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A Comprehensive Approach for Addressing E-Cigarette Use in High School Students

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A Comprehensive Approach for Addressing E-Cigarette
Use in High School Students
by
Michael Ebbert
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Master's Project
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Michael Ebbert

Abstract

The prevalence of electronic cigarette (e-cigarette) use among youth has increased at an alarming rate. More teenagers are falling victim to the adverse physical and mental effects of e-cigarette use despite the attempted implementation of various prevention and intervention programs. Teenagers are influenced to use e-cigarettes by their peers, social media, and e-cigarette advertisements. Schools and parents need to work together to end the teenage e-cigarette use epidemic. The comprehensive e-cigarette prevention program will seek to increase the knowledge of e-cigarettes, raise awareness of the harms of nicotine addiction, and build positive peer support influences. The overarching objective of this project will be to develop and provide an implementation guide for all high schools to use the evidence-based e-cigarette prevention program to reduce teenage e-cigarette use and promote healthier alternatives.

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Chapter One: Introduction

Problem Statement

The use of e-cigarettes among teenagers is reaching epidemic levels, which is negatively impacting their academic success and overall mental and physical well-being. Not only are more teenagers using e-cigarettes, but the frequency of use is also alarming. E-cigarettes were initially marketed as a healthier alternative to traditional cigarettes, intended to help people quit smoking. However, because of tobacco marketing campaigns, teenagers are increasingly being targeted as the demographic to use e-cigarettes. Social media and peer influences are contributing to the teenage e-cigarette epidemic. E-cigarettes are still relatively new, making it difficult to determine the short-term or long-term effects of their use, especially for teenagers. However, numerous studies reveal the harmful health effects of e-cigarettes (Dube et al., 2023; McCabe et al., 2017; Staudt et al., 2018; Vardavas et al., 2012). Despite these adverse health effects, teenagers often fail to understand the importance or significance of these effects. Considering the escalating trend in teenage e-cigarette use and its adverse impact on physical and mental health, coupled with the readily available access to these devices, it becomes imperative for schools to institute e-cigarette prevention and intervention programs.

Importance and Rationale of the Project

There is an urgent need for a more robust and comprehensive e-cigarette prevention and intervention program tailored specifically for high school-aged students. If schools do not provide prevention programs, teenagers are left to gather information from social media and their peers. Tobacco companies utilize YouTube and other social media platforms to promote e-cigarette use (Donaldson et al., 2023). Donaldson et al. (2023) identified messaging themes in their analysis of e-cigarette companies' social media campaigns and found that the second most

prevalent theme in 260 YouTube videos was the promotion of youth e-cigarette use. Peer influence also plays a crucial role in shaping teenage e-cigarette use. Merrill and Hanson (2022) found that 28.7% of students in their multi-school study, which included 10,758 high school students, were willing to try an e-cigarette if offered one. E-cigarette use is normalized among young people in their social environments. A study conducted at a university found that sharing e-cigarettes is a widespread practice among users; 24% of users reported sharing e-cigarettes every day, while 76% of users share occasionally (Seitz et al., 2020). In a study conducted by Wallace and Roche (2018), youth are more likely to use e-cigarettes due to the perceived positive social impact. Social impact plays a critical role in motivating youth to use e-cigarettes.

Between 2015 and 2021, 13.2% of teenagers reported using e-cigarettes, with male students (53.8%) being more likely than female students to use e-cigarettes (Janjua et al., 2023). Choi et al. (2022) also found that 12% of adolescents have tried e-cigarettes at least once. Simpson et al. (2022) suggest that approximately 75% of e-cigarette users initiated use between the ages of 12 and 14, which is particularly concerning as their bodies are still undergoing puberty, and the potential health effects could lead to long-term damage. Not only are more teenagers initiating e-cigarette use, but the frequency of use is also increasing. From 2017 to 2019, the percentage of teenagers who used e-cigarettes for 20 or more days in the past 30 days increased from 16.8% to 26.2% (Coats et al., 2022).

The rise in e-cigarette usage has led to high school students using their devices at school. Jackson et al. (2020) found that 45% of e-cigarette users use their devices at school, despite facing school discipline and possible legal actions. Access to e-cigarettes is becoming increasingly easy for teenagers, as they can be purchased at lower costs or borrowed from friends

(Simpson et al., 2022). Schools are now responsible for educating students about the effects of e-cigarettes and promoting avoidance of their use on school premises.

The use of e-cigarettes among teenagers is increasing at an alarming rate, even though they are unaware of the potential effects of these products on their physical and mental health. Youth who perceive e-cigarettes as safer than traditional cigarettes are more likely to use e-cigarettes (Dobbs et al., 2016). The nicotine content in e-cigarettes has increased over time. The percentage of teenage e-cigarette users who reported using e-cigarettes with a nicotine content of more than 24mg rose from 17.7% to 58.3% (Coats et al., 2022). Like traditional cigarettes, e-cigarettes deliver nicotine, an addictive substance, to the body. Due to the nicotine content, teenagers are finding it difficult to quit.

Research is identifying the short-term and long-term effects of e-cigarettes on the body. Exposure to e-cigarette aerosols can harm three aspects of a person's lungs, potentially leading to lung disease (Staudt et al., 2018). Another study found that using an e-cigarette for five minutes caused airway flow resistance and oxidative stress, both of which are known to impede lung function (Vardavas et al., 2012). Formaldehyde and acetaldehyde, both of which are carcinogenic, have been found in e-cigarettes (Goniewicz et al., 2013).

In addition to physical effects, e-cigarette use negatively impacts a person's overall well-being. E-cigarette use is associated with an increased risk of engaging in risky behaviors, including substance abuse (such as binge drinking, alcohol use, marijuana use, and nonmedical prescription drug use) and school-related risk behaviors (such as truancy and low grade point average) (McCabe et al., 2017). Over the course of one year, the initiation of e-cigarette use was found to harm academic performance (Dearfield et al., 2021). In their study, Augenstein et al.

(2023) also found a positive correlation between e-cigarette use and low academic performance. Poor academic performance could be attributed to the impact of chemicals on the brain or truancy issues. Students who use e-cigarettes are more likely to experience truancy issues in high school (Augenstein et al., 2023). The urge to smoke interferes with the ability to focus (Dube et al., 2023). The psychological effects of e-cigarettes cause immediate harm to the teenager's overall well-being. Teenage e-cigarette use can cause detrimental long-term effects, such as scoring poorly on high stakes standardized tests or missing school due to suspensions or expulsions. Schools must make it a priority to educate students on the effects of e-cigarette use and promote tools to abstain from e-cigarette use.

Background of the Project

Community organizations and schools have attempted to implement prevention programs aimed at reducing the number of teenagers who use e-cigarettes. Despite the valiant efforts of various programs, teenage e-cigarette use continues to rise at alarming rates (Choi et al., 2022; Coats et al., 2022; Janjua et al., 2023). The health and well-being of teenagers rely on a more effective prevention program that will reduce the number of teenagers choosing to use e-cigarettes. In most programs, the focus of the messages has been on discouraging students from using e-cigarettes. There is also a strong need to educate teenagers about healthy alternatives for those who have already succumbed to the addictive nature of e-cigarettes. Schools often apply disciplinary measures, such as suspensions, to students who use e-cigarettes on school premises. However, when this happens, they do not try to educate students about the consequences of e-cigarette use. When combined with restorative practice tasks, intervention programs can serve as an alternative approach to disciplining students. Current literature suggests that programs aiming

to raise awareness and enhance self-efficacy effectively prevent e-cigarette use (Dube et al., 2023).

In the past, society has significantly emphasized the effects of cigarette use and prevention campaigns. E-cigarettes have become the most popular form of nicotine product among youth in the United States (Choi et al., 2022; Coats et al., 2022). When developing prevention and intervention programs, it is essential to analyze the sociodemographic characteristics of teenagers who use e-cigarettes. Lower academic performance among teenage e-cigarette users was associated with several factors, including being male, Hispanic, non-Hispanic black, having parents with an education in high school or less and some college, and living with at least one tobacco user (Dearfield et al., 2021). During a qualitative study analyzing a variety of message themes, Popova et al. (2021) found that most of the actors were White, which made it difficult for the Black participants to empathize with them. Given the recent prioritization of socio-emotional learning in schools, schools need to incorporate e-cigarette prevention programs into their curriculums for all students.

Statement of Purpose

The purpose of this project is to develop a comprehensive e-cigarette prevention and intervention program for high school-aged students. Current prevention and intervention programs lack authenticity and relevance to teenagers and parents (Popova et al., 2021). The goal of the prevention and intervention program is to raise awareness among others about the effects of e-cigarette use. Prevention programs target individuals before they start using e-cigarettes. Intervention or cessation programs, however, target individuals who are currently using e-cigarettes with the goal of helping them quit. There is limited research on the effectiveness of prevention programs for high school-aged students except for the CATCH My Breath program

(Kelder et al., 2020). The CATCH My Breath program is a free, online preventative program that focuses on raising awareness of the effects of e-cigarette use. The project will include resources from the CATCH My Breath program that will target teenagers' attitudes and perceptions of e-cigarettes. It will also include an e-cigarette educational program for parents to actively support and educate their children on abstaining from e-cigarette use.

Objectives of the Project

The project's overall objective is to emphasize the importance of refraining from using e-cigarettes to high school students. In addition, current e-cigarette users will develop coping strategies to overcome this behavior. Providing high school students with information on the effects of e-cigarette use, fostering positive peer support, and enhancing self-efficacy will equip them with the necessary tools to live a healthy life. The start of this project will focus on a school-wide targeted prevention program. The targeted timeline for this prevention program is to implement it during the first month of the school year. It is critical to implement this program early before students are exposed to e-cigarettes by their peers. Alongside the prevention program, there is an intervention program aimed at providing current e-cigarette users with tools to stop their use.

The main objective of this project is to provide an e-cigarette prevention program to all students in the high school. The prevention program will include three facets that are connected to the theory of planned behavior (Simpson et al., 2022). The first focuses on the attitudes toward e-cigarette use (health risks, ingredients in e-cigarettes, and nicotine addiction). The second facet focuses on the social influences that promote e-cigarette use (peer pressure, accessibility, and ease of use). Lastly, the third lesson focuses on increasing teenagers' self-efficacy around e-

cigarettes (Simpson et al., 2022). To help build upon positive peer influence, the prevention program allows students to create and share anti-e-cigarette messages.

One objective of this project is to partner with families to help decrease teenage e-cigarette use. This program will contain e-cigarette informational meetings for families to help establish collaboration between the school and parents on how to speak with teenagers about e-cigarettes. It will also provide parents with identifiable warning signs that their student may be using e-cigarettes.

Another objective of this project is the creation of intervention peer support groups. These groups target students who are current or previous e-cigarette users to establish a system to help encourage them from continued use. These support groups are led by a trained staff member in restorative practices or have a counseling background.

Definitions of Key Terms

E-cigarettes - An electronic nicotine delivery system (ENDS) that uses nicotine liquid (e-liquid) to deliver nicotine to the body. These devices take the form of cigarettes or the size of USB flash drives and come in various flavors (CATCH My Breath, 2023).

Prevention Program - A campaign or service used to eliminate or reduce problem behavior in an identified group of people.

Intervention Program - A campaign or service used to prevent the continued use of an identified problem behavior.

Theory of Planned Behavior - A person's behaviors are controlled by their attitudes (beliefs about a behavior), subjective norms (beliefs about others' attitudes towards a behavior), and perceived behavioral control (beliefs about one's ability or inability to perform a behavior) (Simpson et al., 2022).

Scope of the Project

This project aims to provide high schools with a comprehensive e-cigarette prevention and intervention program. Reducing the number of high school students using e-cigarettes by increasing their understanding of the consequences of e-cigarette use and providing alternative methods of abstaining is the ultimate goal of the program. This project also aims to enhance high school students' self-efficacy by providing them with new skills to resist peer pressure. This project uses the theory of planned behavior as a framework for the program. For this project, the term "e-cigarettes" is used instead of other names such as "vapes," "e-cigs," and "vape pens."

The prevention and intervention program focuses exclusively on e-cigarette use. Despite the widespread use of alcohol, marijuana, and other tobacco products, the focus will be on e-cigarettes due to the recent surge in their use among teenagers. However, improving self-efficacy and learning to resist peer pressure can be applied to other areas of concern.

This project depends significantly on the commitment of the students, staff, and parents. Several factors may render this project ineffective. The prevention program consists of four lessons that the teachers will teach. Gaining support from the staff to implement all aspects of the lessons is crucial for the program's overall effectiveness. No training is needed for high school staff to implement these pre-created lessons by CATCH My Breath. Student engagement is crucial for the effectiveness of these lessons. Data from the pre-test is collected to identify students who have recently used e-cigarettes. The intervention program will include these students in the peer support groups. Students who are not truthful about their previous e-cigarette use could hinder their participation in intervention programs. As an alternative to traditional school discipline, the program provides online modules for students who are disciplined for

using e-cigarettes at school. Students can access these modules at any time. These students will receive an invitation to join peer support groups. Staff should receive training in restorative practices to facilitate peer discussions about e-cigarette use.

Parents must actively participate in the program by attending the e-cigarette parent information meetings. Informational meetings should be offered in a variety of formats, including virtual and in-person, to accommodate the schedules of families. Parents are responsible for initiating conversations with their children about e-cigarettes.

Schools must establish a system that allows students to participate in the prevention program. This system could involve providing the prevention curriculum to classes such as a Homeroom or Advisory class. The CATCH My Breath program, which is the primary focus of the prevention program, is a free resource provided to schools. Additional resources, such as stipends for the staff members leading the peer support groups or the program's lead staff member, must be considered.

Chapter Two: Literature Review

Introduction

Teenage e-cigarette use is increasing at alarming rates despite the well-documented physical and mental effects (Coats et al., 2022; Choi et al., 2022; Janjua et al., 2023). It is essential to conduct a comprehensive review of the existing literature to illustrate the necessity of establishing an e-cigarette prevention and intervention program for schools. This section will analyze findings from various sources to gain a better understanding of the prevalence of teenage e-cigarette use and the adverse physical and mental effects associated with using e-cigarettes. Ultimately, the goal of this literature review is to gain a deeper understanding of why teenagers are using e-cigarettes despite the well-documented adverse health effects. The beginning of this chapter will provide an overview of the theory of planned behavior, which will help develop the prevention and intervention program. Additionally, this literature review presents information about the growing use of e-cigarettes among teenagers, adverse physical and mental health effects, perceptions of teenage e-cigarette use, prevalence of e-cigarette use at school, incorporating parental support, advertisement message themes, establishing positive peer support, and prevention and intervention programs. A summary section will follow, which will include an overview of the literature review. Finally, the conclusion will highlight key aspects of the literature review to justify the necessity of the e-cigarette prevention and intervention program.

Theory/Rationale

The goal of a prevention or intervention program is to change a person's perspective, which, in turn, will help change their behavior. To help someone change a behavior, it is important to understand the reasons behind their choice to engage in that behavior. The theory of

planned behavior (TPB) provides a framework for schools to use in developing e-cigarette prevention and intervention programs. The TPB will provide an understanding of why teenagers choose to use e-cigarettes. The goal is to utilize the three critical components of TPB to develop a comprehensive prevention and intervention program. The TPB states that individuals' behaviors are influenced by their attitudes (beliefs about a behavior), subjective norms (beliefs about others' attitudes toward a behavior), and perceived behavioral control (beliefs about one's ability or inability to perform a behavior) (Simpson et al., 2022). It is essential to consider all aspects of a teenager's life when attempting to make a significant behavior change.

The first component of TPB is one's attitude toward the behavior. Raising awareness of the short-term and long-term effects of e-cigarette use will enhance this aspect of TPB. For example, an individual's attitude influences their intention to engage in a behavior, and therefore, their personality plays a crucial role in TPB (Hersberger et al., 2018). Hersberger et al. (2018) discovered that individuals with impulsive personality traits and a strong inclination towards e-cigarettes were more inclined to use them. Preventive programs should incorporate engaging and stimulating messages to reach individuals with strong impulsive personality traits (Hersberger et al., 2018). Cognitive dissonance exists for individuals who continue to engage in the behavior despite being aware of its harmful effects. For example, someone may choose to smoke e-cigarettes despite knowing that it is harmful to their health. The following components of TPB can better explain this dissonance.

The second component of TPB is subjective norms. This component focuses on how others' beliefs about the behavior will influence a person's decision to engage in the behavior (Scheinfeld et al., 2019). Teenagers are significantly influenced by the world around them. Dube et al. (2023) found that teenagers started using e-cigarettes while socializing with peers and

would obtain their devices from peers. Parents or guardians also play a crucial role in their children's decisions. Incorporating parents' knowledge about e-cigarettes and advocating for abstaining from using e-cigarettes will help create a more comprehensive prevention program. Changing the cultural norms surrounding e-cigarette use within peer groups will significantly impact preventive and intervention programs.

Lastly, the third component of TPB is a person's perceived behavioral control. A person's ability to control their behavior can be better explained by self-efficacy (Simpson et al., 2022). The American Psychological Association defines self-efficacy as an individual's belief in their ability to perform or control a behavior. If a person has strong self-efficacy, they are less likely to engage in negative behavior. Promoting self-efficacy is particularly important for teenagers, as they are easily influenced by their peers. To end the epidemic of teenage e-cigarette use, society needs to understand the desire or need for teenagers to resort to using e-cigarettes. Incorporating TPB into the prevention and intervention program will address the negative attitudes toward e-cigarettes, offer education on the cultural norms surrounding e-cigarette use, and equip teenagers with tools and strategies to resist e-cigarette use.

Research/Evaluation

Increase in Teenage E-Cigarette Use

E-cigarettes are devices that contain a battery, a heating element, an e-liquid, and a cartridge to hold the e-liquid (CATCH My Breath, 2023). These devices are used for inhaling aerosolized chemicals (Kelder et al., 2020). Between 2015 and 2021, 13.2% of teenagers reported using e-cigarettes, with male students (53.8%) being more likely than female students to use e-cigarettes (Janjua et al., 2023). Choi et al. (2022) also found that 12% of teenagers have

tried e-cigarettes at least once. Simpson et al. (2022) suggest that approximately 75% of e-cigarette users began using them between the ages of 12 and 14. Not only are more teenagers starting to use e-cigarettes, but the frequency of use is also increasing. From 2017 to 2019, the percentage of teenagers who used e-cigarettes for 20 or more days in the past 30 days increased from 16.8% to 26.2% (Coats et al., 2022). Despite efforts from numerous organizations and school-wide prevention programs, the prevalence of teenage e-cigarette use continues to rise.

Adverse Physical and Mental Effects

Compared to cigarette use, there is far less information available on the short-term or long-term effects of e-cigarette use for teenagers (Janjua et al., 2023). However, numerous studies are demonstrating the adverse physical and mental effects of using e-cigarettes. "E-cigarette Initiation Predicts Subsequent Academic Performance Among Youth: Results from the PATH Study," written by Dearfield et al. (2021), takes the first step in analyzing the impact of e-cigarette use on academic performance among high school students. This longitudinal study, conducted from 2014 to 2018, analyzed data from surveys collected as part of the Population Assessment of Tobacco and Health (PATH) study (Dearfield et al., 2021). The authors aim to gain a better understanding of the relationship between e-cigarette use and academic performance (Dearfield et al., 2021). In their self-reported academic grades, students who use e-cigarettes experienced a decrease in their overall grades after using e-cigarettes (Dearfield et al., 2021).

Janjua et al. (2023) analyzed data from 24,014 high school seniors who participated in the Monitoring the Future survey. The study found that teenagers who use e-cigarettes had poorer academic performance and lower expectations of attending a four-year college (Janjua et al.,

2023). Academic performance was assessed based on the students' self-reported current academic grades. The study also found that students who used e-cigarettes had negative feelings about attending school compared to students who did not use e-cigarettes (Janjua et al., 2023). One limitation of the study conducted by Janjua et al. (2023) was that it only examined data from high school seniors. However, Dearfield et al. (2021) conducted a similar study, but they analyzed data from students aged 12-15 years old who participated in the Population Assessment of Tobacco Health (PATH) study. The data trends in this study were similar to those in the study by Janjua et al. (2023). Initiating e-cigarette use among teenagers aged 12-15 had a negative impact on their academic performance, as indicated by their self-reported current academic grades (Dearfield et al., 2023).

When evaluating academic success, it is important to consider other data in addition to a student's grades. Dai and Hao (2017) analyzed data from 16,184 student survey responses collected in 2014 as part of the Monitoring the Future survey to identify risk factors linked to e-cigarette use. Research by Dai and Hao (2017) suggests that teenagers who use e-cigarettes miss more school days than students who do not use e-cigarettes. In addition to missing more school days, teenage e-cigarette users also work more hours, which could hinder their ability to complete homework (Dai and Hao, 2017). Dube et al. (2023) found that strong urges to use e-cigarettes disrupted users' ability to concentrate. Academic risk behaviors among high school-aged e-cigarette users from the Monitoring the Future survey were also analyzed by McCabe et al. (2017). Their analysis demonstrated consistency with previous studies. Teenage e-cigarette users had lower grade point averages and experienced increased truancy issues compared to non-users (McCabe et al., 2017).

In addition to the negative academic implications associated with e-cigarette use, there are also numerous adverse physical effects. In a study conducted by Vardavas et al. (2012), it was found that using an e-cigarette for only five minutes had a negative impact on lung function. Compared to the control group, the experimental group exhibited increased lung flow resistance and decreased fraction of exhaled nitric oxide (FENO). Even though this study focused on adults, the findings should also be considered in relation to teenagers, as their lungs are still developing. Staudt et al. (2018) also investigated the short-term effects of e-cigarettes on first-time users by analyzing the lung cell biology of individuals who had never smoked and took twenty puffs of an e-cigarette over thirty minutes. This study aimed to determine whether e-cigarettes without nicotine were safer than those with nicotine (Staudt et al., 2018). The study indicated that both nicotine-containing and nicotine-free e-cigarettes had a detrimental effect on lung cell biology (Staudt et al., 2018).

In order to understand the harmful chemicals present in e-cigarettes, Goniewicz et al. (2013) analyzed the contents of vapors from twelve different e-cigarette brands. Goniewicz et al. (2013) used a smoking machine to simulate vapor from popular e-cigarette brands found in Poland. The smoking machine produced vapor similar to smoking one hundred and fifty puffs over five minutes (Goniewicz et al., 2013). Even though the concentration of the toxic chemicals formaldehyde and acetaldehyde found in these e-cigarettes was lower than in regular cigarettes, the findings indicate that e-cigarettes contain harmful chemicals (Goniewicz et al., 2013).

A well-known chemical found in e-cigarettes is nicotine. Coats et al. (2022) aimed to investigate the vaping behaviors of teenagers by conducting a cross-sectional survey of teenagers aged fifteen to seventeen in New York in 2017 and 2019. The increase in teenage e-cigarette users can be attributed to the higher levels of nicotine in e-cigarettes and subsequent nicotine

addiction (Coats et al., 2022). The nicotine content in e-cigarettes has also been shown to increase (Coats et al., 2022). The percentage of youth using e-cigarettes with a nicotine content of more than 24mg increased from 17.7% to 58.3% (Coats et al., 2022). Due to the nicotine content, teenagers are finding it difficult to quit.

Perceptions of E-Cigarette Use

In order to develop a program aimed at preventing teenagers from using e-cigarettes, it is crucial to comprehend how teenagers perceive and view e-cigarettes. Understanding teenagers' perceptions of e-cigarette use will help customize a targeted prevention and intervention program. Dobbs et al. (2016) analyzed the 2014 National Youth Tobacco Survey to assess the perceived harm of e-cigarettes. In 2014, nearly 20% of middle and high school students reported using e-cigarettes (Dobbs et al., 2016). Out of this 20%, 48% of students perceived that e-cigarettes are less harmful than traditional cigarettes (Dobbs et al., 2016). Youth who believe that e-cigarettes are safer than traditional cigarettes are more likely to use e-cigarettes (Dobbs et al., 2016). Prevention messages that promote e-cigarettes as a healthier alternative to cigarettes could contribute to the incorrect perception of teens.

Merrill and Hanson (2022) corroborate the findings of Dobbs et al. (2016) regarding students' perceptions of e-cigarette use. Students are more likely to try e-cigarettes if they perceive them as less harmful and have reduced self-efficacy (Merrill & Hanson, 2022). If students are unable to articulate the adverse effects of e-cigarettes, they are more likely to experiment with e-cigarettes (Merrill & Hanson, 2022).

Pettigrew et al. (2022) sought to gain a better understanding of the prevalence of e-cigarette use in schools and the perceptions of e-cigarette use among high school staff members

by conducting a survey. Even though the study was conducted in Australia, the results shed light on the importance of establishing a prevention program in schools. Staff members reported an increase in e-cigarette use among students (Pettigrew et al., 2022). Because of the increase in e-cigarette use, staff members are concerned about the students' mental well-being, social interactions, academic performance, and participation in after-school programs (Pettigrew et al., 2022). Out of the one hundred and ninety-nine staff members, only 31% reported the presence of an e-cigarette prevention program in their respective schools. In order to reduce e-cigarette use in schools, staff support the need to increase school discipline and supervision in common areas where students use e-cigarettes (Pettigrew et al., 2022). Overall, this study supports the necessity of implementing a comprehensive e-cigarette prevention program in all schools, as indicated by staff perceptions of usage and potential harm to students.

Incorporating Parental Support

The responsibility of raising awareness about the importance of abstaining from e-cigarettes does not solely rest on the educational system. Parents play a crucial role in preventing teenage e-cigarette use. To better understand how parental support helps limit e-cigarette use, Choi et al. (2022) analyzed survey results from six hundred thirty-nine teenagers in nine states. The survey aimed to comprehend the participants' perception of parental knowledge and social media mediation (Choi et al., 2022). Choi et al. (2022) discovered that teens who perceived more adverse effects of e-cigarette use tended to have a greater level of parental knowledge. For this study, parental knowledge refers to parental involvement with their teenagers (Choi et al., 2022). Similarly, teenagers with parents who limited or controlled their media use were less likely to use e-cigarettes (Choi et al., 2022). This study supports incorporating parental support into comprehensive prevention and intervention programs.

Changing Advertisement Messages

The article "Don't Do Vape, Bro!," a qualitative study of youths' and parents' reactions to e-cigarette prevention advertisements, written by Popova et al. (2021), seeks to better understand the effectiveness of various e-cigarette prevention messages. Popova et al. (2021) conducted interviews with sixty-three teenagers and twenty-seven parents after they watched a variety of e-cigarette prevention advertisements. The interviews were conducted in twelve focus groups, and the advertisements focused on message themes related to chemicals, adverse health effects, anti-industry, and financial costs. Generally, the messaging in prevention campaigns needs to be realistic and relevant to teenagers (Popova et al., 2021). Participants found that using more well-known chemicals, such as acetone, instead of formaldehyde, makes it easier for teenagers to understand (Popova et al., 2021). Since e-cigarettes contain nicotine, advertisements should focus on the effects of nicotine on the body. This strategy was found to be more effective, especially in helping parents discuss the adverse health effects with their teenagers (Popova et al., 2021). Regardless of the message conveyed in the advertisement, students and parents emphasized the significance of authenticity (Popova et al., 2021). Results from the study showed that prevention messages about e-cigarettes could be effective when they are realistic and the topics discussed are relevant to the viewer (Popova et al., 2021).

In order to gain a deeper understanding of the promotional messages from e-cigarette companies, Donaldson et al. (2023) analyzed themes from two hundred and sixty YouTube videos of e-cigarette companies. Tobacco companies utilize YouTube and other social media platforms to promote their brands and e-cigarette use (Donaldson et al., 2023). The second most common theme in the YouTube videos was the use of e-cigarettes among young people (Donaldson et al., 2023). In addition to analyzing the themes of the videos, Donaldson et al.

(2023) examined user engagement with the videos. The most disliked messages were those with themes related to anti-tobacco and cessation, as reported by Donaldson et al. (2023). While watching these videos, teenagers are encouraged to use e-cigarettes by the e-cigarette companies and discouraged from quitting by other viewers.

Current literature indicates that e-cigarette messaging is not effective in reducing teenage e-cigarette use (Popova et al., 2021; Donaldson et al., 2023). Peer influence is a significant factor in teenage e-cigarette use (Cavallo et al., 2019). Cavallo et al. (2019) aimed to identify common themes for use in prevention messages by analyzing messages created by peers. Focus groups were utilized with both non-smokers and smokers to facilitate a discussion about e-cigarettes and develop e-cigarette prevention messages (Cavallo et al., 2019). The most influential themes identified in these prevention messages were unsafe product components, an increase in addiction, and health risks (Cavallo et al., 2019).

Establishing Positive Peer Support

Social impact plays a critical role in motivating youth to use e-cigarettes (Choi et al., 2022; Dai, 2021; Dube et al., 2023; Wallace & Roche, 2018). Wallace and Roche (2018) conducted a study on survey results administered to students and discovered that youth are more likely to use e-cigarettes and accept them from their peers due to the perceived positive social impact. Choi et al. (2022) found that teenagers perceived that 44% of their peers had used an e-cigarette. There is a high probability that students will start using e-cigarettes if they see their peers use e-cigarettes (Dai, 2021). Dube et al. (2023) and Seitz et al. (2020) found that the initiation of e-cigarette use often began when a peer offered to share their device. Merrill and Hanson (2022) found that 28.7% of students in their multi-school study, which included 10,758

high school students, were willing to try an e-cigarette if offered one. The normalization of e-cigarette use is making it difficult for teenagers to abstain. A prevention program will establish peer support groups to identify strategies for avoiding situations where e-cigarette use is easily accessible.

Prevalence of E-Cigarette Use at School

Due to addiction and the easy accessibility of e-cigarettes, high school students are regularly using e-cigarettes at school (Dai, 2021; Jackson et al., 2020). Dai (2021) analyzed data from the 2019 National Youth Tobacco Survey to determine the prevalence of e-cigarette use in schools. According to Dai (2021), nearly two-thirds of high school students witness their peers using e-cigarettes on school premises. The most common locations where high school students use e-cigarettes are the bathrooms or locker rooms because of peer influence and ease of access (Dai, 2021). Compared to male students, female students were more likely to witness other students vaping on school premises (Dai, 2021).

The findings of Jackson et al. (2020) corroborate the findings of Dai (2021). Jackson et al. (2020) identified that 45% of e-cigarette users use their devices at school. School bathrooms are the most common location for high school students to use e-cigarettes (Jackson et al., 2020). Despite the risk of school discipline and potential legal consequences, students continue to use e-cigarettes on school premises (Jackson et al., 2020). Jackson et al. (2020) highlight the necessity of implementing non-disciplinary policies for e-cigarette use on school premises.

Prevention and Intervention Programs

The number of virtual e-cigarette prevention programs is increasing compared to in-person programs (Gaiha et al., 2022). Gaigh et al. (2022) compared the effectiveness of virtual and in-person programs for high school students in Alabama and found providing prevention programs either virtually or in person did not have an impact on the overall effectiveness of the program. The study's findings indicate that students' perceived addictiveness of e-cigarettes increased, while their intent to try e-cigarettes decreased in both virtual and in-person programs (Gaiha et al., 2020).

Researchers at the University of Texas School of Public Health developed the CATCH My Breath prevention program in 2015. It is one of the few evidence-based programs grounded in the social cognitive theory that has been proven effective in preventing teenagers from using e-cigarettes (Kelder et al., 2022). CATCH My Breath was developed independently of cigarette prevention campaigns and designed to be easily integrated into schools. It provides teachers with easy access and can be incorporated into the existing curriculum or completed by students as individual modules (Kelder et al., 2022). Kelder et al. (2022) analyzed the effectiveness of the CATCH My Breath program at a middle school. At the high school level, the CATCH My Breath curriculum consists of four sessions that are similar to the theory of planned behavior. The four sessions include:

Session 1: Provide knowledge of the mental and physical effects of e-cigarette use

Session 2: Learn about the addictive nature of nicotine

Session 3: Explain how to get help for an addiction or give help to someone who is addicted.

Session 4: Make a personal decision regarding e-cigarette use.

(CATCH My Breath, 2023)

The findings from Kelder et al. (2022) revealed that the CATCH My Breath program led to a decrease in the number of first-time e-cigarette users, a reduction in the frequency of previous 30-day e-cigarette use, an increase in knowledge about e-cigarette use, and perceived positive outcomes for abstaining from e-cigarettes. Despite the availability of various prevention and intervention programs, the CATCH My Breath program is the only proven tool to decrease e-cigarette use (Kelder et al., 2022). When used in conjunction with parental support, the CATCH My Breath program will help establish a comprehensive school-wide prevention and intervention program.

Summary

The prevalence of teenage e-cigarette use and the frequency of use are increasing at alarming rates (Choi et al., 2022; Coats et al., 2022; Janjua et al., 2023; Simpson et al., 2022). This poses a risk to youth due to the adverse mental and physical health effects of e-cigarette use (Coats et al., 2022; Dai & Hao, 2017; Dearfield et al., 2021; Janjua et al., 2023; McCabe et al., 2017; Staudt et al., 2018; Vardavas et al., 2012). The theory of planned behavior (TPB) comprises three components that can aid in developing an effective prevention and intervention program. According to TPB, individuals can change their behavior if they have knowledge about the significance of the behavior, understand others' beliefs, and have the self-efficacy to avoid the behavior (Simpson et al., 2022). The CATCH My Breath program offers an evidence-based curriculum that incorporates elements of the TPB by educating teenagers about the effects of using e-cigarettes and providing them with tools to avoid this behavior (Kelder et al., 2020). Incorporating concepts from the theory of planned behavior will enhance a comprehensive e-

cigarette prevention and intervention program by targeting the modification of teenagers' attitudes toward e-cigarettes, increasing awareness of others' perceptions of e-cigarette use, and fostering self-efficacy.

The perceptions of e-cigarettes among teenagers and high school staff members are important factors to consider when developing a prevention and intervention program. Unfortunately, teenagers do not understand the impact e-cigarettes have on their physical and mental health (Merrill & Hanson, 2022). Despite the proven adverse health effects, teenagers will continue to use e-cigarettes. High school staff members are also recognizing the increased use of e-cigarettes and witnessing the negative effects on their students (Pettigrew et al., 2022).

Prevention programs begin by enhancing the participants' knowledge about the negative behavior. Current prevention messages lack authenticity and relatability among teenagers (Popova et al., 2021). Prevention messages created by peers that include information about chemicals in e-cigarettes, the likelihood of addiction, and the associated health risks have been shown to have the most positive impact (Cavallo et al., 2019). Schools must prioritize the implementation of a school-wide prevention and intervention program due to the rising use of e-cigarettes among teenagers, the misconceptions teenagers have about e-cigarettes, lack of parental support, the detrimental influence of peers and social media, prevalence of e-cigarette use at school, negative impact on academic performance, and the short-term and long-term health effects.

Conclusion

E-cigarettes are a relatively new habit that has been proven to be harmful to users' health. Life can be challenging for teenagers who are highly susceptible to the influence of their peers

and social media. Unfortunately, the social dynamics of teenagers' lives and social media are encouraging them to use e-cigarettes. Research indicates that e-cigarettes are associated with poor academic performance, an increased likelihood of engaging in risk behaviors, and adverse physical and mental effects (Coats et al., 2022; Dai & Hao, 2017; Dearfield et al., 2021; Janjua et al., 2023; McCabe et al., 2017; Staudt et al., 2018; Vardavas et al., 2012). The physical and mental well-being of teenagers depends on schools implementing prevention and intervention programs that raise awareness of the mental and physical effects of e-cigarettes. If schools do not offer this program, high school students may obtain information about e-cigarettes from their peers or social media, both of which promote teenage e-cigarette use (Cavallo et al., 2019; Choi et al., 2022; Dai, 2021; Dube et al., 2023; Donaldson et al., 2023). In a society where social media significantly influences beliefs and decisions, teenagers are often tempted to use e-cigarettes to appear "cool" or to follow the behavior of their peers. The intervention program is designed to help current users abstain from using e-cigarettes. Positive peer support groups are the catalyst for abstaining. As an educator advocating for the health and well-being of students, the goal of this comprehensive prevention and intervention program is to equip students with the knowledge and skills to abstain from activities that could jeopardize their health.

The next step for schools, following the literature review, is to implement a comprehensive prevention and intervention program. The findings of the literature review demonstrate the need to implement a program to address the persistent use of e-cigarettes among teenagers. Aspects of the project in Chapter Three will cover e-cigarette education for staff, materials for peer support groups, informational meetings for parents, and a step-by-step implementation guide for schools. The comprehensive prevention and intervention program aims

to empower high school students to change their attitudes, foster positive peer support, and enhance their self-efficacy.

Chapter Three: Project Description

Introduction

High school students are using e-cigarettes at alarming rates, despite the proven adverse health effects that are impacting their academic success. Due to the lack of prevention programs in schools, students often fail to understand the importance of their decisions to use e-cigarettes and the potential mental and physical harm they can cause. Social media, tobacco advertisements, and peers are exerting a negative influence on teenagers, encouraging them to use e-cigarettes. The most effective way for high school students to comprehend the importance of abstaining from e-cigarette use is by implementing a comprehensive and impactful prevention and intervention program. The primary objective of this project is to create an e-cigarette prevention and intervention program that enables high school students to transform their attitudes and beliefs about e-cigarettes, cultivate positive peer support, and enhance their self-efficacy. Despite efforts by schools and communities to promote prevention campaigns, the use of e-cigarettes continues to increase. Now is the time for schools, communities, and parents to come together to put an end to the teenage, e-cigarette-use epidemic. This chapter discusses the project components, evaluation, conclusions, and implementation plans. The conclusion of this chapter will provide a final encouragement to utilize this program for high school students' mental and physical well-being, along with an implementation guide for schools.

Project Components

The primary objective of the project is to decrease the prevalence of teenagers using e-cigarettes by educating students about the adverse physical and mental effects of e-cigarettes. This comprehensive e-cigarette prevention and intervention program enables students to acquire

skills to avoid using e-cigarettes and to advocate to their peers about the dangers of e-cigarette use. Additionally, parents will actively participate in this program to help raise awareness within the community. This comprehensive program will include e-cigarette education lessons, peer support groups, parent information sessions, and school advertising campaigns.

The main component of this comprehensive prevention and intervention program is the four e-cigarette lessons delivered to students during a homeroom or advisory class (see Appendix C). Schools will use the resources from CATCH My Breath for these lessons (see Appendix D). The lessons will be delivered during students' Homeroom or Advisory classes to ensure that all students receive the prevention program. The lessons are designed to align with the theory of planned behavior, which includes educating students about e-cigarettes (attitude), challenging societal norms related to e-cigarettes, and building skills for high school students to resist e-cigarette use (self-efficacy). All lessons include resources such as videos and guided notes (see Appendix D).

During the initial lesson, students will comprehend the potential impact of e-cigarettes on their physical and mental health. At the beginning of the lesson, students will identify their short-term and long-term goals for the year, which will lead them to learn about the impact of e-cigarettes on the brain. At the end of the lesson, students will be able to explain the impact of using e-cigarettes on their high school goals. In the second lesson, students will learn about the rise in teenage e-cigarette use, which is linked to the addictive nature of nicotine. Students will have the opportunity to explore healthy alternatives for managing stress. They will be able to develop a stress management plan that incorporates a variety of healthy alternatives to using e-cigarettes. The third lesson of this program focuses on overcoming addiction to e-cigarettes and providing support to current e-cigarette users. At the end of this lesson, students will be able to

engage in role-playing activities to demonstrate how to support individuals who use e-cigarettes in various scenarios.

Finally, the last lesson integrates the concepts from the previous lessons into a final group project (see Appendix E). Students will create an e-cigarette prevention message drawing upon the knowledge they have gained from previous lessons. These advertisements will take the form of posters displayed throughout the school, educational e-cigarette messages in the school's announcements, and targeted informational messages shared on the school's social media accounts. By creating their own advertisements, students will take ownership of the messages, thereby enhancing the authenticity and relatability of the messages.

The peer support groups in this comprehensive program focus on the intervention component. The objective of the peer support groups is to assist current e-cigarette users in quitting smoking. This is an optional group for students. These sessions are led by a member of the administrative team or the school's social worker (see Appendix G). The facilitator needs to establish a relaxed environment for the students to feel at ease discussing their addiction to e-cigarettes (see Appendix G). During each session, students will offer support to one another as they work towards quitting. The objective of these sessions is to establish accountability partners.

A crucial aspect of this comprehensive prevention program is the collaboration of parents and guardians. Before starting this prevention program, parents will receive a letter explaining the program (see Appendix A). This letter will highlight important components of the prevention program and request families to attend the parent informational meeting. At the parent informational meeting, the lead staff member of the e-cigarette prevention program will promote

the comprehensive e-cigarette program and educate parents about e-cigarettes (see Appendix F). The purpose of conducting the student and parent lessons simultaneously is to facilitate discussions between parents and students after they have been educated about e-cigarettes. Depending on the school community's preference, these sessions could be held in person or virtually. Ideally, the parent informational sessions are offered twice to accommodate families' schedules at different times. The virtual sessions should be recorded and made available to families after the sessions.

The parent informational sessions will cover a range of topics, including a description of e-cigarettes, a historical overview of the rise in teenage e-cigarette use, the effects of using e-cigarettes, how to identify signs of e-cigarette use, and strategies for discussing e-cigarettes with their children. Each session should last approximately forty-five minutes, with a chance for parents to ask questions at the end. At the end of the session, the overarching goal is to foster collaboration and partnership between the school and families to combat the e-cigarette epidemic.

Project Evaluation

This project aims to reduce the number of students experimenting with e-cigarettes for the first time and to enhance awareness of e-cigarettes. Quantitative data from pre- and post-intervention surveys, as well as student discipline records, are analyzed to assess the effectiveness of the prevention and intervention program. Students will complete a pre-prevention survey (see Appendix B), which will help quantify the number of students who are currently using or have used e-cigarettes. The survey will also aim to understand the students' initial e-cigarette knowledge. To assess the success of the program, students will complete the

post-intervention survey (see Appendix B). Schools can compare the pre- and post-intervention results to assess the effectiveness of the program. If the prevention program is successful, the students' scores on the post-prevention survey will indicate a reduction in the number of students currently using e-cigarettes and a decrease in the likelihood of future use. The surveys can also serve as a long-term evaluation tool by analyzing data from each grade level cohort over the four years that students are in high school.

Given that high school students are using e-cigarettes on school premises, it is imperative for schools to establish a system for tracking school discipline data. Analyzing student discipline data can help determine the extent of e-cigarette use in schools. Schools can compare student discipline data related to e-cigarettes annually. A reduction in the number of students disciplined for using e-cigarettes will demonstrate a positive correlation with the effectiveness of the prevention program.

The primary objective of the prevention and intervention program is to educate students about the impact of e-cigarette use, change the societal perception of e-cigarettes, and boost the self-efficacy of high school students. This, in turn, will result in a reduction in the number of students using e-cigarettes. This project will succeed when the quantitative data collected from the surveys and student discipline are evaluated together. If the time is taken to properly administer the program and to assess and analyze the collected data, this program can be beneficial for the health and well-being of high school students.

Project Conclusions

Despite the adverse physical and mental health effects of using e-cigarettes, teenage e-cigarette use is on the rise (Coats et al., 2022; Choi et al., 2022; Janjua et al., 2023). The lack of

understanding of the harmful effects of using e-cigarettes, combined with peer and social media influence, contributes to the rise in teenage e-cigarette use. E-cigarettes are marketed to teenagers as a safer alternative to traditional cigarettes (Donaldson et al., 2023). Similarly, peer influence makes it challenging for teenagers to refrain from using e-cigarettes because of the easy access and the perceived positive social impact (Wallace & Roche, 2018). High school students are becoming addicted to the nicotine found in e-cigarettes, and they are opting to use e-cigarettes at school. When this happens, students will face school discipline and increase the risk of developing academic challenges, such as a low grade point average and truancy (Dearfield et al., 2021; Janjua et al., 2023). In addition to academic concerns, e-cigarettes contain harmful chemicals and have been proven to cause serious health effects, such as a decrease in lung function (Goniewicz et al., 2013; Vardavas et al., 2012).

If schools do not implement an effective prevention and intervention program, more students will be at risk of falling victim to the e-cigarette epidemic. This initiative will pose a challenge for schools, but the overall well-being of teenagers depends on the success of this program. Literature supports the use of components from the theory of planned behavior when developing a prevention and intervention program (Hersberger et al., 2018). The components of the TPB suggest that it is the school's responsibility to educate students about the effects of using e-cigarettes, challenge societal norms surrounding e-cigarette use, and equip students with skills to resist using e-cigarettes. Schools are not the only ones involved in this endeavor. Parents and guardians play a crucial role in engaging in conversations with their children about e-cigarettes (Choi et al., 2022). If implemented faithfully, the comprehensive e-cigarette prevention and intervention program will play a crucial role in reducing teenage e-cigarette use.

Plans for Implementation

The comprehensive prevention and intervention program developed in this project is a step-by-step process for schools to use to combat the teenage e-cigarette epidemic. To enhance the program's effectiveness, it is essential for all staff members and parents to be fully committed to its implementation. However, because the program involves many components, it should be led and guided by one person, such as a dean of students, assistant principal, or health teacher. Once the leader has established themselves, they should introduce the project and the CATCH My Breath program during professional development. At this time, all staff members are required to complete the free CATCH My Breath training.

Since early intervention and education are critical for the success of the program, the CATCH My Breath lessons should be provided to students within the first month of the school year. To ensure that all students receive the prevention program, the lessons should be delivered in a common class, such as a homeroom or advisory class. Since the curriculum consists of four sessions, the lessons should be conducted over the course of one week. Once the course is completed, the students will receive a certificate of completion.

An important aspect of this program is the partnership with parents and guardians. To help communicate the school's action steps in addressing the teenage e-cigarette epidemic, parents and guardians will receive the parent informational letter at the beginning of the school year (see Appendix A). This letter will serve as an introduction to the program for the parents, along with an invitation to join the parent informational meeting. The parent informational meeting should be scheduled during the same week as the CATCH My Breath program is delivered to the students. This will help facilitate communication about e-cigarettes at home

between parents and their students. Depending on the needs of the school community, this meeting could be held in person or virtually.

The intervention aspect of this project focuses on the peer support groups. A school social worker or dean of students should lead the discussions in the peer support groups (see Appendix G). Schools should review survey results to identify students who are willing to join the support groups (see Appendix B). To ensure consistency, these groups should meet once a week. Attending these groups will be optional for students, but highly recommended for those who have faced school discipline for possessing or using e-cigarettes at school.

At the conclusion of the prevention program, the administrative team, along with the program's lead staff member, should review the data from the post-prevention survey (see Appendix B). This will enable the team to identify new students to join the peer support groups and develop an implementation guide for the following year. Additional resources may be created based on the survey results.

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Appendix A

Parent Informational Letter

Created by: Michael Ebbert

Dear Parents and Guardians,

The prevalence of teenage e-cigarette use and the frequency of use are on the rise, not only at our school but across the United States. To address this issue at XYZ School, our school is implementing a school-wide e-cigarette prevention and intervention program for all students in grades 9-12. The homeroom teachers will instruct the students in the program over a four-day period. Each day will include the following lessons:

Day 1: Provide information on the mental and physical effects of e-cigarette use

Day 2: Learn about the addictive nature of nicotine

Day 3: Describe the process of seeking help for addiction or providing assistance to someone struggling with addiction.

Day 4: Make a personal decision to abstain from using e-cigarettes for personal health reasons.

We are excited to embark on the journey of ending the e-cigarette epidemic, but we need your help. At XYZ School, we value the partnership and commitment of our families. The proverb "It takes a village to raise a child" encapsulates the journey of ending the e-cigarette epidemic. To be clear, we need your help. In conversations with our leadership team, we have realized that many parents and guardians are unfamiliar with e-cigarettes. We are here to assist you too. Along with raising awareness among our students, we will hold Parent Informational Meetings to educate you about e-cigarettes and equip you with resources to facilitate conversations with your child about e-cigarettes.

Sincerely,

Your Principal

Appendix B

Pre and Post E-Cigarette Prevention Survey

Created by: Michael Ebbert

Pre-Test E-Cigarette Survey

Students,

Unless you provide us your name in the last section, this survey is completely anonymous. Your responses will provide data to to school on the effectiveness of the e-cigarette prevention and intervention program. Remember, the term e-cigarette is used in reference to vapes.

Thank you!

* Indicates required question

Sociodemographic Information

1. Age *

Mark only one oval.

14

15

16

17

18

2. Student Grade *

Mark only one oval.

9th

10th

11th

12th

6. In the past 30 days, I have used an e-cigarette *

Mark only one oval.

Yes

No

7. In the past 30 days, I have used an e-cigarette at school. *

Mark only one oval.

Yes

No

8. In the past 30 days, I have seen a peer use an e-cigarette at school. *

Mark only one oval.

Yes

No

9. I have family members that I live with use e-cigarettes *

Mark only one oval.

True

False

E-cigarette Knowledge

3. Gender *

Mark only one oval.

- Male
- Female
- Prefer not to say
- Other

4. Race/Ethnicity *

Mark only one oval.

- Hispanic or Latino
- American Indian/Native Alaskan
- White, Non-Hispanic
- African American or Black
- Asian
- Mixed or other
- Prefer not to say

Previous E-Cigarette Use

5. I have used an e-cigarette at least once in my life. *

Mark only one oval.

- True
- False

10. E-cigarettes are a healthier alternatives than cigarettes *

Mark only one oval.

1 2 3 4 5

Stro Strongly Disagree

11. E-cigarettes are not addicting. *

Mark only one oval.

1 2 3 4 5

Stro Strongly Disagree

12. Using an e-cigarette is a healthy way to reduce stress. *

Mark only one oval.

1 2 3 4 5

Stro Strongly Disagree

13. I know most of the chemicals found in e-cigarettes *

Mark only one oval.

1 2 3 4 5

Stro Strongly Disagree

Peer Influence

17. I believe I am addicted to using e-cigarettes

Mark only one oval.

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. I am worried I won't say no if I am offered an e-cigarette.

Mark only one oval.

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. I want to join the Peer Support Intervention Program

Mark only one oval.

Yes

No

20. First and Last Name

14. If a friend offered you an e-cigarette, you would say no. *

Mark only one oval.

1 2 3 4 5
Stro Strongly Disagree

15. You have friends that use e-cigarettes *

Mark only one oval.

1 2 3 4 5
Stro Strongly Disagree

16. You walk into a school bathroom, and you see other students using an e-cigarette. *
What is the likelihood that you would tell them to stop?

Mark only one oval.

1 2 3 4 5
Stro Strongly Disagree

E-cigarette Peer Support Group Intervention

If you are currently or have used e-cigarettes before, we want to support you in developing skills to stop using. The following questions are optional. You will NOT face any school discipline or have parents notified if you answer yes and provide your name.

Appendix C

CATCH My Breath Prevention Slideshow

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CATCH MY BREATH

Fact or Fiction: The Truth About Vaping
HIGH SCHOOL | CORE LESSON BUNDLE

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CATCH MY BREATH

3-for-Me Breathing Exercise

BREATH 1
Focus on the mind.
Both hands on head.

BREATH 2
Focus on the heart.
One hand on heart.

BREATH 3
Focus on the body.
Raise arms on inhale.
Lower arms on exhale.

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CATCH MY BREATH

Session 1
Your Life,
Your Choice

Agenda

- My Personal Goal (5 min)
- Vaping Aerosol-ing (10 min)
- Health Effects of E-cigarettes (15 min)
- Why Are the Brain Consequences Worse for Teens? (5 min)
- Personal Goal Revisited (5 min)

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My Personal Goal

- Where do you want to be *mentally and physically* by the end of the school year?
 - How do you feel mentally and physically right now?
 - How do you want to feel mentally and physically by the end of the year?
 - What are some areas you want to improve on?

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CATCH MY BREATH

In the CATCH My Breath Program You Will...

- Understand the impact that e-cigarette use can have on mental and physical health.
- Understand the highly addictive nature of nicotine and the signs of addiction.
- Develop helpful stress management strategies to avoid e-cigarette use.
- Identify support resources and practice help seeking/offering behaviors.
- Develop messaging to promote the choice to not use e-cigarettes.
- Make a personal decision regarding e-cigarette use.

Classroom Norms

There are no bad questions

Respect others' privacy

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What Do You Already Know About E-cigarettes?

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Vaping Aerosol-ing

Vaping is basically flavored water. It's not that bad.

You do know there's no water in it right?

It's called vaping. As in water vapor.

It's an aerosol. Basically tiny drops of oil with nicotine and other toxins in it.

No way. I wouldn't inhale hot oil. That'd be dumb.

Yes... yes, it would be.

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Inside the Aerosol Droplets

"The Flavor and Extract Manufacturers Association Expert Panel evaluates the safety of flavor ingredients for use in food, not for inhalation. We do not support the use of flavors in vaping products in the absence of rigorous safety assessments performed by vaping product manufacturers and marketers that demonstrate safety."

— Flavor and Extract Manufacturers Association (the group of companies that make the flavor chemicals)

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MY BREATH

What Are Your Thoughts?

- What misconceptions did you initially have about e-cigarettes and what truths did you learn?
- Did any of the information you learned today surprise you?
- What will you remember most from what you just heard?
- How did this information make you feel?



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My Personal Goal Revisited

- Describe the impact that e-cigarette use can have on the way you feel **physically**.
- Describe the impact that e-cigarette use can have on the way you feel **mentally**.
- How might using e-cigarettes **affect the goal** that you made for yourself?



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"My Vaping Mistake: How it Affected My Mental Health"

Homework:

- Watch the video on YouTube: "[My Vaping Mistake: How it Affected My Mental Health](#)".
- Answer the question: What are the different ways in which using e-cigarettes affected the lives of teens in the video?




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Summary

- E-cigarette aerosol contains a toxic mix of chemicals, including flavors that are not recommended for inhalation.
- E-cigarettes cause numerous physical and mental health problems affecting organs throughout the body.
- Teen e-cigarette use causes long-term consequences to brain functioning and mental health.
- Researchers are still learning about the impacts of e-cigarette use and the long-term health effects are still unknown.



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E-liquid is Technically a Poison

- Exposure to e-liquids (through the skin, ingestion, and eyes) can lead to seizures, brain injury, vomiting, and even death from poisoning.
- Between 2013–2023, Poison Centers in the U.S. received 40,774 calls due to e-liquid exposure.



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Announcing Your New Team!




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My Body, My Health Effects




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Why Are the Brain Consequences Worse for Teens?

"There are acetylcholine receptors in the brain and other places in the body and, when nicotine enters your system, it binds to them. The long-term effect of nicotine is a higher risk of addiction and a negative impact on brain development, specifically, your working memory and attention span. So, high schoolers who smoke e-cigarettes could be risking their grades and, potentially, their future careers."




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Think-Pair-Share

- Why do you think people guessed too high or too low for the number of high schoolers who choose not to use e-cigarettes and the number of high schoolers who are trying to quit?
- Why do you think most teens choose not to use e-cigarettes?
- For teens who do choose to use e-cigarettes, what are some reasons they may make this choice?




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Nicotine is Highly Addictive.

1 Month




1 in 4 teens who get addicted to nicotine are hooked within a month.

Many Attempts



88% of teens report that it takes many attempts to quit using nicotine.

Unsuccessful At First



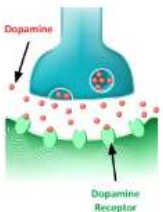
Of teens who try to quit nicotine, only **12%** are successful their first time.

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Addiction is a Joy Thief


Normal Neuron



Flood of Dopamine



Reduced Receptors



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My Real Joys

- What brings you real joy in your life?
- How can addiction jeopardize the joy someone feels in life?




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Session 2

Addiction

Agenda

- Homework Review (5 min)
- Cigarettes vs E-cigarettes (8 min)
- Guess & Check: How Many High School Students Use E-cigarettes? (5 min)
- Stress Management Plan (18 min)

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Reflecting on "My Vaping Mistake"


- How did using e-cigarettes affect the teens in the video?
- What about that video did you relate to?
- What did you not relate to?



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Cigarettes vs. E-cigarettes



Nicotine Strength Level

- 0 mg
- <1%
- 1 to <2%
- 2 to <3%
- 3 to <4%
- 4 to <5%
- >= 5%

1. Which contains a higher percentage of nicotine on average, cigarettes or e-cigarettes? Did this answer surprise you? Why or why not?
2. From 2017-2022, how would you describe what happened to the average nicotine strength level in e-cigarettes?


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- What percentage of high schoolers do you think choose **NOT** to use e-cigarettes?
- What percentage of current high school tobacco users do you think are **trying to quit** using e-cigarettes?

85.9% of high schoolers choose **NOT** to use e-cigarettes.

More than half of users have tried to quit at least once.



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Why I Hate My Vape

"During sports, like try not to use it or makes my breath season started, I would stop trying down, and then I'll

"I got really sick, like, [...] last year. Like, in February and January I had to go on antibiotics, like, something was really wrong with my throat and, like, my lungs, like, I couldn't breathe that well. I had to go on an inhaler. Yeah. That made me stop for, like, a few weeks."

"I know it's hard [to quit]. I waste my money on it, and I don't even like using it, but it's just the fact that I fiend for it..."

"It's like I can't. But, the inside."



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Stop—Breathe—Go

STEP 1
Stop and pause for a moment

STEP 2
Take a breath

STEP 3
Have a plan

Example Responses:

- "Nah, I'm good. Thanks, though."
- "No, thanks. I am trying to stay in shape for dance."
- "No, I'm alright. I hate the way those things make me feel."
- "Honestly, it's really not my thing."
- "No, thanks. I feel like they give me a gross cough."
- "No way. My coach would be so mad."
- Leave the situation.
- Suggest something else to do, like getting something to eat.

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"Nicotine Addiction Isn't Pretty"



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Signs of Addiction

<p>Bad Mood</p> <p>Feeling annoyed, nervous, anxious or restless when you can't vape or smoke.</p>	<p>Can't Focus</p> <p>Difficulty concentrating on a task when you can't vape or smoke.</p>	<p>Morning and Night</p> <p>Strong cravings to vape or smoke first thing when you wake up or right before you go to bed.</p>
<p>Loss of Control</p> <p>You've tried to stop but found it really hard.</p>	<p>Clingy</p> <p>You feel like you can't go anywhere without your vape or can't go a day without taking a few puffs.</p>	<p>High Risk</p> <p>You can't stop vaping even when there are health consequences or you're at risk of getting caught.</p>

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Stress Management: What Can You Do?

- Eliminate stressors
- Talk to friends or family members and offer support
- Spend time in nature
- Exercise
- Sleep 8–10 hours a night
- Do activities that make you happy
- Maintain good nutrition
- Reframe your thinking
- Practice Mindfulness & Breathing (ex: diaphragmatic breathing)
- Practice progressive muscle relaxation
- Seek help



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My Stress Management Plan

Identify your stress triggers and make a plan for what to do when it happens.



- I plan on going for a walk outside when I'm overwhelmed.
- I'm taking a break from social media during the school week.
- I am going to practice breathing exercises when I'm feeling stressed.

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Summary

- Both cigarettes and e-cigarettes have a harmful effect on physical and mental health.
- Most high schoolers choose NOT to use e-cigarettes.
- Over half of the high schoolers who use tobacco products are trying to quit.
- Nicotine changes the brain in a way that makes it harder to feel real joy.
- E-cigarette use makes stress worse by causing addiction and mental health problems.
- There are many positive, proven ways to manage stress.

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Session 3

Quit/Avoid

Agenda

- Why I Hate My Vape (15 min)
- Take Control (5 min)
- Signs of Addiction/Resources for Quitting (5 min)
- Get Help/Give Help (15 min)

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Session 4

What's Your Why?

Agenda

- **My Top 5 Project** (20 min)
- **Presentations** (15 min)
- **What's Your Why?** (5 min)

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My Top 5 Project

Directions: Make a listicle based on one of the topics below, or come up with your own. List the 5 reasons, then include 1–3 sentences to explain each numbered point.

- Top 5 Reasons to Quit/Not Start
- Top 5 Myths and Realities about E-cigarettes
- Top 5 Ways E-Cigarette Use Affects Your Life
- Top 5 Ways to Give Help to a Friend
- Top 5 Health Effects of E-cigarettes
- Top 5 Ways that E-cigarettes Affect Mental Health
- Top 5 Reasons Why Choosing Not to Vape Makes My Community a Better Place to Live
- Top 5 Things You Can Say to Refuse E-cigarettes



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My Top 5 Project—Sample Listicle

Top 5 Benefits of Eating More Fruits and Vegetables

Prevent some types of cancer

- A diet rich in fruits and vegetables can protect you from several types of cancers such as stomach, lung and prostate cancer thanks to the phytochemicals they contain. Eat a variety of fruits and vegetables every day to help protect your health!

Lower blood pressure

- High blood pressure can damage vital organs like the heart by making it work too hard. The potassium in fruits and vegetables helps to lower your blood pressure to prevent health problems in the future.

Reduce your risk of heart disease and stroke

- Fruits and vegetables contain loads of heart healthy antioxidants that can slow down or prevent plaque from building up in your arteries. Filling half your plate with fruits and vegetables can reduce the chance of developing heart disease and stroke.

Maintain a healthy weight

- Fruits and vegetables are low in fat and calories, but help you feel full thanks to their high fiber content. Crunching on fruits and vegetables is a great alternative to less healthy snack options like chips.

Fight Infections

- Fruits and vegetables are full of vitamins and minerals that are crucial for a healthy immune system. Eating lots of fruits and vegetables helps you fight off infections and even prevent infections in the first place!

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Presentations



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Support Resources

TEXT	<ul style="list-style-type: none"> DITCHVAPE to 88709 QUIT to 478-48
CALL	<ul style="list-style-type: none"> 1-800 QUIT NOW 1-855-891-9989*
VISIT	<ul style="list-style-type: none"> Teen.SmokeFree.gov MyLifeMyQuit.com*
TALK TO	<ul style="list-style-type: none"> School counselor or trusted adult Doctor or other medical professional

*Resources available in the following states only: MA, CO, MI, MT, NV, OH, PA, or UT

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Finding a Trusted Adult

1. Make a list of adults who make you feel safe and listened to.
2. Prepare what you would like to say.
3. Practice what you would like to say.
4. Choose a good time to talk.
5. Let them know you have something important to talk about.
6. Go through what you have prepared to say to them.

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Get Help/Give Help

Activity 24: Give Help/Give Help

Read the following text and answer the questions below.

Text:

Quitting tobacco products is a challenge, but it's worth the effort. There are many resources available to help you quit, and you can get help from friends and family. It's important to have a support system when you quit. You can also get help from a healthcare professional. They can provide you with resources and support. You can also get help from a quitline. They can provide you with resources and support. You can also get help from a quitline. They can provide you with resources and support.

Questions:

1. What are some resources available to help you quit?
2. How can you get help from friends and family?
3. Why is it important to have a support system when you quit?
4. How can a healthcare professional help you quit?
5. How can a quitline help you quit?



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Summary

- Teens who use e-cigarettes often have many reasons as to why they don't actually like it.
- E-cigarettes are so addicting that many users will continue to use them even when it brings them harm.
- There are many resources available for quitting tobacco products like e-cigarettes.

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What's Your Why?



I'm focusing on my goals. Who's got time to vape?



I care too much about my future and the environment's future to vape.



Playing in shops for sports is my top priority. That's why I stay away from tobacco products.



I tried it once but realized it wasn't for me. I haven't done it since.



I have way better things to spend my money on than e-cigarettes.



I don't smoke because I want to set a good example for my little brother.

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YOU DID IT!

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Appendix D

CATCH My Breath Student Workbook

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CATCH My Breath Student Workbook

HIGH SCHOOL | STUDENT WORKBOOK

STUDENT HANDOUT

Activity 1A | My Personal Goal

Where do you want to be mentally and physically by the end of the school year?
How do you feel mentally and physically right now?
How do you want to feel mentally and physically by the end of the year? What are some areas you want to improve on?

STUDENT HANDOUT

Activity 1B | My Body, My Health Effects

Read the assigned health effects aloud in your group, then sort each health effect into the chart below based on the organ system that it affects. Some health effects may affect more than one organ system.

Health Effects
<ul style="list-style-type: none"> Known: Worsening Asthma E-cigarettes are shown to irritate the cells in the airway and harm lung tissue, which puts e-cigarette users at a significantly higher risk of chronic lung diseases like asthma. High school students who use e-cigarettes have a higher risk of asthma attacks and are more likely to miss school due to severe asthma symptoms. Known: Coughing and wheezing E-cigarette users develop coughing and wheezing, which affects their ability to enjoy and perform in activities like sports, dancing and music and regular daily tasks like walking up stairs. Known: Shortness of breath E-cigarette users are warned to lookout for signs like shortness of breath, which can be signs of lung damage. Breathing in the chemicals from e-cigarettes can cause lung damage that cannot be reversed. Known: Addiction Nicotine is highly addictive and causes lasting physical changes in the brain, which makes it very difficult to quit. Just one JUUL and some disposable e-cigarettes can have more nicotine than a pack of 20 cigarettes. Known: Reduced attention span Nicotine changes the way that the brain is set up and can cause a reduced attention span lasting into adulthood, making it harder for the nicotine user to pay attention in school and in their career. Known: Reduced working memory The brain is still developing until about 25 years of age. Nicotine use as a teen decreases the brain's ability to keep and use pieces of information in its working memory, which can affect grades and career performance. Known: Mental health problems Using nicotine as a teen physically changes the way that the brain is set up, leading to lifelong issues with chemical signaling and the brain's emotional response system. Nicotine use and withdrawal can lead to increased anxiety, depression and sensitivity to stress. E-cigarette users are twice as likely to report clinical depression compared to those who have never used e-cigarettes. Known: Impaired emotional regulation Nicotine use reduces the brain's ability to control emotional responses, making it harder to keep emotions in check. Teen nicotine use reduces the ability to stop and think before acting, which can cause an increase in all kinds of risks such as sexual behavior, drug use, and physical accidents. Nicotine also changes the pathways in the

CATCH
MY BREATH

3

CATCH
MY BREATH

2

STUDENT HANDOUT

brain that regulate mood, which causes mood swings, especially when trying to stop using nicotine.

- Known: Trouble sleeping**
Teens need 8–10 hours of sleep to stay physically and mentally healthy. Nicotine withdrawal can cause insomnia and may cause nicotine users to sleep more lightly and spend less time in deep sleep, affecting mental health, physical health, and the ability to do well in school.
- Known: Poor oral health**
E-cigarettes can cause an increase in harmful bacteria in the mouth, dry mouth, higher rates of gum disease and cavities, mouth sores, bad breath, tooth loss, and an increase in mouth infections. E-cigarette users are also more likely to develop a disease called black hairy tongue, which happens when the tongue appears black and furry due to an overgrowth of bacteria and dead cells.
- Known: Battery explosion injuries**
Explosions from e-cigarette batteries can cause burns on the face and mouth, jaw bone fractures, tooth loss, and burns on the thighs, hands and genitals.
- Known: Throat irritation**
Chemicals in e-cigarettes are known to cause throat irritation, which can cause the user to feel like they have a sore throat or excess mucus in the throat.
- Known: Dizziness**
E-cigarette use can cause dizziness, which is a sign of nicotine poisoning.
- Known: Nausea, vomiting and diarrhea**
E-cigarette use can cause vomiting and diarrhea, which are serious signs of nicotine poisoning that happen often 30 minutes to 4 hours after use.
- Known: Rapid heart rate**
E-cigarette use can cause a faster heartbeat. A rapid heartbeat means that the heart is having to work harder than normal.
- Known: Congestion**
E-cigarette use makes it harder for the body to clear mucus and dehydrates the airways causing a sticky mucus to build up in the lungs.
- Known: Insulin resistance and high blood sugar**
Nicotine changes cells so they don't respond to insulin, which causes an increase in blood sugar levels. The chemicals in e-cigarettes also harm cells and cause inflammation, which makes cells unable to respond to insulin. Because of this, the more you use e-cigarettes, the higher your risk for Type 2 Diabetes.
- Possible: Heart Disease**
E-cigarette use raises several risk factors for heart disease. For example, nicotine use makes it harder for the arteries to expand and increases blood pressure. Because of this, e-cigarettes may affect heart health over time.
- Possible: Lung infections and disease**
Inhaling the oily substances found in e-liquid causes lungs to become inflamed, leading to chronic cough and shortness of breath. There is no good treatment for this other

CATCH
MY BREATH

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than stopping the use of e-cigarettes. Researchers have shown that e-cigarette users are more likely to develop a chronic lung disease. E-cigarette use causes changes to the cells that line the airways, causing issues like cell death. E-liquid ingredients produce acrolein, formaldehyde, and acetaldehyde, which are known to be toxic to the lungs.

- Possible: Weakened immune response**
 E-cigarettes harm the immune system, so research is showing that users are likely to get sick more often because they are more susceptible to infections from bacteria and viruses. This is particularly important considering the COVID-19 pandemic and the virus's effect on the lungs.
- Possible: Liver damage**
 So far, animal studies are showing that e-cigarettes damage the liver, which is essential for digesting food and helping your body get rid of toxins.
- Possible: Cancer**
 Many chemicals in e-cigarette vapor are known carcinogens (chemicals that cause cancer) or are linked to an increased risk of cancer.
- Possible: Impaired Reproductive Health**
 Research is showing that e-cigarettes harm the developing baby and may reduce fertility in males by reducing sperm count.

Organ Systems	
Immune system Organs, cells and proteins that work together to protect your body from outside invaders like bacteria, viruses, fungi and toxins. Makes asthma worse.	Cardiovascular system The heart and blood vessels move blood throughout the body, transporting nutrients, hormones, oxygen and more to all of the organs and tissues in the body.
Integumentary system The outermost layer of your body which is made up of the different layers of the skin, hair and nails, acting as a physical barrier between the external and internal environment.	Digestive system The gastrointestinal tract (the mouth, throat, esophagus, stomach, intestines, rectum and anus) and the liver, pancreas and gallbladder work together to break down food and liquids into smaller parts so your body can absorb the nutrients.

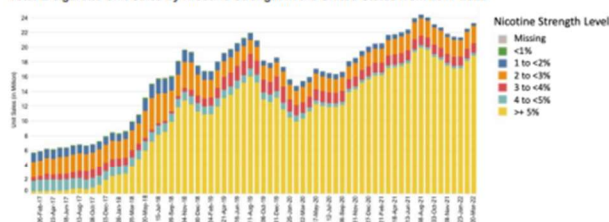
Activity 2a | Cigarettes vs. E-cigarettes

Use the charts below to answer the questions comparing the nicotine content in cigarettes versus e-cigarettes and be ready to discuss aloud with the class.

Cigarette Brand	Percentage of Nicotine
Kent	1.80
Winston	2.07
Marlboro Lights	2.09
Pine	1.89
Dunhill	1.69

Source: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3905555/>

Total E-cigarette Unit Sales by Nicotine Strength in the United States from 2017-2022





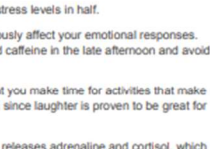
Source: https://academic.oup.com/ntr/article/24/5/1024/6564272/6_source-advances-access/full_campaign/0/ntr_advances

- Which contains a higher percentage of nicotine on average, cigarettes or e-cigarettes? Did this answer surprise you? Why or why not?
- From 2017-2022, how would you describe what happened to the average nicotine strength level in e-cigarettes?

Activity 2b | My Stress Management Plan

Part 1: Ways to Reduce Stress

Below are different techniques that are proven to reduce stress. Read through the techniques and put a star next to the ones that you'd like to use.

- Eliminate stressors that you have control over** by dropping some responsibility or asking for help. Taking a break from social media and avoiding relationships or situations that make you unhappy can help reduce your stress.
 
- Talk to friends or family members and give support back.** Having social support helps you bounce back from stress and giving support to others helps increase positive emotions and decrease negative emotions.
 
- Spend time in nature.** Studies show that spending time in nature can improve mood. Take a walk outside or set up a blanket and relax at the park.
 
- Exercise.** Exercise can cancel out the negative health effects of stress and has been shown to cut stress levels in half.
- Sleep 8-10 hours a night.** Too little sleep can seriously affect your emotional responses. Create a sleep routine to help you wind down. Avoid caffeine in the late afternoon and avoid screen time before bed.
- Do activities that make you happy.** Make sure that you make time for activities that make you happy, especially activities that make you laugh since laughter is proven to be great for your physical and mental health.
- Good nutrition.** When you are stressed, your body releases adrenaline and cortisol, which can cause fat and sugar cravings, but a diet high in nutrients can protect your health and help you feel better. Eat a rainbow of fruits and vegetables and make sure to stay hydrated by drinking water throughout the day.
- Reframe your thinking.** Thoughts affect emotions, so reframing your thoughts about things that you're stressed about can help you reduce feelings of stress. Try to set realistic expectations for yourself and others and catch yourself when your mind is spiraling, replacing negative thoughts with positive ones. Writing down your feelings or negative thoughts in a journal can be a good release. Try to replace the negative thoughts with positive thoughts in writing.
- Mindfulness and Breathing.** Mindfulness is proven to reduce stress and anxiety. Set aside a few minutes to just sit and breathe. Try to focus on your breathing and if stray thoughts emerge, acknowledge them, then refocus on your breathing and how your body feels. You

can even do mindful eating by eating slowly and focusing intently on how the food looks, smells, feels, and tastes.



Diaphragmatic Breathing, or belly breathing, is especially helpful:

- Sit in a comfortable position and relax your shoulders or lie down.
- Put one hand on your chest and the other hand on your stomach.
- Breathe in for 3 seconds through your nose and feel your stomach expand. Try to make sure your stomach, or diaphragm, is moving out while your chest remains somewhat still.
- Press gently on your stomach and breathe out for 3 seconds through pursed lips.
- Repeat this as many times as you need.



Progressive Muscle Relaxation: Stress makes muscles tense, so stretching can help you relax. You can also try a technique called progressive muscle relaxation:

- Get in a comfortable position, then inhale and contract the muscles in your feet for 5–10 seconds.
- Exhale and release the muscles all at once.
- Relax for 10 seconds.
- Inhale and contract the muscles in your legs for 5–10 seconds, then exhale and release the muscles.
- Continue this, moving up the body through the muscle groups. If tensing is hard for you, you can also just picture each muscle group one at a time and focus on relaxing each one.

Seek Help. If self-help is not working, look for a mental health provider that can help you identify your stress triggers and develop an action plan to change your responses.

Part 2: Make Your Plan

Use the chart below to list your stress triggers (situations that make you feel stressed), then make a plan for what you will do to alleviate your stress in each situation using ideas from the list above.

Stress Trigger	What will you do?

Activity 3a: Why I Hate My Vape

Read through the quotes from teen e-cigarette users below. Then, underline the different health effects and signs of addiction that you noticed in the quotes.

- "There's so much to dislike. I wake up with a sore throat all the time."
- "Sometimes I will just be laying down and then I'll try to take a deep breath. It's not like I can't. But it just starts to hurt on the inside."
- "This is going to sound so gross. But I feel like there's just like phlegm always in my throat like I feel like I'm always like sick."
- "I mean, like I have asthma like already, but ever since I started [vaping] like I'll cough.... like really hacking. I feel like I can't breathe sometimes..."
- "Some flavors are just like harsher than others. So it will make like this dry burning feeling in your chest and like that's the only time I've ever almost thrown up because I was coughing so hard."
- "Well, I mean like yeah the nausea is awful after a while because nicotine like just messes your stomach up real bad and then also the fact that after a while like the point that we've been doing this for years and now it doesn't really even give us a head rush as much anymore so now we kind of doing it to feed the addiction."
- "I got really sick like last year. Like in February and January I had to go on antibiotics like something was really wrong with my throat and like my lungs like I couldn't breathe that well. I had to go on an inhaler. Yeah. That made me stop for like a few weeks."
- "During sports, like I swim too, I would try not to use it or do anything at all because it makes my breathing worse. So before the season started I would try to like ween off of it and try to stop for the season. It obviously didn't happen, but I try to stop for the season so I can perform better."
- "I know it's hard [to quit], I waste my money on it but I don't even like using it but it's just the fact that I fiend for it..."

If these effects happened to me, how would it affect my life? How would it affect the personal goal I made for myself in Session 1?

Activity 3b | Give Help/Get Help

Before the conversation: Write down the main points that you want to talk about and questions that you want to ask to help you stay focused and remain calm in the conversation.

Do:	Don't:
<ul style="list-style-type: none"> • Use "I" statements that express your feelings and your concerns. <ul style="list-style-type: none"> ○ Example <ul style="list-style-type: none"> ■ "I feel worried when I see you sneak away to use your vape," instead of "You are always sneaking away to use your vape." • Listen to what they have to say. • Ask how they are feeling. Offer empathy and affirm their feelings. • Use eye contact, uncross your arms and lean in to show you are paying attention. 	<ul style="list-style-type: none"> • Use an accusing or judging tone • Use statements that begin with "you" • Threaten them or make demands • Get angry • Use absolutes (always, never) • Use guilt or shame • Try to force them to make a change • Assume what others are feeling • Lecture. You can share information that you've heard, but do so in a way that is helpful • Use harsh words or name calling with labels like "addict" • Make excuses for them or justify their behavior • Blame yourself • Avoid eye contact, turn away, or use other negative body language

Step 1 Find a time when you can be alone together and free of distractions or interruptions.

Step 2 Start the conversation by letting your friend or family member know that you care about them and that you are concerned.

Examples:

- I wanted to check in with you because you haven't seemed yourself lately
- I've noticed you've been acting differently lately and I am worried about you.
- I noticed you've been vaping a lot lately and I'm worried about you.

Step 3	Ask if they are open to hearing your thoughts.
Step 4	Use real examples to explain why you are concerned. Examples: <ul style="list-style-type: none"> I noticed that you've been leaving class a lot to vape. I noticed that you have been coughing a lot and I'm worried about you.
Step 5	Ask questions. Examples: <ul style="list-style-type: none"> When did you first start feeling like this? Why do you feel like you like your vape? Do you ever feel like you want to stop? Are you worried about your vaping sometimes?
Step 6	Offer support. Examples: <ul style="list-style-type: none"> What can I do to best support you right now? Have you thought about getting help?
Step 7	Reassure them that you are there for them. Examples: <ul style="list-style-type: none"> I want you to know that I am here for you and want to help in any way I can. It may not feel like it now, but you can be in control again. I may not understand exactly how you feel, but I love you and want to help. I believe in you and know things can get better.

Step 8

Offer resources and share information.

Examples:

- I've heard about a text hotline that you can use to help you quit when you're ready.
- There's a phone number you can call to find out more about getting help.
- I was wondering if you would consider talking to a counselor about it.

If they're not ready: They may become defensive, but don't take it personally. Continue to offer support and encouragement.

Examples:

- I hope you'll think about it because I care a lot about you.
- I understand you may not be ready to talk about it, but I am here for you if you decide you want to talk.

Instructions: Use the guide above to practice a conversation between you and a friend that you are concerned about. One partner will pretend to be the concerned friend and the other will pretend to be the person who is using e-cigarettes. For the person who is playing the role of the e-cigarette user, try to offer realistic responses and move the conversation along. You can use the sentence starters below to guide possible responses.

E-cigarette User Sample Response	Example Reply
Why do you care? It doesn't affect you.	I care about you because you are my friend. I just want to make sure that you are okay because you mean a lot to me.
It's not a big deal.	I know you don't feel like it is a big deal, but I am worried about you because it has a big impact on your health. I just want to make sure that you are okay.
Okay maybe there are some things that are going wrong, but I don't know what to do.	I have a few resources that I've heard about, if you'd like me to share them with you.
I tried to stop and it was really hard.	I know I may not understand exactly what you are going through, but I am here for you and know that it is really hard. Please let me know how I can help.
I can stop whenever I want.	I am really glad to hear that you are thinking about stopping. It can be surprisingly hard to stop, but I have some resources that are really helpful if you're interested.

Tobacco & E-Cigarette Cessation Resources

The following are a list of tobacco & e-cigarette cessation resources. Please note that these resources are intended to help young people start the quitting process, but a physician should also be consulted for a comprehensive cessation process.

FDA-approved cessation products:

Call 1-800-QUIT NOW or text QUIT to 47848 to start a quit program.

- Truth Initiative's This is Quitting Program**
Text DITCHJUUL to 88709 or visit truthinitiative.org/thisisquitting to learn more and/or start a quit program.
- National Institute of Health**
Visit smokefree.gov to get 24/7 live support and cessation resources.
- Centers for Disease Control and Prevention, Youth Tobacco Prevention**
Visit cdc.gov/tobacco/basic_information/e-cigarettes/index.htm to stay up-to-date on the latest e-cigarette research.
- National Jewish Health**
Teens in nine states—Colorado, Massachusetts, Michigan, Montana, North Dakota, Nevada, Ohio, Pennsylvania and Utah—can call or text the helpline at 1-855-891-9989 or go online to mylifemyquit.com.

Tobacco & E-Cigarette Support Resources

The following are a list of tobacco & e-cigarette support resources. Please note that these resources are intended to help young people start the quitting process, but a physician should also be consulted for help with quitting.

FDA-approved cessation products:

Call 1-800-QUIT NOW or text QUIT to 47848 to start a quit program.

- Truth Initiative's This is Quitting Program**
Text DITCHVAPE to 88709 or visit truthinitiative.org/thisisquitting to learn more and/or start a quit program.
- National Institute of Health**
Visit smokefree.gov to get 24/7 live support and cessation resources.
- Centers for Disease Control and Prevention, Youth Tobacco Prevention**
Visit cdc.gov/tobacco/basic_information/e-cigarettes/index.htm to stay up-to-date on the latest e-cigarette research.
- National Jewish Health**
Teens in nine states—Colorado, Massachusetts, Michigan, Montana, North Dakota, Nevada, Ohio, Pennsylvania and Utah—can call or text the helpline at 1-855-891-9989 or go online to mylifemyquit.com.



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STUDENT HANDOUT

Use the space below to brainstorm your listicle, then make your final copy on the chart paper or poster board. Refer to the rubric to understand what you will need to do to earn a good score.

My Top 5 Project Planning

My Top 5 Grading Rubric:

Use of Facts—50 points

The project presents relevant facts from the sessions in an engaging way, including at least two facts from the 1b: **My Body, My Health Effects** activity.

Effectiveness—10 points

The project is very convincing and effectively uses ideas explored in class.

Originality—10 points

The project uses unique and original ideas.

Professionalism—10 points

The poster is neat, tidy, and free of (unintentional) grammar and/or spelling errors.

Presentation—10 points

All group members spoke clearly during the presentation and in an engaging way.

Teamwork—10 points

All group members contributed to the project in a meaningful way.



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Activity 4A | My Top Five Project

Directions: Make a listicle based on one of the topics below, or come up with your own. List the 5 reasons, then include 1–3 sentences to explain each numbered point. Make sure to incorporate the facts that you learned in the sessions including at least two facts from the 1b: **My Body, My Health Effects** activity.

- Top 5 Reasons to Quit/Not Start
- Top 5 Myths and Realities about E-cigarettes
- Top 5 Ways E-cigarette Use Affects Your Life
- Top 5 Ways to Give Help to a Friend Who is Using E-cigarettes
- Top 5 Ways that E-cigarettes Affect Mental Health
- Top 5 Health Effects of E-cigarettes
- Top 5 Reasons Why Choosing Not to Vape Makes My Community a Better Place to Live
- Top 5 Ways to Refuse E-cigarettes

Sample Listicle

Top 5 Benefits of Eating More Fruits and Vegetables

- 1. Prevent some types of cancer**
A diet rich in fruits and vegetables can protect you from several types of cancers such as stomach, lung and prostate cancer thanks to the phytochemicals they contain. Eat a variety of fruits and vegetables every day to help protect your health!
- 2. Lower blood pressure**
High blood pressure can damage vital organs like the heart by making it work too hard. The potassium in fruits and vegetables helps to lower your blood pressure to prevent health problems in the future.
- 3. Reduce your risk of heart disease and stroke**
Fruits and vegetables contain loads of heart healthy antioxidants that can slow down or prevent plaque from building up in your arteries. Filling half your plate with fruits and vegetables can reduce the chance of developing heart disease and stroke.
- 4. Maintain a healthy weight**
Fruits and vegetables are low in fat and calories, but help you feel full thanks to their high fiber content. Crunching on fruits and vegetables is a great alternative to less healthy snack options like chips.
- 5. Fight infections**
Fruits and vegetables are full of vitamins and minerals that are crucial for a healthy immune system. Eating lots of fruits and vegetables helps you fight off infections and even prevent infections in the first place!



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STUDENT HANDOUT

Activity 4B | What's Your Why?

Think back to the goal that you made in Session 1 about how you want to feel mentally and physically by the end of the year. Review your stress management plan. What are some things that you will do to accomplish the goal you made for yourself?

Take some time to think about your decision regarding e-cigarettes, then answer the questions below:

What is your *why*? In other words, why are you making your decision?

What are some situations that may tempt you to change your decision? What might you do if you are tempted to change your decision in the future? What might you remind yourself of?



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Appendix E

Student-Created Prevention Campaign

Created by: Michael Ebbert

Name: _____

Homeroom Teacher: _____

E-Cigarette Prevention Campaign Assignment

At the end of our e-cigarette prevention program, students will work in groups to create an e-cigarette prevention message. You should utilize the information you've learned throughout the lessons to communicate the dangers of using e-cigarettes along with tools to stop using e-cigarettes. As we've discussed in class, tobacco companies promote the use of e-cigarettes to teenagers by capitalizing on social media. This assignment will help promote our anti-e-cigarette campaign to the student body at XYZ School.

Group Member Names: _____

Message Theme: _____

Message Theme Ideas:

- Physical health effects of using e-cigarettes
- Mental health effects of using e-cigarettes
- Academic risk behaviors
- Chemicals found in e-cigarettes
- How to avoid e-cigarettes
- Responding to peer pressure
- Encouraging a friend to quit using e-cigarettes
- Other

Platform for Message _____

Platform Ideas:

- Posters throughout the school
- Posters in high traffic areas (bathrooms/locker rooms)
- Social media post
- Morning announcements
- Tik Tok video
- Other

Appendix F

Parent Informational Slideshow

Created by: Michael Ebbert

Welcome Families!

E-Cigarette Informational Meeting

Agenda

- Why are we here?
- What are E-cigarettes?
- Adverse physical and mental effects of e-cigarette use
- CATCH My Breath Prevention Program
- Resources

Why are we here?

Teenage E-Cigarette Use Epidemic

Teenage E-Cigarette Use Epidemic

- Almost 15% of teenagers are using e-cigarettes
- 75% of e-cigarette users started when they were between the ages of 12 and 14
- Frequency of e-cigarette use is also increasing
- More studies are reporting short-term and long-term physical health effects
- Students who use e-cigarettes do poorly in school

What are E-Cigarettes?

E-Cigarettes

- E-cigarettes are devices that contain a battery, a heating element, an e-liquid, and a cartridge to hold the e-liquid
- Originally marketed as an 'healthy' alternative to using cigarettes

Adverse Physical and Mental Effects of E-Cigarette Use

Health Effects

- E-cigarettes contain nicotine, the addictive chemical and other harmful chemicals such as formaldehyde and acetaldehyde
- The body becomes addicted to using e-cigarettes due to the increase of nicotine
- E-cigarettes severely damage the lungs
- Increased risk of engaging in risky behaviors including substance abuse (binge drinking, alcohol use, marijuana use and other drug use)
- Increased risk of school-related risk behaviors (truancy and low-grade point averages)
- Decrease in academic performance
- More days out of school due to school disciplinary actions

How XYZ School is Ending the Teenage E-Cigarette Use Epidemic

CATCH My Breath Program

- All students are participating in the CATCH My Breath prevention program
- Lessons include:
 - Day 1: Provide information on the mental and physical effects of e-cigarette use
 - Day 2: Learn about the addictive nature of nicotine
 - Day 3: Describe the process of seeking help for addiction or providing assistance to someone struggling with addiction.
 - Day 4: Make a personal decision to abstain from using e-cigarettes for personal health reasons.

CATCH My Breath Program

- Students will create e-cigarette prevention messages to be displayed throughout the school
 - Morning announcements, posters, social media posts
- Peer Support Groups created as part of the intervention program
 - Groups led by our social worker
 - Help promote e-cigarette cessation to current users

How to talk with my teenager about e-cigarettes?

Parental Support

- Educate Yourself
 - Understand the negative impacts of using e-cigarettes
 - Identify what an e-cigarette looks like
- Proactive Steps
 - Ask your child who they are hanging with and where they are going
 - Monitor social media
 - Encourage participation in after-school activities
- Talk With Your Teen About E-Cigarettes
 - Ask what they learned from the CATCH My Breath program
 - Help them identify ways to say no to peer pressure

Resources

- CATCH MY Breath Program
 - <https://catch.org/program/vaping-prevention/>
- Teenager Quit Vaping Resources
 - <https://teen.quitvapes.com/quit-vaping>
- Substance Abuse and Mental Health Services Administration
 - 1-800-662-4357
- Truth Initiative
 - <https://truthinitiative.org/hiiskquitting>

Appendix G

Peer Support Group

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Development**

HOW DO YOU FACILITATE A PEER SUPPORT GROUP?

You've put in a lot of hard work in preparing for your support group to begin, and now the day has arrived. If you are the group's facilitator, here are some helpful guidelines for running these meetings.

PREPARE YOURSELF FOR THE MEETING

Take a few minutes to think about possible topics for discussion. If this isn't your first meeting, review the topics that were talked about last time. Go over any notes you took. This can help you remember to bring up things that members might want to revisit or give updates on. If you plan to make any announcements of community events or activities that may be of interest to the group, make sure you have them ready.

PREPARE THE ROOM FOR THE MEETING

Arrive 20 to 30 minutes early to arrange the room. Put the chairs in a circle large enough for latecomers to fit in, with enough room for folks who use wheelchairs to easily join. If you're going to have refreshments, set them up on a table to the side or back of the room. If you're going to use name tags, have them ready. Have a pen and paper to take notes.

START THE MEETING

As people begin arriving, be sure to make eye contact and say hello, greeting them by name if you've met them before. Call the meeting to order on time, or at least within five minutes of the designated time. This encourages other members to be prompt. It also rewards those who are punctual; if you always start the meeting late because you're waiting for that one person who shows up 15 minutes late every time, you risk alienating those who made the effort to be there on time. A simple "Let's get started," or "Well, it's five minutes after seven o'clock, why don't we begin the meeting," is adequate.

GIVE PRELIMINARY INTRODUCTIONS AND INFORMATION

Introduce yourself briefly; if you have some experience with the group topic, be sure to mention it. Make any announcements and ask the group if they have anything to add.

ENCOURAGE MEMBERS TO LISTEN TO EACH OTHER

Being a good listener - and acting as an example to group members in this regard - means being an active listener, one who is obviously listening and understanding what is being said. How do you let people know that you're listening?

- Body language (leaning slightly towards the speaker, not fidgeting)
- Eye contact (looking in the speaker's eyes, not looking around the room)
- Brief encouraging statements, also sometimes called nonverbal encouragers ("Uh-huh" or "Mmm-hmm")
- Nodding
- Repeating or rephrasing the speaker's last phrase to let him know you understood. ("I can't believe my mother was so cold about it," could be responded to with, "So you were really hurt by what your mother did," for example)

ENCOURAGE MEMBERS TO OFFER SUPPORT TO ONE ANOTHER

While being supportive yourself, you must also help others in the group learn how to be so as well. Demonstrate the active listening skills listed above while the member is speaking. Wait 10 seconds or so and then, if no other members have done so, offer support. Group members will usually pick up on this and start offering support themselves. If they don't you may have to ask them questions about how they are affected by the discloser's experience.

For example, Yoshiko might say the following things in her group:

- "Shawna, what can you say to Brian that might help?"
- "How can we give Brian some support now?"
- "What do you think about what Brian is going through, Annie?"

ENCOURAGE MEMBERS TO TALK ABOUT THEMSELVES

One advantage of support groups is that they can create an atmosphere in which members feel comfortable talking about and working through very personal issues and experiences. Disclosure - the act of revealing personal information - gives other members a chance to offer support, ideas, and assistance. It also encourages other members to share their own experiences and fosters an atmosphere of trust in the group. To maintain that trust, facilitators may find that they also need to disclose information from time to time.

HELP MEMBERS SOLVE PROBLEMS

While solving problems shouldn't be the only goal of a support group, it is something that many members hope for and expect. All members should take part in the problem-solving process so that no single person is seen as the solution to their difficulties. It's the facilitator's job to help members learn how to help each other with problem solving.

Here are the steps to problem solving:

- *Clarifying the problem:* Make sure everyone fully understands the problem. If you aren't sure what the problem is, ask questions to get more information.
- *Talking about the alternatives:* Bring up possible solutions to the problem, but be very careful to word them in a way that doesn't give advice. For example, instead of "You should do this," a better wording could be "I wonder what it would be like for you to try this" or "Maybe you could do this." **Telling people what to do is not the purpose or responsibility of a support group.** It takes away a person's feeling that he can handle his own problems and can make people feel attacked and uncomfortable. Try asking members to tell what's worked well for them in similar situations. You can also ask the person with the problem what he thinks might work.
- *Choosing which option(s) to take:* Have the group discuss the pros and cons of each suggestion. You can then let the person with the problem come to a decision, or he may want to take some time on his own to consider the possibilities. Let him know that the group cares and wants to know how things turn out.
- *Offering help:* Sometimes members may offer to assist each other. For example, if the problem being discussed is a member's problems with transportation to the meetings, other members might offer to give that person a ride.

Appendix H

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Michael Ebbert <ebbertm@mail.gvsu.edu>
to communityhealth ▾

Sat, Jan 27, 7:26 PM (3 days ago) ☆ ↶ ⋮

Hello,

My name is Mike Ebbert, and I'm a graduate student at Grand Valley State University, pursuing my Educational Leadership degree. I've attached a formal letter requesting permission to use components from the Community ToolBox: Chapter 21 - Section 2. Creating and Facilitating Peer Support Groups.

Please let me know if you have any questions about the Master's Project or if you have any concerns.
Thank you for your consideration.

One attachment • Scanned by Gmail ⓘ



Center for Community Health and Development
to me ▾

Mon, Jan 29, 12:06 PM (1 day ago) ☆ ↶ ⋮

Good morning Mike,

Thank you for your e-mail. We are pleased that you have found the Community Tool Box helpful! The Community Tool Box is a [Creative Commons](#) publication, so we encourage users to share the materials. We have a suggested written citation (example below) for materials that will use or reference the Tool Box:

KU Center for Community Health and Development. (2023). Chapter 3, Section 1: Developing a Plan for Assessing Local Needs and Resources. Lawrence, KS: University of Kansas. Retrieved January 4, 2023, from the Community Tool Box: <https://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/develop-a-plan/main>

For your recreation of the above citation, we ask that you please use this link: <https://ctb.ku.edu/en/table-of-contents/implement/enhancing-support/peer-support-groups/main> in place of the one in the example.

Additionally, please find attached the signed letter from our Assistant Director Christina Holt.

Thanks, and let us know if you have any further questions!

Audrey Foster (she/her) | Administrative Associate Sr
Center for Community Health and Development
WHO Collaborating Centre for Community Health and Development
Life Span Institute, University of Kansas
<http://communityhealth.ku.edu> | @KUCommHealth | [facebook](#)
Community Tool Box | <http://ctb.ku.edu> | @CToolBox | [facebook](#)
1000 Sunnyside Avenue, 4082 Dole Center | Lawrence, Kansas | 66045 | (785) 864-5627

January 27th, 2024

To Whom It May Concern:

I am currently enrolled in the Grand Valley State University (GVSU), Master's of Educational Leadership Program, and I am writing a Master's Project for the completion of my Master's Degree in Education. My Master's Project is entitled "Developing an E-Cigarette Prevention and Intervention Program." May I receive permission to include in the appendixes of my Master's Project a copy of the following item?

From Chapter 21, Section 2: Creating and Facilitating Peer Support Groups – Information under the section "How do you facilitate a peer support group?"


Your signature at the bottom portion of this letter confirms your ownership of the above item. The inclusion of your copyrighted material will not restrict your re-publication of the material in any other form. Please advise if you wish a specific copyright notice to be included on each page. My Project may be cataloged in the GVSU library and will be available to other students and colleges for circulation.

Sincerely,

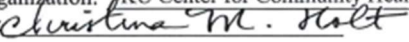
Mike Ebbert

Mike Ebbert
545 Harfield Dr. SE
Ada, MI 49301
Phone: 630-269-5559
ebbertm@mail.gvsu.edu

PERMISSION IS GRANTED to Mike Ebbert to include the requested material(s) in their GVSU Master's of Education Project.

Name: 
Address: 545 Harfield Dr. SE Ada, MI 49301
Date: 1/29/24

Use the following permission signature format if a publishing house or other organization owns the copyright.

Name of Company/Organization: KU Center for Community Health and Development
Permission granted by:  (Christina M. Holt)
Title: Assistant Director
Date: 1/29/24

CMB Feedback External Inbox x**Bryan Austin**

to me ▾

3:56 PM (3 hours ago)



These look fantastic. One small note is that the plan, as written, cites the Theory of Planned Behavior while CMB is actually rooted in Social Cognitive Theory. These theories have a large amount of overlap but there may be a need to adjust that part in order to accurately interpret and discuss the program as they implement the program, speak to parents, implement peer support groups (i.e., the 3 aims).

This isn't a major hurdle as the constructs noted are all easily translatable to SCT. From the student's text:

"Theory of Planned Behavior - A person's behaviors are controlled by their attitudes (beliefs about a behavior), subjective norms (beliefs about others' attitudes towards a behavior), and perceived behavioral control (beliefs about one's ability or inability to perform a behavior)(Simpson et al., 2022)."

Attitudes and subjective norms are similarly in SCT, with the inclusion of outcome expectations, social support, observational learning.

Perceived behavioral control is a part of self-efficacy (i.e., "confidence") as well as capacity (i.e., knowledge + skills; for CMB, this is particularly true for our teaching of refusal skills)

Aside from that, I think the proposal is interesting and I'm happy to sign off on their project.

Thanks,
DM

**Bryan D Austin** *he/him*

Community Consultant

catch.org | bryanaustin@catch.org | 828.221.7171

Help us provide health & wellness programs to ALL kids with a [donation to CATCH](#) today.

**Bryan Austin** <bryanaustin@catch.org>

to me ▾

Tue, Jan 16, 4:15 PM



Hi Michael,

I am Bryan Austin, Community Consultant and Trainer for CATCH Global Foundation. Thank you for reaching out and for your willingness to use components of our CATCH My Breath program as part of your Master's project. I am forwarding your email and your attachment to Dr. Steve Kelder and Dr. Dale Mantey with UT Health. I will make the request and get back to you as soon as possible. Feel free to reach out to me directly if you need anything in the meantime.

Thanks so much!

Bryan

**Bryan D Austin** *he/him*

Community Consultant

catch.org | bryanaustin@catch.org | 828.221.7171

Help us provide health & wellness programs to ALL kids with a [donation to CATCH](#) today.

**Bryan Austin** <bryanaustin@catch.org>

to me ▾

Thu, Jan 18, 8:47 AM (13 days ago)



Good morning, Mike.

Can you send me your thesis proposal?

Thanks so much!

Bryan

CATCH My Breath Program Permission

**Michael Ebbert** <ebbertm@mail.gvsu.edu>

to suzanne, catchmybreath ▾

Wed, Jan 10, 1:59 PM



Hello,

My name is Mike Ebbert, and I'm a graduate student at Grand Valley State University, pursuing my Educational Leadership degree. I've attached a formal letter requesting permission to use components of the CATCH My Breath e-cigarette prevention program as part of my Master's Project.

Please let me know if you have any questions about the Master's Project or if you have any concerns. Thank you for your consideration.

GRAND VALLEY STATE UNIVERSITY
EDL 693 Data Form

NAME: Michael Ebbert

MAJOR: (Choose only 1)

Educational Leadership School Counseling

Special Education Admin. College Student Affairs Leadership

TITLE: Development of an E-Cigarette Prevention and Intervention Program to End the Teenage E-Cigarette Epidemic

PAPER TYPE: Project

SEM/YR COMPLETED: Winter 2024

Using key words or phrases, choose several ERIC descriptors (5 - 7 minimum) to describe the contents of your project. ERIC descriptors can be found online at <http://eric.ed.gov/?ti=all>

- | | |
|--------------------------|-----------------|
| 1. Health Promotion | 6. Social Media |
| 2. Prevention | 7. |
| 3. Smoking | 8. |
| 4. Behavior Modification | 9. |
| 5. Peer Influence | 10. |