

Combating Youth Vape Culture on Campus Final Report: June 2023

Overview

The trend of youth vaping in Canada has steadily grown over the past decade leaving school administrators grappling with the negative impacts. This emerging issue impacts staff and students alike: large numbers of students congregate in washrooms to vape nicotine and/or cannabis, resulting in poor air-quality and activity that contravenes municipal by-laws and school board policies. Supervising staff and non-vaping students report feeling unsafe while using the facilities or when having to enter washrooms to enforce regulations. This was reflected in our School Climate Data (2021-2022) which indicated that 22% of our secondary students reported feeling ‘not safe’ in the school washroom.

Within the Near North District School Board (NNDSB), school teams have employed a variety of preventative measures to combat this issue. As part of an action research project, a literature review was conducted and a subsequent project plan was generated. The purpose of the plan was to reduce the use of e-cigarettes on school campuses. The project plan provided five key recommendations that, when enacted together, could combat this complex issue. These recommendations included:

- Install vape detectors in high-use areas such as bathrooms and locker rooms to support staff in identifying when vaping is occurring and to collect data that will inform the efficacy of these recommendations.

- Provide on-going training to staff about vape products, vaping behaviour and vape culture in collaboration with the local health unit.
- Provide on-going information to parents about vape products, vaping behaviour, vape culture and the proven health risks associated with e-cigarette use in collaboration with the local health unit.
- Develop and implement a whole-school approach to educating youth about the harm of vaping through curriculum connections and course material.
- Identify individuals who are consistently caught vaping at school and provide them with addiction counseling and cessation programs to support a reduction in their nicotine dependence.

Beginning in August 2022, alongside the staff and Principal of Almaguin Secondary, we were able to enact these five recommendations, having purchased five working vape detectors and 4 ‘dummy’ detectors from Zeptive using funding from a Ministry grant that was received during the 2020-2021 school year. ‘Dummy’ detectors look like working detectors, but do not have sensors in them to allow for the detection of vapor.

Data collected to date demonstrates success in addressing the problem of e-cigarette use on campus, as well as combating the associated problems of washroom congregation and vandalism. We believe that this approach can be duplicated at other secondary schools throughout the district and the province.

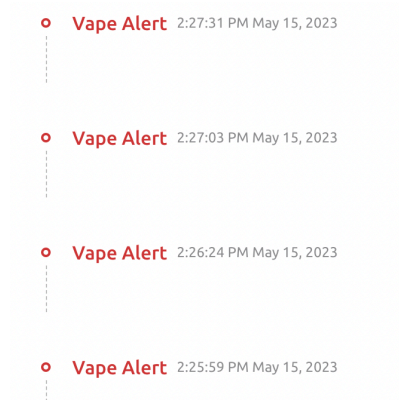
Sources of Evidence

Vape Detectors

The Zeptive detectors are paired to an app which provides app users with information in real-time about each detector. When reviewing all data from the onset of this project, the first observation was that students initially tried to remove the detectors from the wall or damage them. The Zeptive detectors, including the ‘dummy’ detectors, are equipped with a tamper-proof alarm, producing a very loud and high-pitched noise when they are touched. Students quickly realized that they could not remove them without alerting staff. The tamper-proof alarm went off only a few times in the two weeks following their installation and have not gone off again since.

The second observation was that student vaping, along with high numbers of student congregation and the length at which groups of students remained in washrooms, decreased since the installation of the devices. This was demonstrated in both the frequency of alarms and the length of time the vape detector signaled the presence of vapor. For example, if a student walks into a washroom and uses an e-cigarette once and leaves, the data reports one spike in vapour. If, however the student remains in the washroom and continues to use the e-cigarette, the detector identifies repeated spikes in vapour. This tells administration that either there is one student in the washroom using a device multiple times, or that there are multiple students in the washroom. Student congregation, then, typically registers on the Zeptive dashboard as multiple alarms over a short period of time. Graphic 1.0 shows that there were 4 individual uses of a vaping device over a 90 second period. The school principal reports that these type of multiple use incidents have greatly decreased over the seven months detectors were in place.

Graphic 1.0



Zeptive detectors have allowed administration to observe vaping trends across the school today. Through the use of the Zeptive dashboard, the team found that vaping was most often happening just before classes began in the morning, likely after students arrived from their bus and were heading to their first period class. Similarly, student vaping also happened frequently at the very end of the day, again before students were boarding buses for home. This information was then used to support an increase to staff supervision for those areas during those times, thereby further reducing student use of e-cigarettes on campus. Zeptive detector data also showed an increase in washroom vaping on days that had heavy rain or on days with extremely cold temperatures.

Addiction Support

Vape detectors can be used to identify which students are repeatedly using e-cigarettes despite classroom education, whole-school awareness campaigns and/or parent involvement. This indicates that the individual may need further support in reducing or quitting their use. When administrators begin to identify repeat offenders (students who are regularly using on campus) they engage the student in conversations that discuss the harms of e-cigarette use, and the various tools that exist to help them reduce or quit. The school principal understands the value of building positive relationships and therefore approaches these conversations from a

place of care and concern, understanding that students may have to hear this message multiple times and feel supported before they may be willing to try reducing their use. Our health unit partner provides the team with information regarding the most up-to-date, effective, and student-centered programs, such as cessation apps and websites, so that the principal can be assured that they're promoting evidence-based tools for the students.

Supportive conversations may be extended to include referrals to the community addictions counsellor. This service, provided to the pilot school through the Canadian Mental Health Association, is a support used for those who demonstrate high nicotine addiction. As such, students who are regularly found vaping in the washroom are encouraged to work with the addictions counsellor, while those who are found in the washroom multiple times a day are provided with a mandatory referral. Similarly, students who continue to vape on campus despite multiple conversations, supports, parent involvement and education, may be issued a suspension. Any student at the pilot school who was suspended for vaping was automatically referred to the addictions counselor. During the 2022-2023 school year, 33 referrals to the addictions counselor referenced vaping and/or nicotine use as at least one of the reasons for referral.

Suspension Data

Suspensions refer to the assignment of a formal consequence under section 306(1) and 310(1) of the Education Act in which a student can be sent home for a specified number of days. Suspensions can only be granted for specific reasons, as detailed in the Education Act. Students who possess e-cigarettes or who vape on school campus are typically suspended under #7 of the 306(1) section which reads “any other activity that is an activity for which a principal may suspended a pupil under a policy of the board”. The student may be suspended for vaping cannabis under #2 of the 306(1) section which reads “possessing alcohol or illegal drugs” if the

e-cigarette contains cannabis. As outlined in Policy Program Memorandum 145, administrators across Ontario employ a progressive discipline approach, meaning that suspensions are only issued when other supportive interventions and educational opportunities have already been attempted. As such, students who are suspended for vaping on campus would have already engaged in a number of other interventions prior to the suspension being issued.

Table 1.0 details suspension data related to students vaping on campus. During the 2021-2022 school year, there were 11 suspensions for vaping; all except two were a result of students vaping in school washrooms. One suspension was for vaping on the school bus and another suspension was for vaping in the bus line-up. Additionally, there were five suspensions issued for washroom vandalism. Prior to the vape detectors being installed in 2022-2023, there were six suspensions for vaping in school washrooms during the first three months of the school year. Following the installation of the detectors on December 1, 2022, there were only two suspensions issued for students vaping for the remaining seven months of the school year. There were zero suspensions for washroom vandalism during the 2022-2023 school year.

Table 1.0

School Year	Number of Suspensions for Vaping	Number of Suspensions for Vandalism
2021-2022	11	5
2022-2023 Prior to Vape Detector Installation 3 months	6	0
2022-2023 Following Vape Detector Installation 7 months	2	0

Student and Principal Voices

During monthly student senate meetings within the 2022-2023 school year, senators who attended other secondary schools within the district continued to report concerns for the safety of washroom spaces because of student vaping, congregation, and vandalism. Senators shared anecdotes of students who refused to enter school washrooms, choosing instead to seek out public restrooms during their lunch break at nearby locations, such as fast-food restaurants. Senators reported that many school washrooms were often closed either as a result of vandalism, or in an attempt to curb the use of e-cigarettes on campus. As such, many schools may not have been operating with their full washroom capacity on any given day.

Secondary principals expressed similar concerns during monthly meetings, referencing the number of hours spent supervising washrooms, and how many staff members, such as teachers and educational assistants, were becoming increasingly reluctant to supervise student washroom areas due to the large crowds and general feelings of unsafety. This crisis reached a concerning level as administrators reported that it was impossible to keep all washrooms open at all times due to the high volume of vandalism and lack of adequate supervision. The problem is exacerbated by cell phones: student can quickly summons many other students to any given washroom through text or social media messaging, giving them the ability to generate a large number of people in a very short period of time resulting in situations that can become unsafe quickly.

Education and Cessation Programs

As outlined in the multi-faced approach to decreasing student vaping on campus, we know that student education programs about the harms of vaping can have a positive impact on the prevention, reduction and cessation of e-cigarette use among youth. The team created

engaging lesson plans that align with the Ontario Curriculum and made them available to the pilot school for use across all grades. Table 2.0 outlines the various subjects for which lessons were created to support student education related to e-cigarette use including their addictive properties, the short and long-term health impacts, and the various types of marketing strategies employed to gain popularity among youth.

Table 2.0

Grade 9	Grade 10	Grade 11	Grade 12
Science	Science	Biology	Biology
Healthy/Physical Education	Healthy/Physical Education	Healthy/Physical Education	Healthy/Physical Education
Language	Language	Health for Life	

Our local health unit was invaluable in providing factual information to support these educational materials, as well as evidence-based cessation apps and websites to support students who wanted to reduce or quit their use. The North Bay Parry Sound Health Unit’s “Vape: What’s The Hype?” toolkit provides an engaging way for educators to start classroom conversations. It includes inquiry-projects and interesting prompts to get students thinking critically about personal use, the impact e-cigarettes have on society, and how students might contribute to solving this issue.

Conclusion

Both quantitative and qualitative data gathered to date suggest that the five recommendations employed through this project are working to reduce youth vaping on campus, as well as having a positive impact on the number of students seeking support services such as

addictions counselling. It also suggests that the project is reducing student congregation and vandalism in washrooms. The school principal reports that one of the biggest barriers to reducing youth vaping are parents who allow their child(ren) to vape, which undermines the school's messages about the importance of reducing and quitting this harmful activity. As such, we require increased opportunities and methods for sharing the harms of e-cigarette use with parents and our broader school community. In collaboration with local partners, such as the health unit, we will continue to seek a remedy to this barrier.

The safe schools team is highly motivated to continue with this multi-faceted approach into the 2023-2024 school year. Connections greater than anticipated have also occurred, such as the Community Health Promoter attending our monthly Student Senate meetings to connect with students about what the health unit can do to support the cessation or reduction of vaping among youth. Additionally, we have started sharing our findings with the broader system of principals across our district through monthly Safe Schools Newsletters. In conversation with the board librarian, it was also brought forward that the classroom resource support centre could further support this project by producing lesson kits for teachers, based on the OneNote resources outlined in Table 2.0, to remove any potential barriers to implementation. While these pieces are outside of our expected and intended outcomes, it has been really motivating to see the support and enthusiasm all staff across the district have for this project. These endorsements give us hope that through iterative cycles of inquiry, we will be able to create sustained and visible change for the betterment of our students' safety, health, and well-being.