case?
3. What stood out to you as less effective knowledge translation practices undertaken by the characters in the case? Why do you believe these would be less effective?
4. Which steps from the Canadian Institutes of Health Research Model of Knowledge Translation are prominent in the case? Which steps have already occurred and have yet to occur? What actions take place during each of these steps?
5. How can the knowledge-to-action framework be applied to the case? What has occurred or will occur in each stage?

KEYWORDS

Adolescents; health promotion planning; knowledge translation; mental health; school-based programs; self-harm; social media; online communities; cyberbullying.