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Creating a Drug Prevention Program Targeting Inhalant Use in Thai Adolescents

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Creating a Drug Prevention Program Targeting Inhalant Use in Thai Adolescents



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SUBMITTED MARCH 1ST, 2017



BSAC



SATI



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Creating a Drug Prevention Program Targeting Inhalant Use in Thai Adolescents

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Abstract

The abuse of inhalants among young adolescents is a rising public health concern not sufficiently addressed in Thailand. The lack of education in schools regarding mental and physical effects of inhalants has contributed to this health concern. We worked with the SATI foundation and the Hub in order to recommend a way of raising awareness of inhalant use and its detrimental effects. To accomplish this, we conducted interviews of teachers, surveyed the level of inhalant knowledge in adolescents, and closely examined engaging techniques of drug prevention programs locally and globally. This work culminated in a website deliverable that contains several forms of media targeted towards Thai adolescents, is easily shared, and has the underlying message of volatile substance awareness.

CREATING A DRUG PREVENTION PROGRAM TARGETING INHALANT USE IN THAI ADOLESCENTS



Inhalant abuse is a rising problem that affects youth worldwide. Common products such as spray paint, glue, thinner, and nail polish are transformed into drugs, that when inhaled have destructive effects on a person's health. Short-term effect of inhalant use include slurred speech, dizziness, hallucinations, blackouts, and vomiting, while long-term abuse can lead to organ damage, hearing loss, bone marrow damage, and exacerbation of mental health disorders. The effects are often unrecognized by even the people closest to the abuser, resulting in difficulties solving the issue. Unfortunately, without proper awareness of the effects of inhalant abuse, the persistence of this public health concern is inevitable.

Education is a key factor in preventing drug abuse, and without it, the number of abusers could increase. Without a proper support network, some youth find that their only ways to cope with trauma, poor self-esteem, suicidal tendencies, and psychiatric conditions are through the use of drugs (Baydala, 2010). Homeless adolescents can be susceptible to these conditions. In the city, these children must sometimes turn to crime to survive.

The National Institute on Drug Abuse (NIDA) is a respected federal scientific research facility under the US Department of Health and Human Services. According to NIDA, the best way to combat drug use is by way of prevention.

Drug prevention programs should:

- Build adolescents' strengths/skills that are incompatible with substance use.
- Connect adolescents to at least one caring role model
- Short-circuit typical peer norms so that adolescents view avoidance of alcohol, tobacco and other drugs to be "cooler" than using these substances.

NIDA evaluates programs based on structure, delivery, and content. An example of a NIDA approved program is the Life Skills Training, which supports and educates the audience.

Our sponsor, the SATI Foundation, is a non-profit organization whose mission and values are focused on the improvement of the welfare of under-served Thai communities. The Hub is an organization working with the SATI Foundation and offers assistance to nearby homeless adolescents. The Hub is located in the area surrounding the Hua Lamphong train station in Bangkok, which is known for having a large homeless population (Sukprasert, 2016). A major problem faced in the Hua Lamphong area is inhalant abuse among adolescents.

Goal and Objectives

The goal of this project was to develop an online inhalant awareness program to assist adolescents of Hua Lamphong with personal development, self-confidence, overcoming adversity, and the ability to resist drug abuse. We accomplished four objectives to reach this goal, which were:

1. Assess past and existing international and local drug prevention programs' successes and failures

Assessing drug prevention programs demonstrated how to design an effective program for the SATI Foundation so that we could avoid common pitfalls while duplicating successes. We assessed the strengths and weaknesses of each type of program based on their structure while reflecting on our target audience and determining the best approach using criteria developed by NIDA.

2. Evaluate how online media campaigns have been successful

We evaluated online media campaigns in order to determine how they achieved success and whether they would be applicable to the goal of the project. We identified the targeted audience, how they presented their campaign, and how it was received.

We surveyed 88 local adolescents to determine beneficial characteristics for our program, focusing on how they spent their time online. Once our campaign was developed, we received feedback from adolescents at the Hub, school children, and Chulalongkorn students. This data evaluated the effectiveness of our awareness program.

3. Identify the available resources, such as counseling, to support the target audience

In order to achieve this objective, we collected information through a semi-structured interview with the founder of the SATI Foundation. We also analyzed local recommended programs. However, the local resources that we researched either do not cover the Hua Lamphong area or are too expensive or time constraining for the street adolescents.

4. Develop an inhalant abuse awareness program that impacts the local Hua Lamphong area and is capable of extending more globally

By interviewing the adolescents at the Hub, and surveying the schools around Hua Lamphong, we determined the important components for our program, including what type of social media adolescents use most often, what online activities they enjoy the most, and what they lacked in inhalant knowledge.



Fig. 1: Saipanya survey



Fig. 2: Debsirin survey



Fig. 3: Interview with health teachers

Key Findings

Inhalant knowledge: Adolescents had trouble identifying inhalant examples and effects. Over 20% incorrectly answered “Menthol substance” as an inhalant. Damage to the nervous system was the most commonly identified side effect by students, but only 11% were able to recognize it. We found that inhalants were not the priority in the curriculum, leaving adolescents more susceptible to inhalant abuse.

Online activities: A large majority of adolescents in the schools and at the Hub described their social media usage as more than once per day. Watching videos was the most preferred activity, followed closely by sharing pictures. In addition, we learned that some of their preferred content includes funny and educational aspects. All adolescents interviewed expressed their passion towards learning new things and recreational activities.

Drug prevention programs: Based on the criteria outlined from NIDA’s guide to building effective prevention programs, Life Skills Training (LST) and Above the Influence (ATI) scored the best out of the five programs, which concentrate on helping adolescents through their daily struggles. Based on the success of these programs, we observed that just providing drug information is not always an effective approach to solving the problem.



Fig. 4: Mobile website homepage

Deliverable

To showcase inhalant facts and promote alternatives to inhalant use, we created a website and shareable media components for our target audience. The website itself had factual information to correct the common misconceptions of inhalant abuse that we found through our research. Throughout the text, pictures and animations are used to attract attention of visitors to the website and increase inhalant abuse awareness. We also created a personality and talent quiz to engage the adolescents. These talents lead to some recommended activities, in picture based tutorials or videos, that are fun and can promote personal development. The activities are also to provide alternatives to inhalant use.

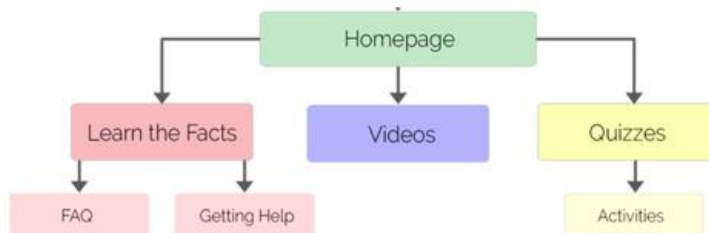


Fig. 5: Website components

Future considerations

In order to engage the audience, it is necessary for SATI to periodically update the website and YouTube channel with new material. The newly created material would mostly consist of activities videos, animations, and images.

We also recommend that SATI and the Hub continue creating a partnership with the Volunteer Chula club by contacting the head of social development, Kittkun Samherpak. They are an organization on Chulalongkorn's campus focused on improving the community through short term volunteer events. They are very invested in expanding materials for the website. This will require communication by SATI to confirm creation of materials.

The existing local resources that we researched do not have enough resources to help more people, are too expensive, or have problematic curriculum. We were able to find one English based organization that could be a support system for the Thai adolescents called 7 Cups. We developed instructions in Thai to allow adolescents to access Thai counselors. We do not believe that local resources will develop enough for the target audience in the near future and that this topic should be revisited in a few years.

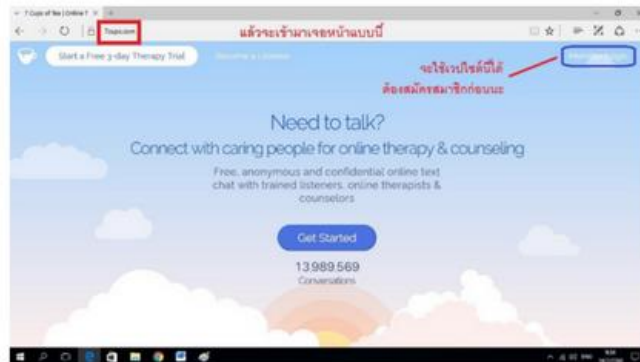


Fig. 6: 7 Cups Thai instructions

Conclusion

Finding a way to successfully capture the attention of Thai adolescents and spread awareness of inhalant abuse was the main goal of this project. Our recommendations highlight ways that could potentially raise inhalant awareness in Hua Lamphong while extending globally. This project should improve the quality of life for homeless adolescents. By suggesting potential activities and passion, we can encourage the adolescents towards a better future and away from drugs. All in all, we aimed to give them the tools for furthering their future. With the proper facilitation of this program, it will become a reality and provide support for countless adolescents.



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2.1.1	Identifying the inhalant abuse concern	ES	All
2.1.2	The Most at risk individuals	CMC, SC, AV	All
2.1.3	Inhalant regulations and detection	JN, SC	All
2.2	Physical, mental, and social effects of inhalant drugs	CMC, JN	All
2.2.1	Physical health impacts	CMC	All
2.2.2	Mental health impacts	ES	All
2.2.3	Inhalants as a gateway drug	JN	All
2.2.4	Correlation of crime and inhalants	JN, SC	All
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4.2	Finding 2	JN, PK	SC, JN, CMC, PK
4.3	Finding 3	SC, SR	SC, JN, CMC
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4.6	Finding 6	JN, SC	SC, JN, CMC
4.7	Finding 7	SC, SR, JN	SC, JN, CMC, SR, AV
4.8	Finding 8	SR, PK	AV, CMC

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5	Recommendations	ES	All
5.1	Deliverable	ES, AV	CMC, JN, ES, AV
5.2	Recommendation 1	AV, ES, CMC, SR	CMC, JN, ES, AV, SC, PK
5.3	Recommendation 2	JN	CMC, JN, ES, AV, SC, SR
5.4	Recommendation 3	AV	CMC, JN, ES, AV, SC, PK
6	Conclusion	ES	CMC, JN, ES, AV, SC, SR

Deliverable

Component	Associated people
Inhalant video 1 (Glue)	PK, SR, SC, ES, JN, CMC, AV
Inhalant video 2 (Nail polish)	PK, SR, SC, ES, AV
Bracelet video	PK, SR, JN, SC
Jump rope video	SC, PK, JN
Soccer video	PK, SR, JN, SC
Motivational graphics	PK, SR, SC, ES, AV
Informational graphics	PK, SR, SC, ES, AV
Zombie Animation	PK, AV
Glue Fight Animation	PK, SC, SR, JN
Brain Animation	CMC
Is menthol an inhalant? Animation	PK, SC, JN
Soccer Animation	AV, CMC
Website	PK, SR, SC, AV, ES, CMC
Homepage	PK, SR, SC, AV, ES
Learn the Facts	PK, SR, SC, AV, ES
FAQ	PK, SR, SC, AV, ES
Quiz	PK, SR, SC, AV, ES
7 Cups instruction	PK, ES, AV

Chapter 1 Introduction

Inhalant abuse is a rampantly rising problem that affects youth worldwide. Common products, known as volatile substances, are transformed into drugs, that when inhaled have destructive effects on a person's health. The effects are often unrecognized throughout the world, resulting in difficulties solving the issue. Unfortunately, without proper awareness of the concerning effects of inhalant abuse, the persistence of this public health concern is inevitable.

Products that can be used as inhalant drugs range from markers to gasoline. Even though these materials are easily found, there is a significant danger when using them as inhalant drugs. According to the National Institute on Drug Abuse (NIDA), inhalants' effects can be as mild as dizziness or as severe as bone marrow damage and death (2012).

Inhalants are gateway drugs to more harmful substances and crime. In addition, they can amplify mental health issues (Sakai, Hall, Mikulich-Gilbertson, & Crowley, 2004). Inhalant abuse further complicates the lives of homeless adolescents in Bangkok, Thailand. According to a survey of street kids in Bangkok, these children typically find work as beggars, street vendors, shoe shiners, and sex workers because their families are poor or abusive (Friends-International, UNICEF, & World Childhood Foundation, 2010). In order to ensure Thai teenagers' well-being, it is imperative that a prevention program is available to illustrate how a decision can make a difference in their lives.

An organization looking to address inhalant abuse in Thailand is the SATI Foundation. The SATI Foundation is a non-profit organization in Thailand whose mission is to help those in need, focusing on improving the health care and education of underserved people in Thailand. Additionally, the SATI Foundation partnered with another non-profit organization called The Hub. The SATI Foundation approached WPI and Chulalongkorn University for a way to spread awareness of the negative effects of inhalant abuse to at-risk adolescent populations in the area surrounding Hua Lamphong Station in Bangkok. Inhalant abuse amongst Thai teenagers has detrimental effects on their health and future, and we, along with the SATI Foundation, developed a program to help combat this concern.

By creating an awareness program that spreads knowledge of inhalants, this project identifies methods of reaching youth populations to supplement the SATI Foundation and the Hub in their endeavors. The best way to combat drug use is by way of prevention (NIDA, 2010). We used surveys and interviews to identify which outlet is the most appropriate to spread the information about inhalant abuse and to determine the preferences of our targeted age group to ensure interest in our project. We confronted the socio-economic issues that adolescents in Hua Lamphong face, created awareness about the dangers of using inhalants, assisted with adolescents' personal development, and created a new outlet to replace their desire for inhalants.

This report contains six chapters outlining the research and implementation of our inhalant awareness campaign. The background chapter explains why inhalant abuse is so prevalent, describes the effects of inhalant abuse, characterizes the target population in Hua Lamphong, and analyzes the characteristics of drug prevention programs. Then, in the methodology chapter, we discuss the methods to achieve our goal of creating an effective campaign. The results chapter details the findings of our surveys and interviews of the adolescents, the teachers, and the residents in the Hua Lamphong area. The fifth chapter presents our final recommendations for our program and campaign.

Chapter 2 Background

2.1 Reasons behind the prevalence of inhalant abuse

Inhalant abuse is a rising public health concern that significantly affects the lives of adolescents. In this chapter, we discuss inhalant abuse worldwide, identify the most at-risk individuals, determine the motivations behind why adolescents use inhalants, and finally, list the policies and regulations that make the management of this concern very challenging.

2.1.1 Prevalence of inhalant abuse

In a recent survey, results showed that 20% of adolescents in middle and high schools worldwide have experimented with inhalants (Verma, Balhara & Dhawan, 2011). Factors that increase the number of inhalant abusers include the lack of awareness of its severity and lack of proper prevention programs (Sekhar, Vyas, Rajesh, & Suhaj, 2013). Other public concerns, such as illegal drug and alcohol abuse, remain at the top of the list of priorities for prevention programs. As a result, inhalant abuse is not properly addressed. Also, most people do not associate common household products with drugs (Williams & Storck, 2007). All of these aspects make inhalant abuse a problem that needs an immediate solution.

2.1.2 The Most-at-risk individuals

Inhalants are widely abused because they are legal, cheap, and available in the home, school, and job settings. One of the major challenges associated with inhalants is that they are mostly used by adolescents. The most prominent age range for inhalant abuse is from twelve to seventeen, but it is more evident in youth who have low attendance in school or a lack of opportunity for education (Perron & Howard, 2009).

Education is often a key factor in preventing drug abuse, and without it, its abuse increases. Society disregards volatile substances as dangerous, causing drug prevention curriculums to overlook inhalants (William & Storck, 2007). As a result, adolescents who are exposed to these drugs see little problem with using them because they have not been made adequately aware of the effects they may encounter (Baydala, 2010).

Another factor that increases the likelihood of inhalant use is poverty (Williams & Storck, 2007). Youth in poor communities experience higher rates of school dropouts, physical and sexual abuse, incarceration, and homelessness. Without a proper support network, some youth find that their only ways to cope with trauma, poor self-esteem, suicidal tendencies, and psychiatric conditions are through the use of drugs (Baydala, 2010).

Homeless adolescents are especially susceptible to these conditions. According to the Quality Learning Foundation, there are about 30,000 street children in Thailand, most of them located in Bangkok (QLF, 2012). Furthermore, according to a survey, the number of homeless people in Bangkok had risen by 5-10% on a yearly basis, from 2012 to 2014 (The Nation, 2015). This statistic is particularly high when compared to the United States, which has an overall decrease in homeless population (NAEH, 2016). The main causes of children living on the streets are abuse within the family and economic disparity (Buasao & Subongkod, 2010). In the city, these children must sometimes turn to prostitution, drug abuse, and other crimes to survive (Lynn et al, 2014).

Street kids in Delhi, India were interviewed on the circumstances in which they first used inhalants (Gigengack, 2014). When one child was asked about her inhalant use, she stated that

the more she inhaled, the less she ate (Gigengack, 2014). This suggests that some adolescents use inhalants to stave off hunger. Street kids in Delhi increased use of inhalants on chilly nights “as it made them feel hot” (Gigengack, 2014, 816). These interviews demonstrate that adolescents turn to inhalants in order to cope with deficiencies in food and shelter. The fact that inhalants are available to adolescents gives them the perfect opportunity to escape their daily struggles, whether it is social or situational.

2.1.3 Inhalant regulations and detection

To address the growing abuse of inhalants, various government entities have attempted to regulate their use. Countries focus primarily on regulating youth consumption by placing limitations on sales of products typically used as inhalants (Williams & Storck, 2007). It is basically an ineffective strategy, and inhalants are still easily accessible to youth populations (Williams & Storck, 2007). In the United States, where selling inhalants to minors is illegal in thirty-eight states, use among middle school students has remained largely the same for the last three years, only varying within 1% (“Are inhalants”; NIDA, 2015).

In Thailand, there are laws regulating the labelling, sale, distribution, and improper use of volatile substances (“Emergency Decree”, 1990). While there are strict punishments for breaking these laws, enforcement of them can vary. Once rehabilitation laws were announced, overall indictments of youth substance abuse decreased, but indictments of inhalant use increased (Assanangkornchai et al, 2008). Overall, reports of hospitalization due to inhalant abuse has been increasing over the years, indicating that its prevalence may not be actually decreasing like the public seems to think (Assanangkornchai et al, 2008).

Even if the bans were more successful, a black market to provide inhalants would surely arise (Williams & Storck, 2007). However, drug tests, fines, and criminalization cannot always be used in the case of inhalants. Unlike other drugs, most common inhalants cannot be detected by tests. Instead, detection focuses on the subtle indicators of inhalant use, including chemical odors, slurred speech, and depression (NIDA, 2012). Without strict adherence to detail by people of authority, inhalant use can go widely unnoticed. Therefore, regulating the market for inhalant drugs is one of the few methods of moderation that can be implemented, even though it has only been able to reduce use slightly.

2.2 Physical, mental, and social effects of inhalant drugs

The easy accessibility of volatile substances has made inhalant abuse a social and health problem around the world, leading to approximately two hundred deaths in the United States alone every year (NIDA, 2012). Inhalant abuse has severe consequences ranging from physical and mental impacts to an increase in criminalization.

2.2.1 Physical health impacts

Inhalant users can abuse volatile substances by sniffing, snorting, bagging, and dusting the chemical solutions (see Appendix A). There are various physical consequences that can be attributed to inhalant abuse. Once inhaled, they affect the nervous system, which leads to a lack of coordination (NIDA, 2012). Numerous short term effects include slurred speech, euphoria, dizziness, hallucinations, drowsiness, blackouts, and vomiting (NIDA, 2012). These symptoms can expose the user and those around them to injury and hazardous situations.

The intake of large doses of inhalants can result in serious chronic health defects. Some of the long-term consequences of prolonged inhalant abuse include kidney and liver damage, spinal cord damage, hearing loss, heart failure, and bone marrow damage (Sekhar et al, 2013). Inhalants can restrict oxygen flow and lead to brain damage. Moreover, frequent use of inhalants damages the myelin, which helps nerves transmit messages in the nervous system, causing limb spasms. Inhalant abuse can also lead to death if inhaled from a bag or in enclosed spaces (NIDA, 2012). Along with these physical health effects, inhalants can directly affect the user's mental health.

2.2.2 Mental health impacts

Aside from the physical effects that develop from inhalant abuse, there are several severe mental effects that can arise. Studies have shown that nearly 40% of users suffered from major depression, and nearly one third attempted suicide (Sakai et al, 2004). Although inhalant abuse and these serious mental health concerns may not have a direct correlation, inhalants can amplify established mental health disorders (Sakai et al, 2004). Inhalants may offer a temporary release from users' day to day lives, but these products will cause abusers harm in the future. Anxiety, forgetfulness, anorexia, irritability, and sleep disturbance are additional effects of inhalant abuse on mental health (Anderson & Loomis, 2003). One study demonstrated that adolescents who used inhalants also experienced coexisting delinquent behavior, other drug dependencies, and use of mental health resources for emotional problems (Wu, 2005). These mental health problems, coupled with other social issues in at-risk adolescents' lives, can make it difficult for adolescents to cope with their adversities.

2.2.3 Inhalants as a gateway drug

Though the effects of inhalant use are substantial on their own, their abuse can also leave the user vulnerable to more severe drugs. Studies have shown that people who became dependent on inhalant use were over twice as likely of abusing more dangerous substances, such as cocaine and amphetamines as people who were not dependent on inhalants (Sakai et al, 2004). In a study done by the University of Michigan on delinquent adolescents in state-mandated treatment, it was determined that those addicted to inhalants had significantly higher delinquency scores and other substance abuse problems (Perron & Howard, 2009). Such addictions to other drugs would further impact the users' health, possibly even ending in fatalities that would occur at higher percentages than with inhalants alone (NIDA, 2015).

2.2.4 Correlation of crime and inhalants

Inhalants, just as with any drug, correlate with increased levels of crimes and arrests. When adolescents use volatile substances, they are substantially more likely to commit crimes (Whiteford, 2007). Additionally, adolescents who are in juvenile detention are extremely likely to begin using inhalants, and later, other drugs (Wu, Pilowsky, & Schlenger, 2004). Crime diminishes the likelihood of graduating from high school or pursuing college and, in the United States, lack of education makes finding employment extremely difficult (Miller & Spellane, 2012). This can have a cyclic effect on the user, resulting in further crime and drug abuse (Baydala, 2010). The consequences of drug use, and therefore crime, have detrimental effects on the user as well as the community.

2.3 Drug awareness programs

While drug awareness programs are developed to increase understanding of the negative effects of drug abuse, the wrong approach can lead to undesirable consequences. Ensuring that a drug awareness program is effective entails looking at distinct characteristics of successful and ineffective programs.

2.3.1 Characteristics of an effective drug awareness program

Prevention programs are the best option to halt addiction to inhalant drugs. Early intervention has been shown to have a greater impact in a child's life by promoting positive behavior (NIDA, 2014). Prevention programs that focus on reasons to avoid drugs in the first place due to their negative effects are most successful. However, it is important to avoid mistakenly glorifying the use of drugs to avoid the negative side effects that other programs experience (Lilienfeld, 2010). Prevention programs that encourage ways to cope with emotions or reasons why adolescents might be attracted to inhalants will most effectively help reduce inhalant abuse (Mason et al., 2015). Therefore, offering different methods to cope with the root causes of drug abuse is most appropriate in an awareness program.

Celine Provini from the *Opposing Viewpoints: Addiction* journal contends that successful prevention programs should accomplish the following:

1. Build "developmental assets" and student strengths/skills that are incompatible with substance use.
2. Make sure that every student is connected to at least one caring adult who serves as a positive role model.
3. Short-circuit typical peer norms so that students view avoidance of alcohol, tobacco and other drugs to be "cooler" than using these substances.

These steps focus on a long-term program that can help prevent adolescents from using drugs such as inhalants.

2.3.2 Examples of drug awareness programs

In the past three decades, several drug awareness programs have been established around the world that target youth in order to reduce drug use. Cornell University developed Life Skills Training (LST). The program develops skills in three different areas: drug resistance, self-management, and social skills (Botvin, 1998). In one of their studies, they found that students' involvement in the LST program was able to reduce the number of students that started smoking cigarettes by 12% (Botvin, 1998). By considering how to ensure that the participants developed the means to successfully address the root problems, the program reduced the use of drugs significantly.

A well-known program in the United States is the Drug Abuse Resistance Education (DARE). The DARE program "addresses drugs, violence, bullying, internet safety, and other high risk circumstances that today are too often a part of students' lives" (Dare.org). Despite its popularity in the American education system, the DARE program's execution can mistakenly glorify drug use. The program typically shows youth enjoying the use of drugs and glosses over the physical and mental consequences. Other programs, such as Scared Straight, emphasize punishment in order to convince adolescents to steer away from drugs. Fear-based intervention programs, similar to Scared Straight, are ineffective and can possibly be more harmful for at-risk youth because they lack proper information about drugs and focus more on the social long term

consequences, such as incarceration (Lilienfeld, 2010).

2.3.3 Non-traditional prevention programs

Recently, other programs have attempted to spread awareness using social media. Above the Influence, for example, is a campaign inspired by how teenagers “deal with the influences that shape their decisions” and focuses on ensuring teens can combat peer-pressure (Above the Influence). It emphasizes the fact that drugs can undermine adolescents’ independence, which is something they respond more readily to than simply telling them the negative health effects of specific drugs (Grabmeier, 2011).

Another campaign that sought creative prevention methods is Dumb Ways to Die, an Australian Public Service Announcement in train safety that started with a YouTube video. Through the use of comical characters and a catchy song, Dumb Ways to Die became the world’s most shared public service announcement (Dumb Ways to Die). Since their success, they expanded to creating a website and a game. Additionally, they decided to expand their campaign to include other imminent dangers. Dumb Ways to Die is a primary example of how to unconventionally attract teenagers through entertainment, and creative thinking.

2.3.4 Targeting homeless adolescents

According to the Journal of Adolescent Health, 37.8% of adolescents in Bangkok have used at least one illegal drug during their lifetime (Ruangkanchanasetr, Plitponkarnpim, Hetrakul, & Kongsakon, 2005). Homeless youth face exposure to drugs due to different adversities in their day-to-day lives, thus creating a need for a prevention program specifically targeting them. In order to create an awareness program that will reach homeless youths, it must be designed carefully and creatively to engage them (Shadel, Tucker, Mullins, Staplefoote, 2014). In a survey of homeless people, 62% had a cellphone, and of those, half had data access, making technology a possible way to attract their attention about the dangers of inhalants (Linnell, Figueira, Chintala, Falzarano, & Ciancio, 2014).

2.4 Sponsor and awareness campaign

Hua Lamphong, Bangkok is known for having a large homeless population surrounding its main train station (Sukprasert, 2016). A major problem faced in the Hua Lamphong area is inhalant abuse among adolescents. Our sponsor, the SATI Foundation, is a non-profit organization whose mission and values are focused on the improvement of the welfare of underserved Thai communities. SATI is a Thai word meaning mindfulness, which they apply in their activities and projects to solve problems in a thoughtful manner. The Hub is an organization working with the SATI Foundation. It is located in the area surrounding the Hua Lamphong train station and offers assistance to nearby homeless adolescents. Adolescents in the area can go to the Hub and fulfill their basic needs. SATI and the Hub have made many strides towards bettering the Thai community. Addressing inhalant abuse is another step towards better living conditions in Hua Lamphong. SATI reached out to Worcester Polytechnic Institute and Chulalongkorn University to create an online inhalant abuse awareness program that can positively impact adolescents in Hua Lamphong and prevent them from trying these volatile substances.

Chapter 3 Methods

The goal of this project was to develop an online inhalant awareness program to assist adolescents of Hua Lamphong with personal development, self-confidence, overcoming adversity, and the ability to resist drug abuse. In order to do this, we worked with the SATI Foundation and the Hub in Thailand to contribute to their efforts of gaining the attention of the youth population and propose solutions that will benefit the entire community by creating an online prevention campaign. To accomplish our goal, we established these objectives:

1. Assess the past and existing international and local drug prevention programs' successes and failures
2. Evaluate how online media campaigns have been successful
3. Identify the available resources, such as counseling, to support the target audience
4. Develop an inhalant abuse awareness program that impacts the local Hua Lamphong area and is capable of extending more globally

This chapter addresses the methods followed to accomplish the objectives of our project and challenges that arose during its execution.

3.1 Objective 1: Assess past and existing international and local drug prevention programs' successes and failures

Assessing drug prevention programs demonstrated how to design an effective program for the SATI Foundation so that we could avoid common pitfalls while duplicating successes. We assessed the strengths and weaknesses of each type of program based on their structure while reflecting on our target audience and determining the best approach using criteria developed by NIDA of successful prevention programs. We chose NIDA because it is a respected federal scientific research facility under the US Department of Health and Human Services. Their work has led to numerous findings regarding health and drug addiction.

We also assessed the overall structure of 5 prevention programs: DARE, Scared Straight, Life Skills Training, Duang Prateep Foundation's New Life project, and Above the Influence. We chose these programs because of their notoriety and the research backing their effectiveness or ineffectiveness. NIDA outlines that a successful research-based prevention program will focus on three topics: structure, content, and delivery (NIDA, 2003). We looked at the programs' websites and created a ranking system based on the NIDA criteria and analyzed where programs succeed in these areas (see Appendix J). By doing this we determined how the program structure can affect their performance.

3.2 Objective 2: Evaluate how online media campaigns have been successful

We evaluated online media campaigns in order to determine how they achieved success and whether they would be applicable to the goal of the project. We identified the targeted audience, how they presented their campaign, and how the campaign was received. In order to determine its reception, we compared the number of followers and view counts of their social media (see Table 1). Once we determined these factors, we proposed a design for an inhalant drug abuse awareness program through an online media campaign.

Table 1: Evaluation of online media campaigns

Characteristics	Above the Influence	Dumb Ways to Die	Do Something	The School of Life	Ceres	The Sierra Club
Targeted at Teens?	Yes	Yes	Yes	No	No	No
Social Media for Sharing	FB YT IG Twitter Tumblr G+	FB YT Google+	FB YT IG Twitter Snapchat WHI	FB YT Twitter LI Vimeo	FB YT IG Twitter LI G+	FB YT IG Twitter LI G+
Method of presenting information	Persuasive videos, Anecdotes from teens, Facts on website, TV ads	Persuasive videos, games, phone apps, website	Shared stories Causes and small campaigns	Informational videos, website with additional information	Website with various campaign information, videos with their projects and instructional videos	Connects to campaigns/movements on website, educational videos, shareable images
Likes on FB (as of Jan 27, 2017)	1,559,638	464,212	2,454,176	32,938	42,140	731,756
Subscriptions on YT (as of Jan 31, 2017)	9,234	647,327	9,235	1,868,860	172	4,443
Total YT views (as of Jan 31, 2017)	320,974	261,311,795	6,361,823	147,240,378	39,793	4,286,075

Key:

FB= Facebook, YT= YouTube, IG= Instagram, LI= LinkedIn, G+=Google+, WHI= We Heart It

3.3 Objective 3: Identify the available resources to support the target audience after the completion of our program

In order to achieve this objective, we collected information through a semi-structured interview with the founder of the SATI Foundation and inquired what outreach SATI has done in the past. A semi-structured interview allowed us to speak candidly of the several support system workshops that they currently offer and helped us analyze if we could redirect teenagers who abuse inhalants to them. In addition, we inquired about their knowledge of similar organizations that could help support their cause. Questions for these interviews are listed in Appendix D.

The SATI Foundation, like any non-profit organization, has limited resources. Therefore, we looked at other organizations that would be willing to help adolescents at risk. To achieve

this, we focused on researching Thailand's local resources to find organizations that can offer supplementary programs to SATI. We wanted to focus on finding counseling that would be both affordable and practical for our users. For practicality, we looked at the location of the programs to ensure it would be in proximity of the Hua Lamphong station, or had online counseling options. We classified each kind of support system offered by both the SATI Foundation and local resources in Bangkok into separate categories. Thus, when we compared all the programs, we focused on:

1. What type of program it is (i.e. art therapy, discussion group, sports based, etc.)
2. Whom they target
3. How costly it is
4. If they are able to help adolescents in the Hua Lamphong area

These characteristics helped us determine which programs were compatible with our project, and allowed us to showcase them for those who need it.

3.4 Objective 4: Develop an inhalant abuse awareness program that impacts the local Hua Lamphong area and is capable of extending globally

Understanding the preferences and knowledge of inhalant abuse of our target audience enabled us to tailor the campaign's features to their needs. While the SATI Foundation and the Hub focus on Thai individuals with lower financial stability than most of the Thai population, we considered adolescents of various circumstances to develop a program that would reach as many adolescents as possible. By interviewing the adolescents at the Hub, and surveying schools around Hua Lamphong, we determined the important components for our program, including what type of social media adolescents use more often and what online activities they enjoy the most. We surveyed Hua Lamphong residents, adolescents at schools and interviewed those who attend programs at the Hub in Bangkok to gain insight on inhalant abuse knowledge.

Surveys allowed us to gather information from 88 adolescents (see Appendix C). We gathered data from schools in the Hua Lamphong area, as well as the Hub (see Table 2). Debsirin and Saipanya schools were chosen because of their location and age range (13-18 years old). The information compiled from the surveys was used to form the structure for the final awareness program by incorporating age appropriate content and information relevant to their regional circumstances. In addition, we examined the perspective of Hua Lamphong residents on their general knowledge of inhalants and how they affect their community by surveying 23 residents. We handed out surveys at the train station and conversed with those who wanted to share more comments (see Appendix D). The surveys from the residents helped us gather a different perspective on common misconceptions of inhalant abuse, and helped us shape the content of the website.

Table 2: Organizations and contact information

Organization	Type	Gender	Age	Contact
Saipanya School	Public school	Girls	13-18	Phone: 02 221 0196 Website: http://saipanya.ac.th/
Debsirin School	Public school	Boys	13-18	Phone: 02 621 5801 Website: www.debsirin.ac.th
The Hub	Homeless shelter	Girls and Boys	2-18	Phone: 1387 Website: http://www.childlinethailand.org/

We conducted semi-structured interviews with 8 adolescents at the Hub and found it beneficial to gain a deeper insight into our target audience. With this type of interview structure, we were able to ask for clarification and additional follow up questions. These interviews provided us with the opportunity to gain a deeper understanding of certain individuals' experiences that we would not be able to gather using surveys alone. Our team employed empathetic techniques that we learned from WPI's Student Support Network in order to form meaningful conversations without inflicting stress on emotionally vulnerable participants.

After collecting the data, we used thematic analysis for any open-ended questions to organize qualitative responses. For close-ended questions, we used Google forms to obtain a visual representation of the information. After gathering the adolescents' preferences, we created a website in order to promote awareness of inhalant abuse, alongside videos and pictures that could be shared easily on different social media.

After the deliverable was created, we went to the Hub to receive feedback on the website and determine its success in creating inhalant awareness. We held a discussion with 3 adolescents at the Hub and then received their feedback about its ease of use, the impression on our website and the effectiveness of adolescents' understanding the inhalants abuse. We also tested their inhalant knowledge before reviewing the website and after (see Appendix H). In addition, we distributed the survey to 5 Debsirin students and 22 students at Chulalongkorn University to obtain more feedback. These discussion questions are listed in Appendix H. This data helped our group obtain constructive criticism on what can help us get the target audience's attention to our awareness program. By using the provided comments, we determined how effective the proposed media campaign might be and any modifications that would be necessary to execute in its final design.

Chapter 4 Results

Over the course of this project, we conducted surveys and interviews of adolescents, teachers, and local residents, and analyzed how effective drug abuse prevention programs were in accomplishing their assigned objectives. This chapter outlines the results of our research, detailing the overall inhalant knowledge of the Hua Lamphong community, adolescents' preferences and interests, and finally the strengths of drug prevention programs and online campaigns.

Inhalant knowledge

4.1 Finding 1: Most adolescents were vaguely aware of inhalants, but they were unable to identify less common inhalants or the negative effects of inhalant use.

Through surveys of adolescents, we were able to get a better understanding of the general knowledge of inhalant abuse. We determined that 72% of the 88 respondents had heard of inhalants before. Nevertheless, when asked to name examples of inhalants, 22% incorrectly answered “Menthol substance” (see Fig. 1). Menthol substance is an over-the-counter, nasally inhaled medication commonly used in Thailand for nasal constriction and vertigo. This misconception was problematic because some students thought that inhalants had positive side effects. According to individual responses, most people provided at least one incorrect answer (see Fig. 2). This shows that the adolescent population does not fully understand what volatile substances are.

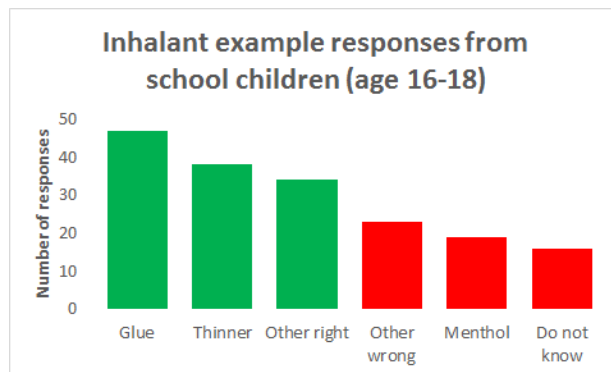


Figure 1: Given examples of inhalants by school adolescents age 16-18

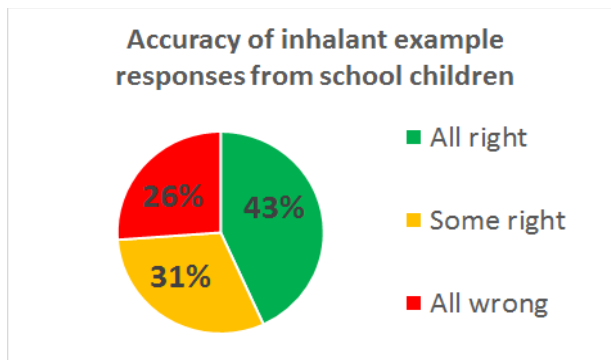


Figure 2: Accuracy of each school adolescent's inhalant examples

Most adolescents were able to correctly identify thinner and glue as inhalants. These are the most commonly abused inhalants in the Hua Lamphong area according to our sponsor, Dr. Sakson Rouypirom. However, damage to the nervous system was the most commonly identified side effect, with only 11% of the students being able to recognize it (see Fig. 3). A majority of students did not mention any side effect in their responses at all, with 29.5% mentioning that they knew some without listing any, and about 32% stating that they did not know at all.

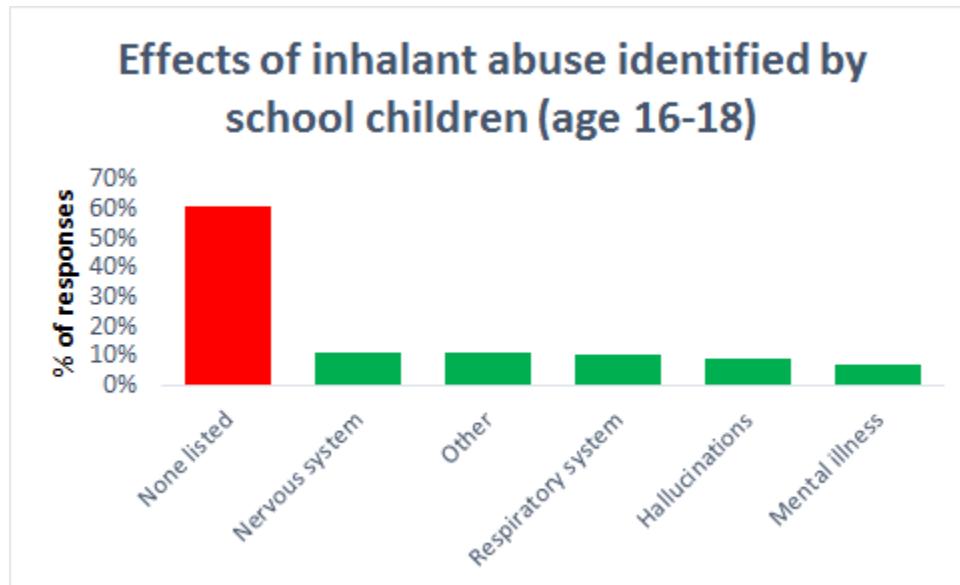


Figure 3: Effects of inhalant abuse given by school adolescents age 16-18

Although there is a general understanding of the most popular ways of using volatile substances as drugs, the side effects have been either glossed over or not been taught at all in local schools. It is imperative that the students are aware of the serious consequences of inhalant abuse, since even trying it once could lead to death. These results differed slightly in the interviews with the Hub adolescents. Some stated more specific effects of inhalant usage, though these results were skewed by the fact that there was a much smaller sample size in the interviews.

4.2 Finding 2: Teachers discuss inhalants in health classes, but they tend to focus on other drugs.

While most of our target audience is homeless adolescents, they were part of a school system at one time, where they likely learned about drug risks. Therefore, it was important to gather data on what is being taught within the school systems. Although the homeless adolescents at the Hub generally come from outside of Bangkok, schools in the Hua Lamphong area face similar inhalant abuse problems, since 1 in 5 students in Thailand have used inhalants at some point in their lives (“Inhalant abuse”).

All of the teachers we interviewed at the Debsirin and Saipanya schools had experience teaching about inhalant use, albeit in different settings. Only one teacher out of the four interviewed said that they did a comprehensive unit on inhalants. This teacher taught about the basics of inhalants, including definitions, examples, and effects of use. They also included a practical section with role-play components to practice avoiding drugs and researching the news

about inhalant use. The other two health teachers did not provide the same depth of information in their inhalant sections. They admitted that they did not focus on inhalants but rather on other drugs. One teacher stated that they only briefly mentioned the existence of inhalants, but not anything about the effects or what some examples were outside of glue and thinner. This lack of focus on inhalants was corroborated in the students' responses to the survey questions previously discussed. The chemistry teacher typically spoke on accidental exposure to inhalants in regards to the materials used in the chemistry labs, not really mentioning that they could be used recreationally. We found that inhalants were not the priority in the curriculum, leaving adolescents more susceptible to inhalant abuse.

4.3 Finding 3: Although inhalant use is prevalent in Hua Lamphong, its residents do not have enough knowledge or inclination to address the issue.

We gathered the residents' views on inhalant abuse. All of the people surveyed either lived or worked near the Hua Lamphong train station. For the open-ended questions about inhalant knowledge, most could identify glue (83%) and thinner (48%) as inhalants. In regards to health effects, only 30% of residents were able to identify lung and respiratory issues as a side effect (see Fig. 4). Some knew that abusing inhalants has a negative effect but could not identify the actual effects. This demonstrates that people know more about substances that can be used as inhalants than the effects inhalants can have. Although they showed a better understanding of side-effects than the adolescents surveyed, there was still a large gap in understanding how it can affect the human body. Thus, they are not able to pass on knowledge to others in their community.

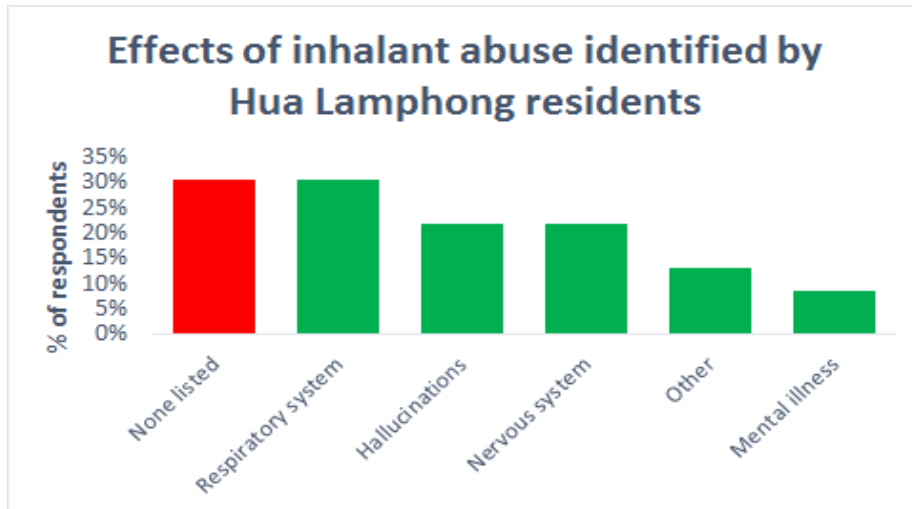


Figure 4: Effects of inhalant abuse given by Hua Lamphong residents and workers

A large majority of those surveyed agreed that inhalant abuse is a problem in the neighborhood. Some of the people we interviewed said that inhalant abuse is not a problem in their neighborhood if it only harms the individual who uses it. Inhalant abuse, for them, only becomes a neighborhood problem if the abusers harm other people. This suggests that if the residents considered that inhalant abuse could affect them personally, they would be more knowledgeable of the effects it can have on individuals. Fifty-three percent of those surveyed did not know anyone who uses or has used inhalants personally. The contrast between how many

people think inhalant abuse is a problem, compared to how small of a percentage had personal experiences with it illustrates that the problem is highly visible in the Hua Lamphong area.

Adolescents' interests

4.4 Finding 4: Adolescents in school and at the Hub are extremely active on social media and interactive activities.

We determined through background research that the most successful awareness programs involved an interactive component. According to our survey of adolescents in school and interviews at the Hub, 95% of students describe their social media usage as either “more than once per day” or “once per hour or more” (see Fig. 5).

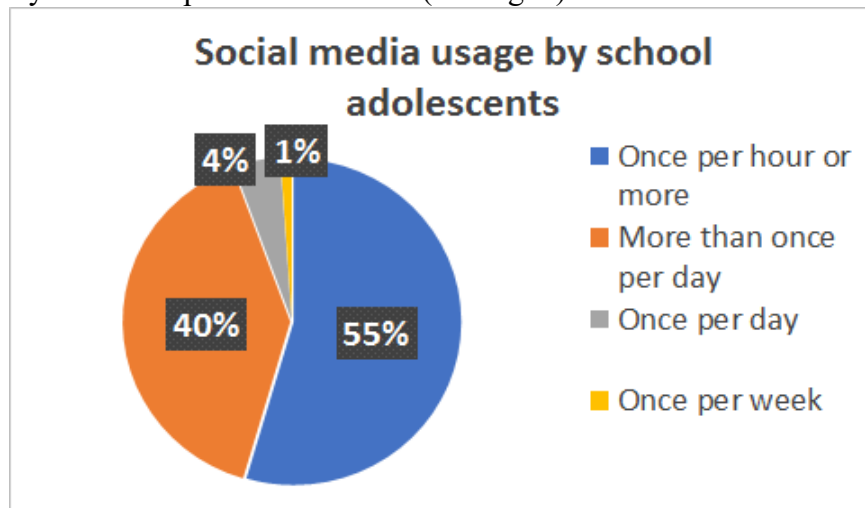


Figure 5: Social media usage by school adolescents age 16-18

The school and the Hub adolescents showed a strong preference to using Facebook over any other form of social media (see Fig. 6). Watching videos was the most preferred activity, followed closely by sharing pictures (see Fig. 7). This indicated that in order for our targeted audience to receive the message, video and image components on Facebook would play a significant role. In addition, we learned that some of their preferred content includes funny and educational aspects. Thus, we followed these guidelines in designing an awareness program in the hope that adolescents will be more willing to share it on social media.

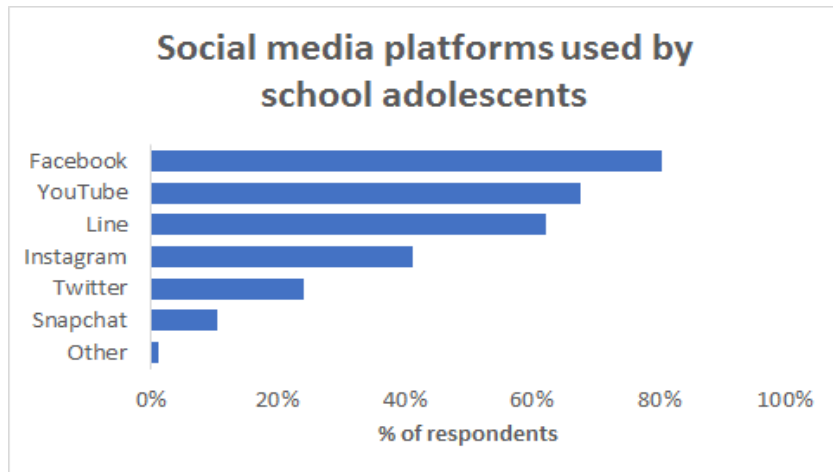


Figure 6: Social media platforms preferred by school adolescents age 16-18

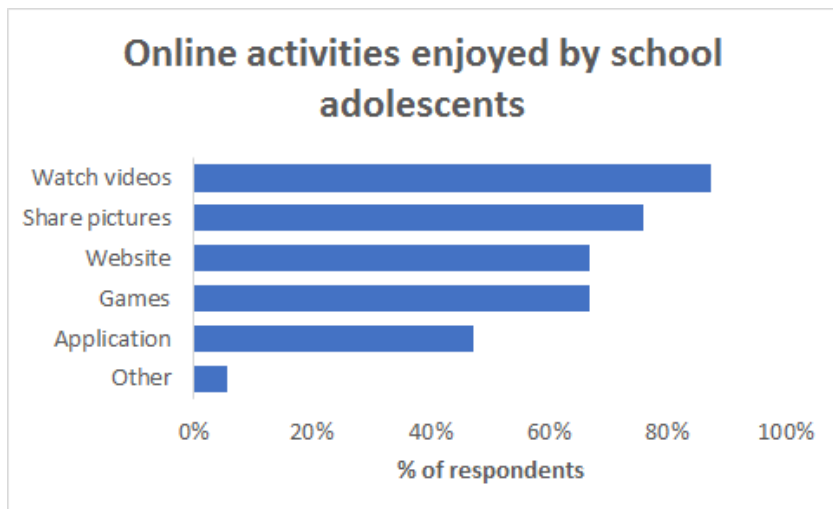


Figure 7: Online activities frequently done by school adolescents age 16-18

Outside of social media, adolescents enjoy interactive hobbies. The Hub adolescents were interested in dancing, drawing, cooking, and sports. School adolescents indicated that they were interested in the same as well as music and reading. All adolescents interviewed expressed their passion towards learning new things and recreational activities.

Campaigns

4.5 Finding 5: The most effective drug prevention programs provide skills and information to succeed.

Although there are several ways to assess drug prevention programs, NIDA has adopted standards to help measure the effectiveness of a program. Using these standards, we developed a numerical evaluation for several drug prevention programs (see Table 3). Higher numbers indicate more qualified programs based on NIDA's standards.

Table 3: Drug prevention programs evaluated by ranking based on NIDA qualifications

	DARE	Scared Straight	Life Skills Training	Duang Prateep Foundation	Above the Influence
Structure	3	2	4	3	3
Delivery	2	2	3	2	3
Content	2	1	4	3	3

Based on the criteria outlined from NIDA’s guide to building effective prevention programs, Life Skills Training (LST) and Above the Influence (ATI) scored the best out of the five programs. Instead of focusing on directly stating facts about drugs or ways of refusal, these programs’ efforts concentrate on helping adolescents through their daily struggles. Life Skills Training provides adolescents with social-emotional learning, cognitive behavioral training, and professional skills. By providing these skills, adolescents can be steered away from drugs and focus on personal growth (Blueprints Program Rating, 2008). LST still offers countless materials regarding drug abuse and health effects but these are supplemental to the program overall. ATI succeeds through a different approach and is based on social media. In the past, ATI spent millions on TV ads and saw little success. From there, a platform was launched online and efforts were focused on creating positive messages among adolescents in shorter videos and easily shared graphics. Similarly to LST, ATI also has drug facts on their website but is simply one piece towards success in their program. There are several drug awareness programs that offer the same information regarding drug use and health detriments as LST and ATI; however, the way this information is directed towards its audience is a major factor regarding effectiveness. Based on the success of these programs, we observed that just providing drug information is not always an effective approach to solving the problem. Therefore, we decided to use activities and skills trainings to distract adolescents from the temptation of inhalant use and encourage them to focus more on their passions.

4.6 Finding 6: Campaigns that utilize visual and interactive aspects can be more effective in spreading their message.

Since the vast majority of adolescents spend time online and on social media according to our surveys and interviews with adolescents, we, along with Dr. Sakson Rouypirom from SATI, decided that the best way to reach the target audience and spread inhalant awareness was through an online medium. We analyzed online campaigns that were not necessarily focused on drug prevention but provided useful engaging techniques to reach audiences. We looked at Above the Influence (a drug prevention program), Dumb Ways to Die (a train safety awareness campaign), DoSomething.org (a network of activist campaigns for adolescents), the School of Life (an emotional educational program), Ceres (an Australian environmental campaign), and the Sierra Club (an environmental activist organization). In Table 1 of Section 3.2, the target audience, social media usage, methods of presenting information, and audience interaction are listed for each organization we researched.

While the campaigns, besides Ceres, have a more global focus than what we developed, they still exhibit promising methods of reaching youth, especially with difficult topics. Above the Influence and Dumb Ways to Die have important messages about health and safety that can be difficult to convey. Above the Influence focuses on how drugs can take away adolescents' much sought independence. While they do not have as high a following on YouTube as they do on Facebook, their videos have large view counts that surpass the number of subscribers. This reveals that their videos can reach beyond their actual subscribers and connect with a larger audience. Their most viewed videos detail decision making and independence with real life stories from affected adolescents.

Dumb Ways to Die showed the power that a sharable and amusing video can have on people. By incorporating a fun component into our program, we can increase our effectiveness and maximum ability to be shared. The School of Life uses videos as their main method of spreading emotional education. They found that there was a need to include more information about things that are never talked about in school. These are important developmental skills that could be important in imparting to our audience. They also incorporate animations that are interesting to watch as a member of the audience. Their various topics engage the audience, making it one of the largest viewed YouTube channels out of the campaigns that we researched.

DoSomething.org is particularly effective because it allows teens to share their activities and ideas in pictures and videos. This interactive component allows for the further involvement and engagement of the audience to increase the organization's spread of good deeds. For example, while ATI and DoSomething.org have similar subscribers on YouTube, DoSomething.org has significantly more views of their videos. This is likely because they frequently share their videos on social media, connecting with exponentially more people when commented on or shared. The Sierra Club also creates shareable images to promote their messages and raise awareness. Their post on Facebook on January 29, 2017 had over 530 shares, indicating a motivated and connected audience.

Ceres has a much more local focus. They are a community sustainability center in Melbourne, Australia. They developed a phone application to serve as an educational tool around the CERES area called Chook. By utilizing it, users are allowed to explore information about green technology in the park. This allows a personal and mobile online connection to the area.

The online campaigns discussed provide useful insight regarding interactive components that can help reach a target audience. The methods of connecting and sharing information through website and applications will assist us in building an online drug prevention program.

4.7 Finding 7: Local Bangkok programs include support systems and skill training, but most lack the resources to help homeless adolescents in the Hua Lamphong area.

Although the Thai programs that we researched had support systems and skill training, they did not reach the level of success like the global programs. This is mainly due to their lack of resources, organization, and accessibility. To connect our audience with potentially beneficial programs in the area, we analyzed resources that were referred to us by other community resources and educators.

One of the successful local projects is the Duang Prateep Foundation's New Life Project, which is directed at adolescents living in the Klong Toey slums. In the New Life Project, boys from families that due to diverse reasons are unable to take care of them, are moved to a camp in

Chumphon, a rural area. They are provided with a welcoming environment by locals and staff members and are taught basic education and skills like farming and teamwork. The boys stay at this camp for approximately three years and return to Bangkok once they are ready to face the challenges that brought them to the program. It was estimated by the Duang Prateep Foundation that over 1,000 children have been able to live a “normal” life after experiencing this project (DPF, 2007). In order to execute a project of this scale, many resources are needed. Furthermore, the program is not aimed at adolescents in Hua Lamphong, so it is not applicable for our primary target audience.

One of the teachers interviewed from Saipanya told us about the Streetside Police Teachers Project, which was implemented in Hua Lamphong (Buasao & Subongkod, 2010). This project uses police officers as the main human resource to help homeless adolescents. They act as periodic teachers for the street children near the Hua Lamphong train station. The police teachers’ role is to educate and console street children in an old train that was converted into a library. The classes taught include basic Thai, mathematics, and life skills. Street children can learn skills from this project that may help them find a living. One of the street side police teachers claimed to have helped around 700 children as of 2009 (Mirror Foundation, 2009). A problem with this program is that it uses DARE’s curriculum, which as mentioned has varying effectiveness in drug prevention.

Bangkok Counselling Service (BCS) started the BCS Wellbeing project. This project is aimed to help adolescents address their personal adversities and emotions through therapy. Moreover, BCS also provides online counseling services which offers access to people who have difficulties traveling to meet a counselor or do not want to discuss certain topics face to face. However, both the BCS Wellbeing project and the online counseling service provided by BCS cost up to 3000 baht per hour, a fee that underprivileged people can hardly afford (BCS).

Table 4 below details the overall criteria that we wanted to view for the local programs that we determined in Objective 3. While Streetside Police Teachers was the most effective and manageable for our target audience, its curriculum has notable limitations.

Table 4: Local Bangkok resources

	New Life Project	Streetside Police Teachers	Bangkok Counselling Services
Type of Program	Rehabilitation	Education/drug awareness	Counselling
Target Audience	Khlong Toey adolescent boys	Homeless adolescents	Bangkok residents (have youth programs)
Cost	Free	Free	100+ USD per hour
Ability to help our audience	No	Maybe	No
Comments	Does not focus on Hua Lamphong, long time restriction	DARE influenced curriculum	Beneficial programs/ skill development

4.8 Finding 8: The first rendition of the website and media components gained positive feedback, but had a small amount of responses.

We evaluated the effectiveness and attractiveness of our website and shareable media, so we could make significant changes. Overall, our campaign had positive feedback. Before the adolescents visited our website, they completed a quiz about inhalants. They could answer what inhalants were and identified glue and gasoline as inhalants. However, they incorrectly listed: ice, water canals, and waste as examples of volatile substances. All of the adolescents identified deterioration of the brain, euphoria, and nose constriction as negative health effects of abusing inhalants. The adolescents at the Hub had a better understanding of inhalants after they visited our website. They were able to identify more inhalants, define the concept of volatile substances, and list the specific short-term and long-term impact these can have on their health.

From the feedback survey, we determined that the adolescents would share our videos on Facebook and found the animations entertaining. In addition, they enjoyed the activities sections and found the website's information easy to understand. This was corroborated by the Chulalongkorn and Debsirin students. They enjoyed the contents and structure of our website, and expressed their intention to share it on Facebook. The Chulalongkorn students understood more about inhalant abuse after reviewing the website's information.

While the feedback for the website was mostly positive, it also included insightful criticism to improve how the information is presented, particularly with visibility on mobile devices. Adolescents at the Hub expressed a desire to see more images in between the blocks of text. We had not included more because of time constraints. Chulalongkorn students suggested that we should make the inhalant awareness video more persuasive. As they stand, the videos do not necessarily show severe enough effects of inhalant use. Some of the Debsirin students were not interested in the activities and wished there were more options.

4.9 Limitations

It should be mentioned that the target audiences are specifically adolescents at Hua Lamphong, Bangkok, Thailand so this project might not succeed when a change of context occurs. Also, this study only included 88 surveys from students of two schools and 8 interviews from adolescents from the Hub from Bangkok, Thailand; thus, it is not a large enough population to draw statistically significant data about the adolescents' preferences and true understanding of inhalants. Additionally, it is difficult to draw conclusions about homeless adolescents based on adolescents who attend schools. We decided to work with these schools despite their different backgrounds because of the time limitation of our project. Due to conflicting time schedules, we could not organize a large focus group at the Hub to review the initial campaign.

Chapter 5 Recommendations

Our sponsor wanted us to create an online inhalant prevention program capable of reaching Thai adolescents. By surveying schools and interviewing the adolescents at the Hub we gained insight into their preferences regarding online media. We developed a website that uses interactive components, videos and images to engage adolescents' attention and spread awareness of inhalant abuse. SATI addresses any problem they confront with a very mindful approach. No problem or solution should be without deeper thought and an empathic point of view. In this chapter, we provide the structure of the website created along with future actions to continue its development and increase inhalant awareness.

5.1 Deliverable

Our deliverable was developed using the Duda web creating service. This platform offers the services required for the program to be successful. We kept in mind cost, mobile friendliness, ease of use, features and design, and language support. We have attached step-by-step instructions in Appendix K for a website facilitator to log in and make changes described in the recommendations below. Features of our website included are shown in Figure 8 and Table 5.

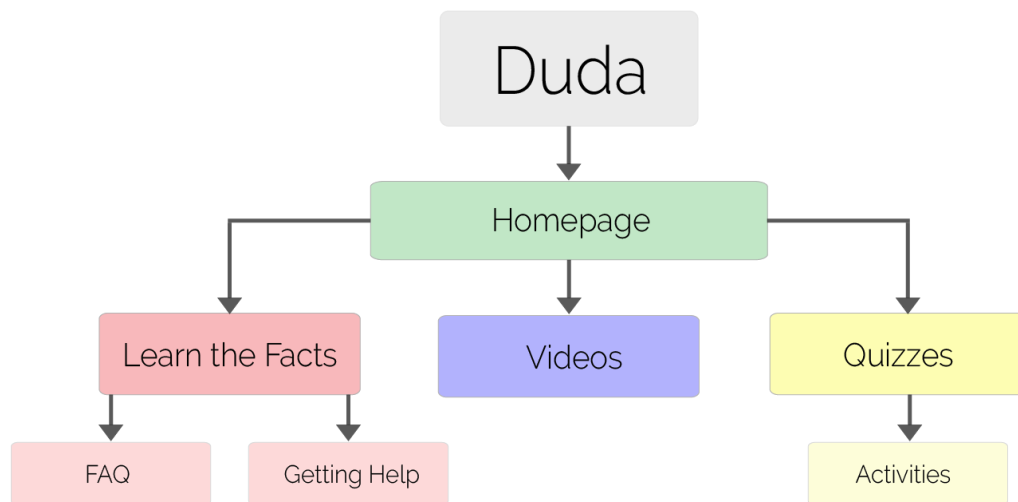


Figure 8: Website components

Table 5: Website components

<p>The Learn the Facts and FAQ pages correct the common misconceptions of inhalant abuse that we found through our research and raises awareness of the dangerous side effects of inhalant abuse. We also provide a Getting Help page to help those adolescents who might need someone to talk to. However, due to the limited resources in Bangkok we had to resort to using an online website which is originally in English. This is further explained in Recommendation 3.</p>	<p>We created videos depicting the various alternatives there are to inhalant abuse to cope with emotions. The main purpose of the videos was to spread awareness of inhalant abuse while trying to connect to teenagers on a deeper level. Also embedded throughout the website are humorous and motivational graphics and animations. Through our research, we determined that Thai adolescents respond well to these messages. In addition, these components can be shared on social media with our hashtag #freshair in order to reach adolescents through social media, specifically we would recommend sharing it on Facebook.</p>	<p>One section of the website features a fun personality quiz. Quizzes capture the attention of adolescents and can be shared on social media to attract other adolescents to the main website. Furthermore, the quiz results are linked to our activities page. The activities page assists adolescents with personal development, providing different options of things to try rather than abusing inhalants.</p>

5.2 Recommendation 1: Create additional material for the website to increase inhalant knowledge and skills development.

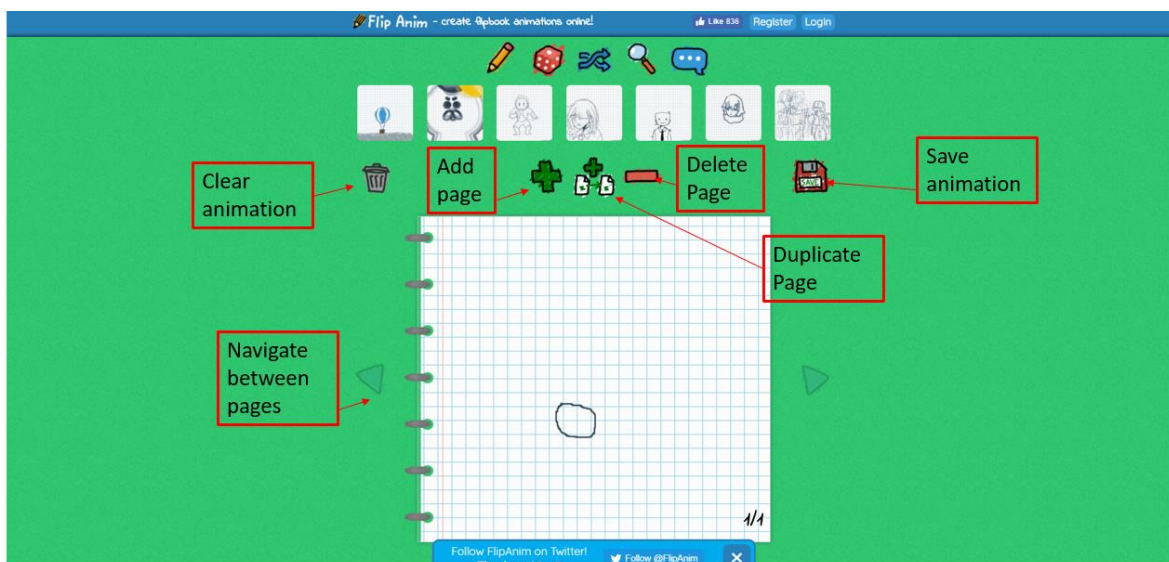
In order to engage the audience, it is imperative for SATI to periodically update the website and YouTube channel with new material. The newly created material would mostly consist of activities videos, animations, and images.

We recommend uploading a new activities video to YouTube at least once a month. The activities need to be completed with minimal materials and easily implemented in various environments. Some examples include sports, cooking, arts and crafts, and scientific experiments. Creating a wide variety of videos will help ensure we cater to as many adolescents as possible, regardless of financial status. This cannot be guaranteed if we rely on videos created by other users. We provided a guide that outlines potential future activities, particularly their requirements, basic instructions, and helpful hints for proceeding (see Appendix N). There is also a basic guide for filming techniques for the people creating the videos (see Fig 10).

In addition, it is important to create new videos addressing inhalant abuse directly. These videos should spread the message that there are alternatives to abusing inhalants and the health effects of using inhalants. This can be accomplished in several different ways but we recommend that the focal point of the video revolves around personal development. These videos should consist of short and long videos. The short video should be between 30 seconds and 2 minutes in

order to be easily shared on social media and to help advertise the website. The long videos should be between 3 to 5 minutes. From the feedback surveys, we learned that the adolescents wanted a more realistic portrayal of the effects of inhalant abuse so that the videos were more persuasive to the audience. We also recommend showing more commonly used glues such as 3M, and ensure that the videos are as accurate as possible. Nevertheless, finding the resources to edit and film the videos might be challenging.

We recommend to continue creating animations for the website. Flipanim.com is a free animation website where users can create GIFs (see Fig 9). In Appendix L, we have attached simple instructions on how it works. An obstacle for these animations is coming up with creative and short ideas that communicate the message of the campaign. However, the adolescents at the Hub suggested to show the effects of using inhalants. Through our surveys, we have determined that the best way to approach Thai adolescents is through humor. Therefore, if possible, it is best to include a fun component to the short animations.



Note: The animation will still be saved even if the window is close. No need to save it yourself.

Figure 9: Example of FlipAnim instructions

Since adolescents also showed a strong preference for sharing images, we created both informative and motivational illustrations, and animations to spread inhalant awareness. The creation of these images should be continued with the targeted audience in mind. In the guide in Appendix M, we included tips on graphic design that would help SATI or the volunteers create the images.

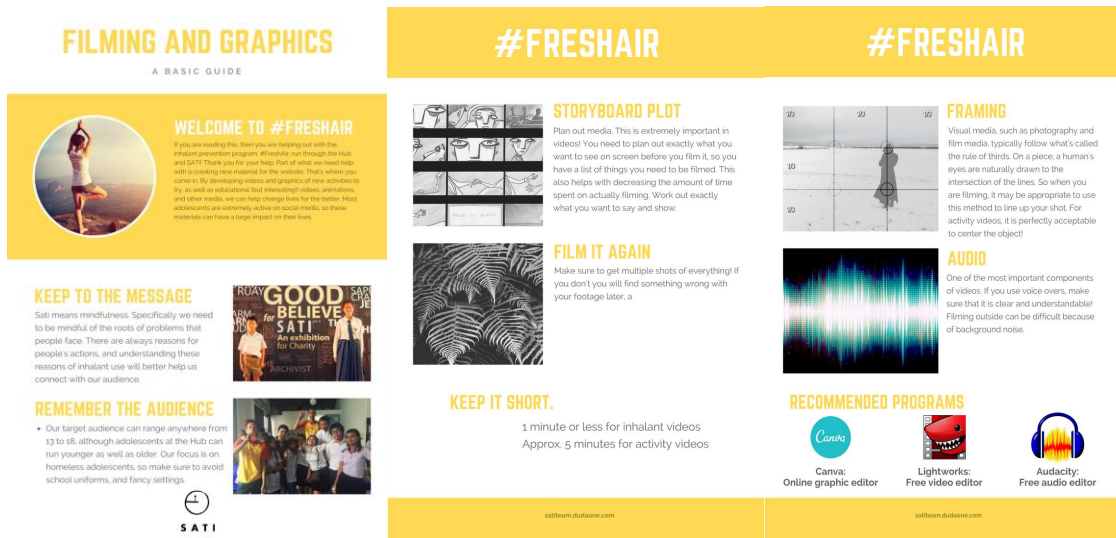


Figure 10: Filming and Graphics tip pamphlet for SATI volunteers (see Appendix M)

In order to offer a more innovative and interactive website, it is important to allow other adolescents to share their experiences and ideas as a means of raising awareness. This can be accomplished by creating a blog space on the website. Based on the research we conducted on different campaigns, we determined that adolescents are more likely to be active participants if the platform includes interactive components. A blog can offer them the opportunity to express their thoughts, share their personal experiences, and provide positive advice to other adolescents.

SATI or volunteers would have the role of an administrator on the website. Once adolescents start submitting pictures, videos, or stories to an email address, the administrator would control the content that will be published to ensure appropriate content. We chose a blog format monitored by a separate administrator over a forum medium to reduce the risk of bullying and inappropriate content, as well as ease of application for the administrator. This could create a backlog of submissions in the future, but it is more important that the experiences and stories shared are appropriate. Guidelines on how to administer the website and the blog will be provided by our team to guarantee full understanding of this platform (see Fig. 11, Appendix K).

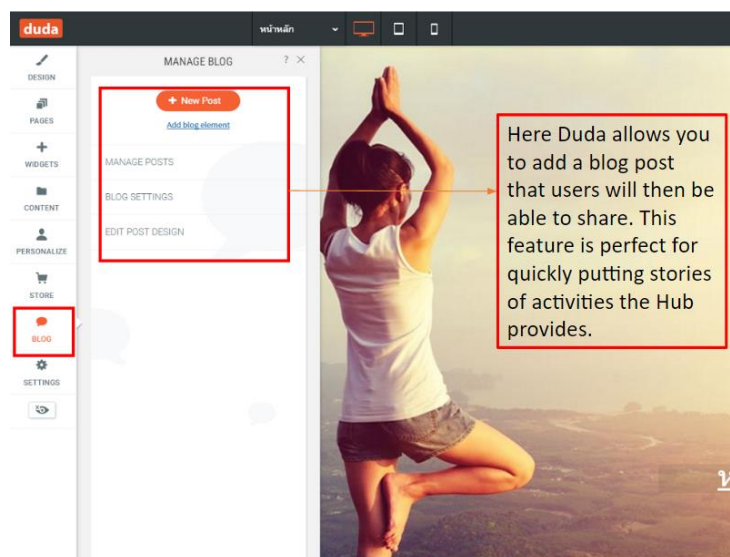


Figure 11: Example of creating a blog on Duda instructions

5.3 Recommendation 2: Expand partnership with Volunteer Chula club so that they can produce materials for website.

We recommend that SATI and the Hub continue creating a partnership with the Volunteer Chula club. They are an organization on Chulalongkorn's campus focused on improving the community through short-term volunteer events. They are very invested in helping the inhalant awareness program. With approval from the faculty advisors of the organization, they would be able to provide assistance in expanding materials for the website.

It is incredibly important for new material to be added to the website so that the audience has a reason to come back and therefore learn more about inhalants. New material could take the form of new activities, comics, or other media. To facilitate this relationship, we have begun correspondence with the club's head of social development, Kittkun Samherpak (Email: phatsgcu59@gmail.com). A faculty member would serve as the point of contact for the Hub and SATI while the organization would develop the materials themselves and share them with the appropriate YouTube channel or website facilitator. Since they normally do short events, we recommend reaching out to encourage a long-term relationship, but framing the videos as individual events. However, if a partnership does not begin to solidify before the end of our project, we recommend that SATI and the Hub reach out to Kittkun Samherpak and ask for an update on the progress. Contact should be maintained between the parties throughout to ensure progress is made and communication on priorities is understood. Otherwise, it would be challenging to continue the program and keep the media content up-to-date.

5.4 Recommendation 3: Continue outreach to local and online resources that support and train homeless adolescents in the Hua Lamphong area.

As stated in Finding 7, the existing local resources that we researched do not offer enough support system and skills training for homeless adolescents. Most of the organizations do not have enough resources to help more people and some of them are too expensive (around \$100 USD per hour). We do not believe that local resources will develop enough for the target audience in the near future and that this topic should be revisited in a few years.

We were able to find one organization that could be a support system for the Thai adolescents. A website called 7 Cups of Tea offers free online counseling and has Thai speakers available. The website has expanded to a phone application as well, which can be easily accessed by homeless adolescents. One challenge of this website is that although it offers the ability to choose which language the participant would like to speak in, the website is completely written in English. Therefore, we developed instructions in Thai to allow adolescents to access the speakers (see Appendix O). Although all listeners must complete a course and successfully pass a quiz to be allowed to talk to others, they are still not licensed counselors. For that reason, if adolescents are in emergency situations, this service would not suffice. There is also no guarantee that a speaker will be available at all times. We provided the instructions to use the application in Thai on our website.

Chapter 6 Conclusion

Inhalant awareness is not prioritized around the world, and yet it is one of the few forms of substance abuse that has not decreased in recent years, but in fact increased (Assangkornchia, 2008). SATI and the Hub have worked hard to provide a place of support and friendship, which sometimes can be enough to prevent a dependence on drugs. When that is not enough, thoughtful drug prevention programs can increase inhalant awareness in adolescent populations. At the beginning of this project, a major obstacle was finding an appropriate way to communicate inhalant awareness to Thai adolescents. The conversations we had during our field work in the Hua Lamphong area helped us understand the overall problem with a clearer perspective. We learned the reasons why adolescents choose inhalants and we learned how to persuade them to choose differently.

Our recommendations highlight ways that could potentially raise inhalant awareness in Hua Lamphong while extending globally. This is the first step in bringing adolescents away from inhalant abuse. By suggesting potential activities and passions, we can encourage the adolescents towards a better future and away from drugs. With the proper facilitation of this program, it will become a reality and provide support for countless adolescents.

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Appendix A: Types of Inhalation Methods

Table 1.0 details the different methods of inhalation according to *Pediatric Child Health*. Prolonged use of these products can lead to detrimental physical effects and dangerous behaviors (Baydala, 2010).

Method	Definition
Sniffing/Snorting	Direct inhalation of fumes from the substance's container
Bagging	Once the drug is sprayed or poured into a bag, it is inhaled directly from the bag
Huffing	Soaking a piece of cloth in the drug and holding over the mouth or nose
Dusting	Spraying aerosol cleaners into the mouth or nose

Appendix B: Letter of introduction for schools from Chulalongkorn University

(Translated from Thai)

To School director of --- school

The Department of Chemistry, Bachelor of Science in Applied Chemistry (BSAC) from the faculty of science, Chulalongkorn University opened the course 2372401 INTERACTIVE SCIENCE AND SOCIAL PROJECT with Associate Professor Dr. Nongnuj Muangsin as advisor for this project. She assigned a written report as a part of this course in order to help the students develop skills that are needed in a working environment.

The Department of Chemistry asks for assistance from the school to permit students from the Department of Chemistry, Bachelor of Science in Applied Chemistry (BSAC) and students from Worcester Polytechnic Institute, United States of America to interview the staff and students at --- school between 16 January - 25 January, 2017. The information and photos gotten from the school will only be published as academic materials. The name of the students participating in this project are as follows:

No.	Name	Contact Number
1	Ms. Suphathida Rujithamrongkul	089 500 1311
2	Mr. Pongsathorn Kiatmongkolkul	086 363 9446
3	Ms. Suchaya Chaiworn	089 897 7050
4	Ms. Jessica Norman	098 574 4852
5	Mr. Erik Sola	097 198 4728
6	Ms. Carolyn Morales Collado	098 574 1675
7	Ms. Aura Velarde	098 574 3394

In the name of the Department of Chemistry, faculty of science, Chulalongkorn University, we hope to get assistance from your department. We thank you in advance for this opportunity.

With respect,
(Associate Professor Dr. Vudhichai Parasuk)
Head of the department of chemistry

Appendix C: Survey questions for adolescents, English and Thai

Goal: Obtain statistical data of the Thai target population regarding age, find out what programs are being taught in school about drug abuse, and determine the level of awareness of the issue in the schools.

We are a group of students from Chulalongkorn University in Bangkok, Thailand and Worcester Polytechnic Institute in Massachusetts, United States, and we are working with the SATI Foundation to create an awareness campaign about the dangers of inhalant abuse, aimed at Thai adolescents. Currently, we are conducting a survey of Thai adolescents from SATI programs, local schools, and other youth programs to better understand the usage and understanding of inhalants, as well as the overall demographics of potential at-risk individuals.

Your participation in this survey is completely voluntary and you may withdraw at any time. Please remember that your answers will remain anonymous. No names or identifying information will appear on the questionnaires or in any of the project reports or publications. If interested, a copy of our results can be provided through an internet link at the conclusion of the study.

เราเป็นกลุ่มนักศึกษาจากจุฬาลงกรณ์มหาวิทยาลัย กับ Worcester Polytechnic Institute จากรัฐแมสซาชูเซตส์ สหรัฐอเมริกา ขณะนี้เรากำลังร่วมมือกับมูลนิธิสติเพื่อจะสร้างโปรแกรมส่งเสริมความตระหนักถึงอันตรายของสารระเหย โปรแกรมนี้จะมุ่งเน้นไปที่เยาวชนไทย ขณะนี้เรากำลังสำรวจเยาวชนไทยจากมูลนิธิสติ โรงเรียนในท้องถิ่น และโปรแกรมเยาวชนอื่นๆ เพื่อศึกษาการใช้และความเข้าใจของสารระเหย ยิ่งไปกว่านั้นข้อมูลทั่วไปของประชากรที่มีความเสี่ยงต่อการใช้สารระเหย

การเข้าร่วมแบบสำรวจนี้ขึ้นอยู่กับความสมัครใจของคุณ และคุณสามารถเลือกที่จะหยุดทำได้ตลอดเวลา ข้อมูลทุกอย่างที่เกี่ยวกับคุณและ คำตอบของคุณ จะถูกเก็บเป็นความลับ และไม่ถูกเปิดเผย หากคุณสนใจที่จะติดตามผลงานของเรา เราจะส่งที่อยู่ของเว็บไซต์เราไปให้เมื่อเราบรรลุวัตถุประสงค์ของงานเราเป็นที่เรียบร้อยแล้ว

Demographic Questions: คำถามทั่วไป

1. What is your age? อายุ
2. What is your gender? เพศ
3. Are you enrolled in school? Which grade are you in? (include choice for Debsirin, Saipanya, others) คุณศึกษาอยู่หรือไม่? คุณเรียนอยู่ชั้นไหน?
4. What is your family income? (include an option that says "I do not know/I prefer not to say") รายได้ครอบครัวต่อเดือน
5. What is the status of your parents? สถานภาพทางครอบครัว
 - a. Married อยู่ร่วมกัน
 - b. Separated/Divorced หย่า/แยกกันอยู่

- c. Remarried มรดดา/บิดา
 - d. 1 deceased มรดดา/บิดาเสียชีวิต
 - e. Both deceased เสียชีวิตทั้งคู่
 - f. Do not know/prefer not to answer ไม่ทราบ/ไม่ประสงค์ออกความคิดเห็น
6. What neighborhood do you live in? คุณอาศัยอยู่บริเวณไหน?
7. Who do you live with? Mention all. ที่บ้านคุณมีใครอาศัยอยู่ด้วยบ้าง? กรุณาระบุทุกคน
- Interests Questions: คำถามเกี่ยวกับความสนใจ
8. What do you do in your free time? คุณทำอะไรบ้างในเวลาว่าง?
9. Who do you spend your time with the most? โดยปกติคุณใช้เวลาส่วนมากกับใคร?
- a. Parents/Guardians บิดา/มารดา/ผู้ปกครอง
 - b. Siblings พี่น้อง
 - c. Relatives/ Cousinsญาติ
 - d. Friends เพื่อน
 - e. Classmates เพื่อนนักเรียน
 - f. Coworkers เพื่อนร่วมงาน
 - g. Other อื่นๆ
10. Which social media do you use the most? (Check all that apply) คุณใช้โซเชียลมีเดียอะไรมากที่สุด?
- a. Facebook เฟสบุ๊ก
 - b. Instagram อินสตาแกรม
 - c. Snapchat สแนปแชท
 - d. Line ไลน์
 - e. Twitter ทวิตเตอร์
 - f. YouTube ยูทูบ
 - g. Others (Please describe) อื่นๆ (โปรดระบุ)
11. How often do you use social media? คุณใช้โซเชียลมีเดียบ่อยแค่ไหน?
- a. Never ไม่เคยใช้
 - b. Monthly หนึ่งครั้งต่อเดือน
 - c. Weekly หนึ่งครั้งต่ออาทิตย์
 - d. Daily วันละครั้ง
 - e. More than once a day มากกว่าวันละครั้ง
 - f. Hourly or more ชั่วโมงละครั้งหรือมากกว่า
12. What sort of things do you like on the internet? คุณสนใจอะไรบนอินเทอร์เน็ตบ้าง?
- a. Funny ตลก ขำขัน
 - b. Cute น่ารักใสๆ

- c. Dramatic ดราม่า
 - d. Educational การศึกษาเรียนรู้
 - e. Other (Please describe) อื่นๆ (โปรดระบุ)
13. What do you like to online? (Check all that apply)
- a. Games
 - b. Websites
 - c. Applications
 - d. Watching videos (YouTube, Vimeo)
 - e. Sharing pictures (Facebook, Instagram, Snapchat)
 - f. Other (Explain)

Inhalant Questions: คำถามเกี่ยวกับสารระเหย

14. Have you heard of inhalants? คุณเคยได้ยินข่าวสารเกี่ยวกับสารระเหยไหม?
15. Do you know what inhalants are? คุณรู้ไหมว่าสารระเหยคืออะไร?
16. What are some examples of inhalants? คุณลองยกตัวอย่างสารระเหยมาได้ไหม?
17. Do you know about the effects of inhalant use? คุณทราบถึงผลกระทบจากการใช้สารระเหยหรือไม่?
18. Do you think inhalant abuse is a problem in your neighborhood? คุณคิดว่าการใช้สารระเหยเป็นปัญหาของชุมชนคุณหรือไม่?

Appendix D: Survey questions for Hua Lamphong residents, English and Thai

Goal: Determine the perspective of Hua Lamphong residents on the inhalant abuse problem. First, approach people around the Hua Lamphong Station. Then move outwards to general neighborhood.

We are a group of students from Chulalongkorn University in Bangkok, Thailand and Worcester Polytechnic Institute in Massachusetts, United States, and we are working with the SATI Foundation to create an awareness campaign about the dangers of inhalant abuse, aimed at Thai adolescents. Currently, we are conducting a survey of residents of the Hua Lamphong area in Bangkok to better understand the perceptions of inhalant use and its prevalence in the neighborhood.

Your participation in this survey is completely voluntary and you may withdraw at any time. Please remember that your answers will remain anonymous. No names or identifying information will appear on the questionnaires or in any of the project reports or publications. If interested, a copy of our results can be provided through an internet link at the conclusion of the study.

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การเข้าร่วมแบบสำรวจนี้ขึ้นอยู่กับความสมัครใจของคุณ และคุณสามารถเลือกที่จะหยุดทำได้ตลอดเวลา ข้อมูลทุกอย่างที่เกี่ยวกับคุณและ คำตอบของคุณ จะถูกเก็บเป็นความลับ และไม่ถูกเปิดเผย หากคุณสนใจที่จะติดตามผลงานของเรา เราจะส่งที่อยู่ของเว็บไซต์เราไปให้เมื่อเราบรรลุวัตถุประสงค์ของงานเราเป็นที่เรียบร้อยแล้ว

1. Do you live around this area? คุณอาศัยอยู่แถวหัวลำโพงหรือไม่?
2. What do you think an inhalant is? คุณคิดว่าสารระเหยคืออะไร?
3. Can you give some examples of inhalants? คุณลองยกตัวอย่างสารระเหยได้ไหม?
4. What do you think the effects of inhalants to your health are? คุณคิดว่าสารระเหยมีผลกระทบต่อสุขภาพของคุณอย่างไร?
5. Do you think inhalant abuse is a problem in your neighborhood? คุณคิดว่าการใช้สารระเหยเป็นปัญหาของชุมชนคุณหรือไม่?
6. Do you know anyone who uses or has used inhalants? คุณรู้จักคนที่ใช้หรือเคยใช้สารระเหยหรือไม่?
7. Why do you think people use inhalants? ทำไมคุณถึงคิดว่าคนถึงเริ่มใช้สารระเหย?

Appendix E: Interview questions for adolescents, English and Thai

Goal: Find out motivations behind inhalant abuse, and what kind of things adolescents in Thailand enjoy in order to cater our awareness program to it.

We are a group of students from Chulalongkorn University in Bangkok, Thailand and Worcester Polytechnic Institute in Massachusetts, United States, and we are working with the SATI Foundation to create an awareness campaign about the dangers of inhalant abuse, aimed at Thai adolescents. Currently, we are conducting a semi-structured interview of Thai adolescents from SATI programs, local schools, and other youth programs to better understand the usage and understanding of inhalants, as well as the overall demographics of potential at-risk individuals.

Your participation in this interview is completely voluntary and you may withdraw at any time. Please remember that your answers will remain anonymous. No names or identifying information will appear on the questionnaires or in any of the project reports or publications. If interested, a copy of our results can be provided through an internet link at the conclusion of the study.

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การให้ข้อมูลในบทสัมภาษณ์นี้ขึ้นอยู่กับความสมัครใจของคุณ และคุณสามารถเลือกที่จะหยุดทำได้ตลอดเวลา หรือสามารถที่จะเลือกไม่ตอบในคำถามนั้นๆ ข้อมูลทุกอย่างที่เกี่ยวข้องกับคุณและ คำตอบของคุณ จะถูกเก็บเป็นความลับ และไม่ถูกเปิดเผย หากคุณสนใจที่จะติดตามผลงานของเรา เราจะส่งที่อยู่ของเว็บไซต์เราไปให้เมื่อเราบรรลุวัตถุประสงค์ของงานเราเป็นที่เรียบร้อยแล้ว

1. What is your age? คุณอายุเท่าไร?
2. What neighborhood do you live in? คุณอาศัยอยู่ละแวกไหน?
3. Are you in school? คุณเรียนที่โรงเรียนหรือไม่?
4. Do you have any siblings? How old are they? คุณมีญาติพี่น้องไหม? พวกเขาอายุเท่าไร?
5. What do you like to do in your free time? เมื่อคุณมีเวลาว่าง คุณมักจะใช้มันไปกับอะไร?
6. What does an average day for you look like? ในชีวิตประจำวัน ส่วนมากคุณทำอะไร?
7. What's your favorite part of the day? ในวันวันหนึ่งคุณชอบทำอะไรมากที่สุด?
8. What types of social media do you use? คุณใช้สื่อออนไลน์ประเภทใดบ้าง?
9. How often do you use social media? คุณใช้สื่อออนไลน์บ่อยแค่ไหน?
10. What sort of things do you like on the internet? คุณใช้สื่อออนไลน์เพื่อจุดประสงค์ใด?

a. Funny things, educational things, dramatic things, cute things, etc. ตลก ขำ
ขัน การศึกษาเรียนรู้ ดราม่า น่ารักใสๆ

11. Are you happy at home? คุณมีความสุขไหมเวลาอยู่บ้าน?

If adolescent is part of the Hub, ask the following questions, otherwise go to question 15:

12. How did you hear about the Hub? How long have you been here? คุณรู้จักที่นี่ได้อย่างไร?
คุณมาที่นี่นานแค่ไหนแล้ว?

13. What are some programs that you enjoy? คุณรู้สึกเพลิดเพลินกับกิจกรรมที่นี่ไหม? กิจกรรมนั้น
คืออะไร?

14. Why did you become homeless? ทำไมคุณถึงกลายเป็นเด็กเร่ร่อน

15. What do you think an inhalant is? คุณคิดว่าสารระเหยคืออะไร?

16. Can you give some examples of inhalants? คุณลองยกตัวอย่างสารระเหยได้ไหม?

17. Have you ever heard about people using inhalants? คุณเคยได้ข่าวเรื่องคนดมกาวไหม?

18. What do you think are the effects of inhalants on the health of the user? คุณคิดว่าสารระเหย
มีผลกระทบต่อสุขภาพของคุณอย่างไร?

19. What's the spiciest food in Thailand? Would we survive if we ate it? คุณคิดว่าอาหารอะไร
ที่เผ็ดที่สุด ห้ามตอบพริกนะ? แล้วหลังจากกินเราจะรอดกันไหม?

Appendix F: Interview questions for teachers, English and Thai

Goal: Determine the perspective of inhalant abuse from the teachers and understand how they perceive the problem.

We are a group of students from Chulalongkorn University in Bangkok, Thailand and Worcester Polytechnic Institute in Massachusetts, United States, and we are working with the SATI Foundation to create an awareness campaign about the dangers of inhalant abuse, aimed at Thai adolescents. Currently, we are conducting a semi-structured interview of Thai teachers to better understand the usage and understanding of inhalants, as well as the perceptions of inhalant use.

Your participation in this interview is completely voluntary and you may withdraw at any time. Please remember that your answers will remain anonymous. No names or identifying information will appear on the questionnaires or in any of the project reports or publications. If interested, a copy of our results can be provided through an internet link at the conclusion of the study.

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1. Do you teach about inhalants in drug awareness programs? คุณสอนนักเรียนเกี่ยวกับการป้องกัน และผลกระทบของสารระเหยหรือไม่?
2. What do you know about inhalants? คุณรู้จักสารระเหยมากแค่ไหน?
3. Can you identify things in the room that can be used as inhalants? (Show them things that they did not guess) คุณสามารถบอกได้ใหม่ว่ารอบๆตัวคุณตอนนี้มีอะไรที่เป็นสารระเหยบ้าง? (แสดงให้เห็นคำเห็นถึงสิ่งที่เค้าไม่ได้บอก)
4. Do you think the students learn enough about inhalants? คุณคิดว่านักเรียนได้รับความรู้ความเข้าใจ เกี่ยวกับสารระเหยมากพอหรือไม่?
5. Do you think that inhalant use is a problem? คุณคิดว่าคนที่ใช้สารระเหยนั้นเป็นปัญหาต่อชุมชนและสังคมหรือไม่?
6. Why do you think people use inhalants? (this question illustrates the perception that people have about inhalant users) คุณคิดว่าทำไมคนถึงเริ่มใช้สารระเหย?
7. What do you think is important to include in an awareness program? คุณคิดว่าอะไรที่จะสามารถทำให้คนไม่คิดที่จะลองใช้สารระเหย?

Appendix G: Interview for The Hub, English and Thai

Goal: To inquire what existing programs are in the Hub that might help adolescents who abuse inhalants.

We are a group of students from Chulalongkorn University in Bangkok, Thailand and Worcester Polytechnic Institute in Massachusetts, United States, and we are working with the SATI Foundation to create an awareness campaign about the dangers of inhalant abuse, aimed at Thai adolescents. Currently, we are conducting a semi-structured interview of The Hub volunteers to understand more about the programs offered and how they are advertised.

Your participation in this interview is completely voluntary and you may withdraw at any time. Please remember that your answers will remain anonymous. No names or identifying information will appear on the questionnaires or in any of the project reports or publications. If interested, a copy of our results can be provided through an internet link at the conclusion of the study.

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1. What range of ages do your programs focus on? โปรแกรมที่คุณจัดนั้น มุ่งเน้นไปที่ช่วงอายุใด?
2. What type of programs do you run? มีโปรแกรมไหนที่คุณกำลังทำอยู่ไหม?
3. If not mentioned, inquire about counseling services ถ้าไม่ แล้วคุณมีคนที่คอยให้คำปรึกษาพวกเขาหรือไม่?
4. Are there specific ones targeting youth who are recovering from drug abuse? มีใครที่สามารถเลิกได้หรือไม่ เราหมายถึงคนที่ได้ผ่านโปรแกรมขอพวกเขาคุณ พวกเขาอายุเท่าไร?
5. How do you decide who can attend these programs? Are they open to the public? การที่ผู้คนจะมาเข้าร่วมโปรแกรมของคุณ คุณจำแนกใหม่ว่าเขาควรเข้าร่วมโปรแกรมใด?
6. How do you advertise your programs? คุณโฆษณาสิ่งที่คุณทำอย่างไร?
7. Do you have a formal process when an individual approaches you for help? คุณค้นหาผู้คนที่คุณจะช่วยอย่างไร?
8. Could you share a memory from one of the programs that you are involved with? คุณเล่าถึงโปรแกรมที่คุณเข้าไปช่วยหรือมีส่วนร่วมได้ไหม?
9. When can we meet with the foundation in the next few weeks? เราจะพบคุณในอีก 2-3 อาทิตย์ข้างหน้าได้ไหม?

Appendix H: Feedback Survey, English and Thai

แบบสอบถามผลตอบรับจากเด็กและเยาวชนในมูลนิธิสายเด็ก

Goal: Measure our program’s success. Success is measured by how much adolescents enjoyed navigating our website, their likeliness to share content, and if they learned something in the process.

**คำถามเพื่อทดสอบความรู้เกี่ยวกับสารระเหย Inhalant knowledge quiz
(used for Pre and Post Campaign review)**

1. ลองอธิบายความหมายของคำว่า สารระเหย มาซิ? Can you define the term inhalant?

2. ลองยกตัวอย่างสารระเหยมาหน่อย ยิ่งเยอะยิ่งดี Can you give some examples of inhalants? Mention all you know.

3. เธอคิดว่าสารระเหยมีผลกระทบต่อสุขภาพอย่างไร? What do you think the effects of inhalant abuse are to your health?

Feedback survey on project performance

Instructions Please put ✓ into the boxes on the right-hand side of the following table.

Evaluation Criteria	Project Feedback				
	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
1. I would share the videos from the project website on Facebook.					
2. I would visit the project website again.					
3. The website was easy to navigate.					
4. I would participate in the activities again.					
5. I liked the animations (zombie cat and superhero fighting the glue)					

6. I liked the inspirational quotes					
7. The information on learn the facts was easy to understand					
8. I liked the activities section					

Did the questionnaire give you an activity you would like to participate in?
If yes, what activity?

.....
.....

Did you learn something you didn't know?
If yes, what did you learn?

.....
.....

Do you have any suggestions for our project?

.....
.....

Thank you for your cooperation.

ความพึงพอใจในการดำเนินงานโครงการ

คำชี้แจง โปรดใส่เครื่องหมาย ✓ ลงในช่องทางขวามือ ตามความคิดเห็นของท่าน

รายการการประเมิน	ผลการประเมิน				
	มากที่สุด (5)	มาก (4)	ปานกลาง (3)	น้อย (2)	น้อยที่สุด (1)
1. ความประสงค์ที่จะเผยแพร่วิดีโอจากเว็บไซต์โครงการบนสื่อโซเชียล					
2. ความประสงค์ที่จะกลับมาใช้เว็บไซต์ของโครงการเรา					
3. ความสะดวกรวดเร็วในการเข้าใช้เว็บไซต์ของโครงการเรา					
4. ความประสงค์เข้าร่วมทำกิจกรรมของโครงการเรา					
5. ความพึงพอใจในภาพเคลื่อนไหวบนเว็บไซต์ (แมวมอบบี้ และยอดมนุษย์)					

ผู้กับทาว)					
6. ความพึงพอใจในคำพูดให้แรงบันดาลใจ					
7. ความเข้าใจในหัวข้อเรื่องน่ารู้					
8. ความพึงพอใจในหัวข้อกิจกรรม					

ความสนใจของท่านตรงตามกิจกรรมในแบบสอบถามบนเว็บไซต์ของโครงการเราหรือไม่
หากใช่ ระบุกิจกรรมดังกล่าว

.....

ท่านได้ความรู้เพิ่มเติมจากเว็บไซต์ของโครงการเราหรือไม่
หากใช่ โปรดระบุให้ชัดเจน

.....

ข้อเสนอแนะ

.....

ขอบคุณในความร่วมมือ

Appendix I: Surveys of schools

88 questionnaires were obtained over 4 days. Among the 88 responses, 40 responses from Saipanya school and 48 responses from Debsirin school.

Demographic characteristics of school surveys (n=88)

Characteristic	Number	Percentage
Sex		
Male	48	54.5
Female	40	45.5
Age ($M = 16.31, SD = 0.77$)		
15-16	54	61.4
17-18	31	35.2
No answer	3	3.4
Grade		
10	39	44.3
11	35	39.8
12	4	4.5
No answer	10	11.4
Monthly Family Income (Baht)		
Less than 5,000	3	3.4
5,000 - 10,000	9	10.2
10,001 - 50,000	30	34.1
More than 50,000	14	15.9
Prefer not to answer	32	36.4
Parental Status		
Together	68	77.3
Divorced or separated	13	14.8
Living with mother	3	3.4
Living with father	0	0
One Deceased	3	3.4
Both Deceased	0	0
Do not know/prefer not to answer	4	4.5

Appendix J: NIDA criteria

Criteria based on the *National Institute on Drug Abuse*:

Rating in each category based on a 1-4 score that reflects NIDA's criteria for an effective drug prevention program.

Structure:

Rating based on a defined audience, type of program, and setting or environment.

- 1: Audience not defined, wrong type of program chosen, environment does not assist with reaching target population.
- 2: Audience is slightly examined and program type is considered. Setting of program still not very appropriate.
- 3: Target audience shows deeper consideration and program type is appropriate. Setting and environment is chosen adequately.
- 4: Target audience clearly defined and type of program has thoughtful consideration. Both the setting and environment closely relate to the audience and are mindfully chosen.

Delivery:

How is the message of the program communicated and implemented? Does it reach its target audience?

- 1: Message is not clear and can lead to misinterpretation by the target audience. Program is not easily accessed and it is difficult for users to participate.
- 2: Message is clear but does not address the goal of the program. Program is difficult for users to participate in.
- 3: The message of the program is defined and clear. Participants can participate fairly easily and resources for the program are accessible.
- 4: Message of the program is delivered and communicated superbly. Implementation allows participants to be involved easily. Resources of the program are well defined and easily accessible.

Content:

How relevant and important are the information, skills, methods, and services in the program?

- 1: Information communicated is not relevant. Skills taught and guidance do not contribute towards the goal of drug prevention or awareness.
- 2: Information in the program is slightly relevant but includes unnecessary content. Services in the program are not very useful or important to its goal.
- 3: Material is defined and connected towards the goal of drug prevention. Skills and methods are appropriately chosen in order to help the target audience understand the message.
- 4: The message and information is very relevant. Skills taught in the program help participants steer away from drugs. Methods are used in a manner that entuses participants.

(National Institute on Drug Abuse, 2003)

Appendix K: Information on Website and Blog

Duda Pricing Plans

- Currently we are using the free version. An updated list is available at <https://www.dudamobile.com/plan/d1>

RESPONSIVE WEBSITE	MOBILE-ONLY WEBSITES	RESELLER PLANS
FREE	BUSINESS +	BUSINESS + ECOMMERCE
A great way to try Duda	\$14.25/mo (annual plan) or \$19/month-to-month \$299 Site for Life	\$22.50/mo (annual plan) or \$29/month-to-month
GET STARTED	GET STARTED	GET STARTED
<ul style="list-style-type: none"> ✓ Natively Responsive Website ✓ Website Personalization Tools ✓ Limited Analytics and Tracking ✓ Web Hosting on Amazon Cloud ✓ Community Support ✓ Duda Domain (my.site.dudamobile.com) ✓ Duda Ads 	<ul style="list-style-type: none"> ✓ Natively Responsive Website ✓ Website Personalization Tools ✓ Full Analytics and Tracking ✓ Web Hosting on Amazon Cloud ✓ Email Support ✓ Custom Domain (my.site.com) ✓ Secure Connection (HTTPS) ✓ No Duda Ads ✓ Site Backup ✓ Chrome Push Notification ✓ Developer Mode ✓ Multi-Language Website 	<ul style="list-style-type: none"> ✓ Natively Responsive Website ✓ Website Personalization Tools ✓ Full Analytics and Tracking ✓ Web Hosting on Amazon Cloud ✓ Email Support ✓ Custom Domain (my.site.com) ✓ Secure Connection (HTTPS) ✓ No Duda Ads ✓ Site Backup ✓ Chrome Push Notification ✓ Developer Mode ✓ Multi-Language Website
<ul style="list-style-type: none"> ✓ 10-Product Store ✓ PayPal, Stripe & Global Gateway Payment Providers ✓ 2 Product Categories ✓ Order and Customer Management Tools 	<ul style="list-style-type: none"> ✓ 10-Product Store ✓ PayPal, Stripe & Global Gateway Payment Providers ✓ 2 Product Categories ✓ Order and Customer Management Tools 	<ul style="list-style-type: none"> ✓ 100 - 2500 Product Store ✓ See full features list → ✓ 30+ Payment Providers ✓ Unlimited Product Categories ✓ Order and Customer Management Tools ✓ Product Reviews integrated with Facebook

Changes are saved automatically but hit republish in order to display changes.

The screenshot shows the Duda website builder interface. On the left is a vertical menu with categories: DESIGN, PAGES, WIDGETS, CONTENT, PERSONALIZE, STORE, BLOG, and SETTINGS. Each category has sub-items. In the center is a preview window showing a mobile website for 'SATI FRESH AIR'. On the right, a list of functions is connected to the interface by red arrows:

- Change colors and sizes on site (points to the DESIGN menu)
- Create/Edit/Delete Pages (points to the PAGES menu)
- Add images/videos/text (points to the WIDGETS menu)
- Manage uploaded material on site (points to the CONTENT menu)
- Create or edit rules for the site (points to the PERSONALIZE menu)
- Enable shopping on your site (points to the STORE menu)
- Enable or create blog posts (points to the BLOG menu)
- Advanced options for customizing content (points to the SETTINGS menu)

At the top right of the interface, there are buttons for 'Upgrade' and 'Republish', with a red box around 'Republish' and an arrow pointing to the text above it.

Edit any pop ups used. Note: After editing a popup click any page to return to normal editing mode

Click any page to reveal options to edit any existing content. To create a new page in the same format, duplicate any pages (other than the home page), and edit it from there. If you want a page from scratch, click +New Page.

To change the name of a page, click on rename, and after click Page URL to modify the link as well.

Drag and drop widget elements into a desired row or column.

Note: If a row or column doesn't exist in the desired location drag and drop a row or column section there first.

Import or delete files such as images into your Duda folder so you can use them.

Rules allow certain instances to trigger actions within the site. Create or edit rules here

Choose a rule

Select a personalization rule below to get started, each one is fully customizable.

- Build your own**
Create a totally custom rule to best meet the unique needs of your business.
Build rule
- Popup**
Engage your visitors with easy-to-use popups. Say welcome with customized msg., increase sales with targeted promotions and more.
Preview rule ▶ Select rule
- Blank Row**
Create a new inSite row, with your own design and elements.
Preview rule ▶ Select rule
- Special Promotion**
Set up a special promotion that will run each year for a defined period of time.
Preview rule ▶ Select rule

กิจกรรม MORE

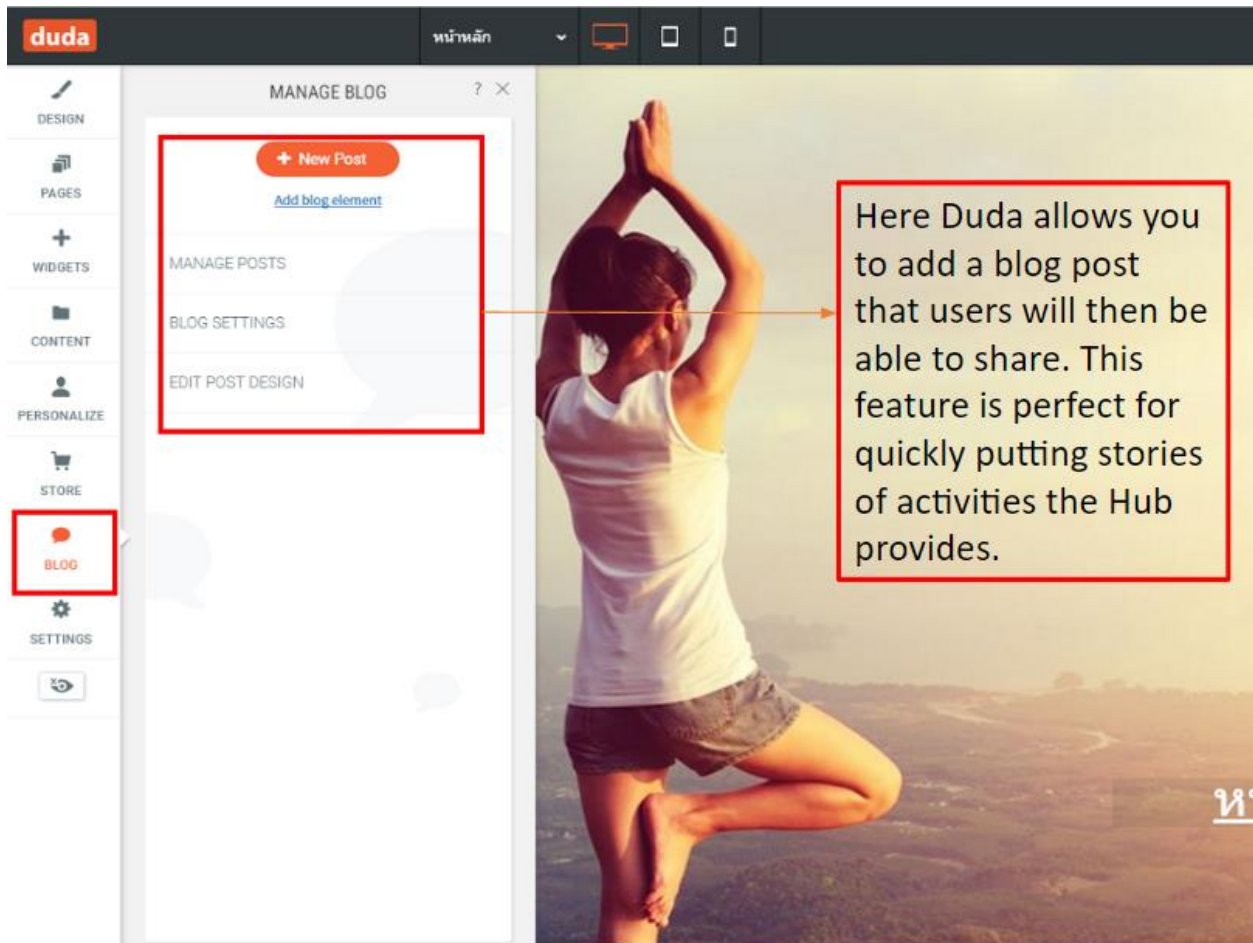
You can make your own rule from scratch but there are plenty of predefined rules ready to use or be modified to your liking.

CHOOSE A STORE

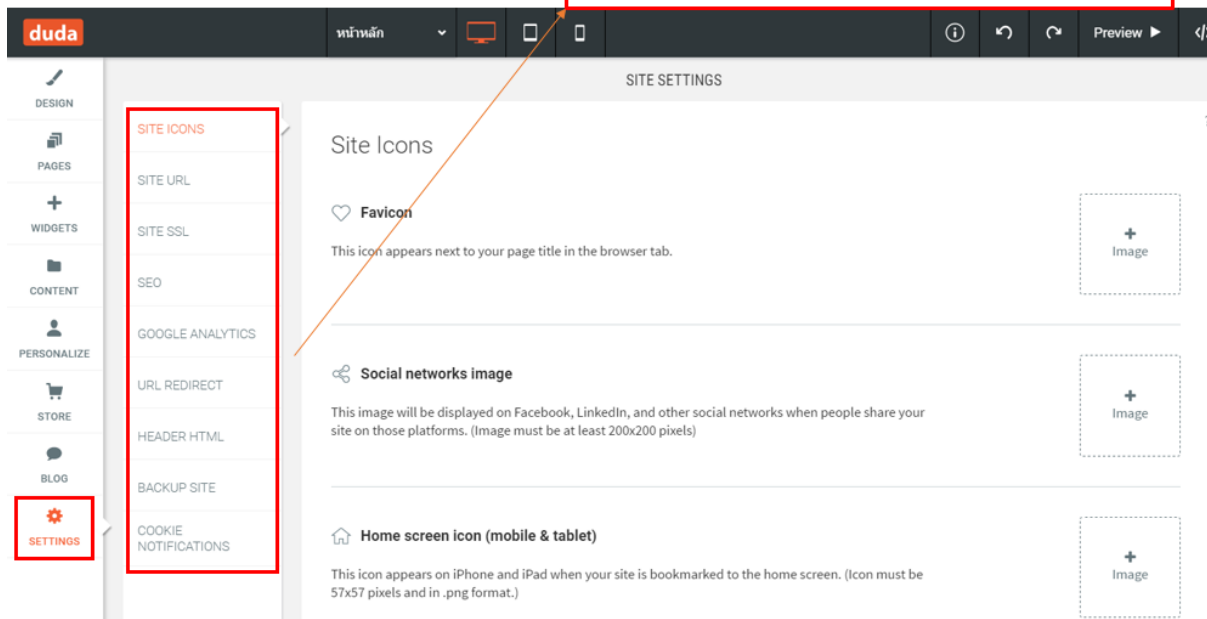
Pick the store you want to add.

- FREE**
ADD 10 PRODUCT STORE
- Upgrade to 100 PRODUCT STORE
- Upgrade to 2500 PRODUCT STORE

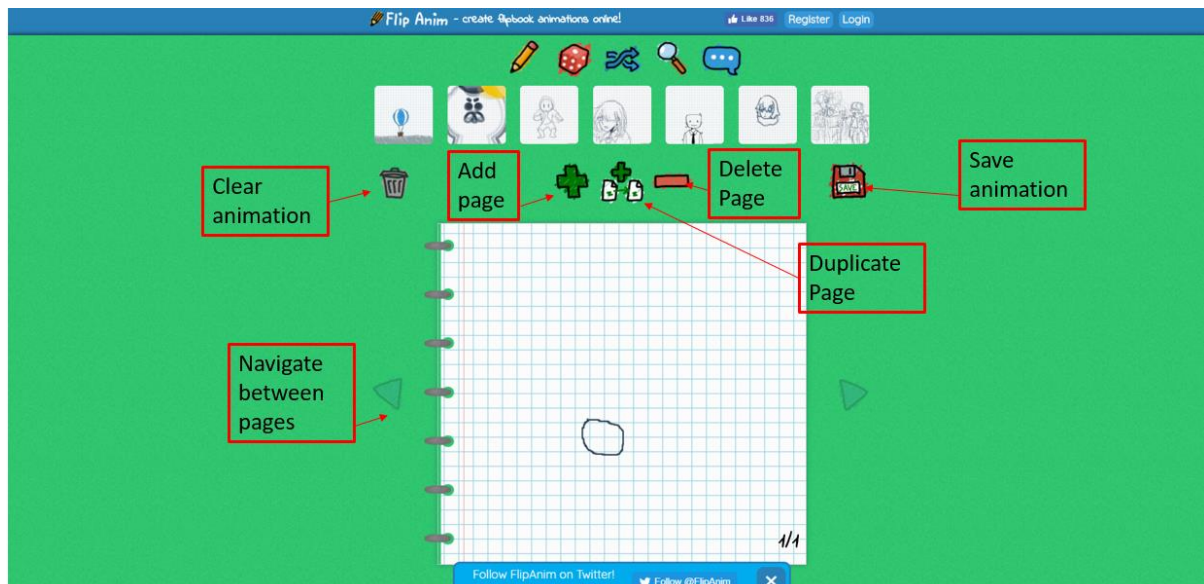
Here Duda allows you to make a store so people can buy items from your site. The free version allows a limited amount of item. However, you can upgrade to suit your needs.



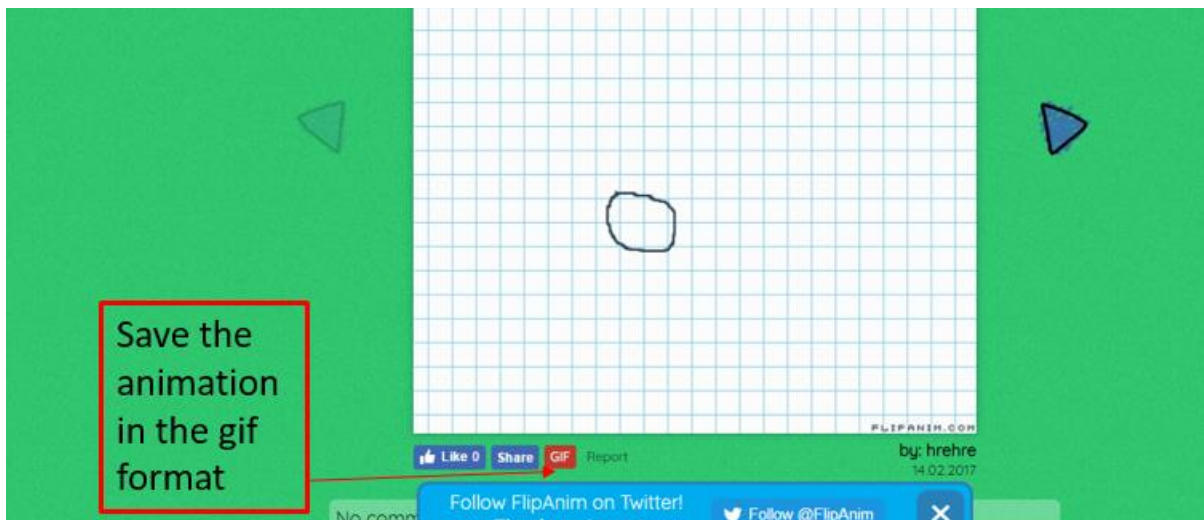
Here in the settings you will find advanced options for checking things such as analytics or even just changing icons for your site

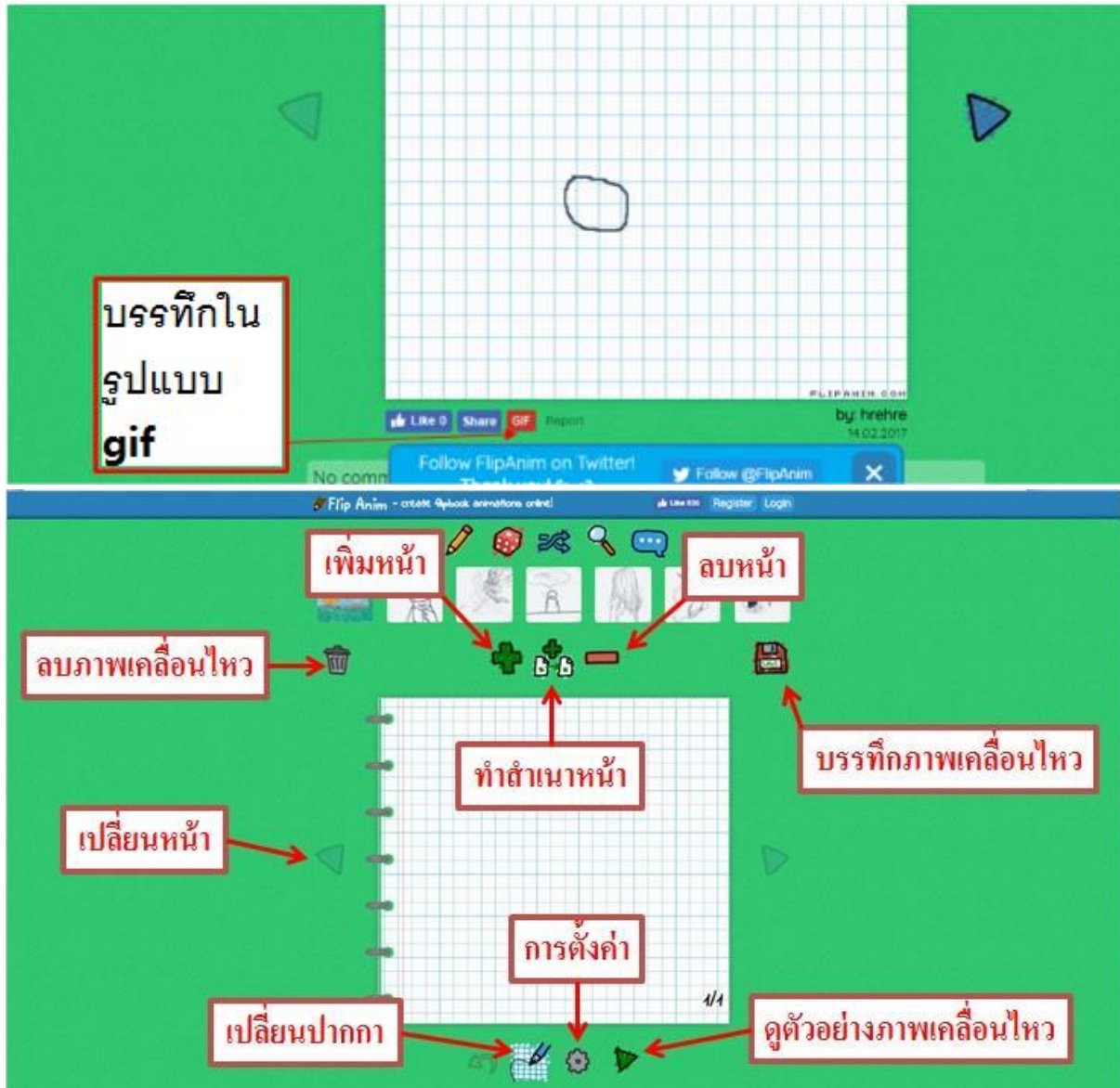


Appendix L: How to Create Animations using funanim.com



Note: The animation will still be saved even if the window is close. No need to save it yourself.






Appendix M: Filming and Graphics tips pamphlet for SATI volunteers

FILMING AND GRAPHICS

A BASIC GUIDE



WELCOME TO #FRESHAIR

If you are reading this, then you are helping out with the inhalant prevention program, #FreshAir, run through the Hub and SATI! Thank you for your help. Part of what we need help with is creating new material for the website. That's where you come in. By developing videos and graphics of new activities to try, as well as educational (but interesting!) videos, animations, and other media, we can help change lives for the better. Most adolescents are extremely active on social media, so these materials can have a large impact on their lives.

KEEP TO THE MESSAGE

Sati means mindfulness. Specifically we need to be mindful of the roots of problems that people face. There are always reasons for people's actions, and understanding these reasons of inhalant use will better help us connect with our audience.



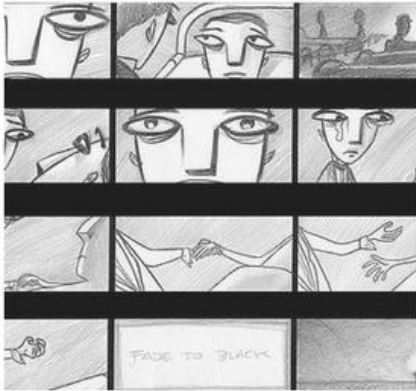
REMEMBER THE AUDIENCE

- Our target audience can range anywhere from 13 to 18, although adolescents at the Hub can run younger as well as older. Our focus is on homeless adolescents, so make sure to avoid school uniforms, and fancy settings.



SATI

#FRESHAIR



STORYBOARD PLOT

Plan out media. This is extremely important in videos! You need to plan out exactly what you want to see on screen before you film it, so you have a list of things you need to be filmed. This also helps with decreasing the amount of time spent on actually filming. Work out exactly what you want to say and show.



FILM IT AGAIN

Make sure to get multiple shots of everything! If you don't you will find something wrong with your footage later, a

KEEP IT SHORT.

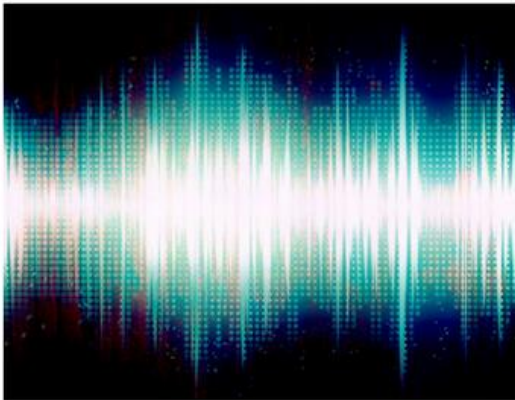
1 minute or less for inhalant videos
Approx. 5 minutes for activity videos

#FRESHAIR



FRAMING

Visual media, such as photography and film media, typically follow what's called the rule of thirds. On a piece, a human's eyes are naturally drawn to the intersection of the lines. So when you are filming, it may be appropriate to use this method to line up your shot. For activity videos, it is perfectly acceptable to center the object!



AUDIO

One of the most important components of videos. If you use voice overs, make sure that it is clear and understandable! Filming outside can be difficult because of background noise.

RECOMMENDED PROGRAMS



Canva:
Online graphic editor



Lightworks:
Free video editor



Audacity:
Free audio editor

Appendix N: Activities that can be taught at the Hub or in future videos

Plastic bag ice cream

ไอติมถุงพลาสติก

<https://www.youtube.com/watch?v=deejPoTYIGQ>



อุปกรณ์

- น้ำตาล
- เกลือ
- น้ำแข็ง (1 ถัง)
- ถุงพลาสติกขนาดกลาง 1 ใบ
- ถุงพลาสติกขนาดเล็กที่ปิดหัวถุงได้ 1 ใบ (สามารถใช้หนังยางปิดได้)
- ครีมเหลวหรือกะทิเข้มข้น
- วานิลลา (ใช้หรือไม่ใช้ก็ได้)
- ผาเช็ดตัว (ใช้หรือไม่ใช้ก็ได้) - เพื่อไม่ให้น้ำแข็งเย็นมือ



วิธีทำวิธีทำ

1. เทครีมหรือน้ำกะทิลงในถุงอันเล็กให้เต็มครึ่งถุง
2. ใส่ น้ำตาลและวานิลลา (ใช้หรือไม่ใช้ก็ได้) ลงไปในถุงเล็กด้วยกัน เพื่อปรุงรสตามที่ต้องการ
3. ปิดถุงเล็กให้แน่น โดยอย่าให้มีช่องเหลวไหลออกมา
4. ใส่ น้ำแข็งลงไป ในถุงพลาสติกขนาดกลาง แล้วโรยเกลือตามลงไป
5. นำถุงอันเล็กใส่เข้าไปในถุงอันกลาง
6. ผูกถุงขนาดกลางเพื่อไม่ให้น้ำแข็งไหลออก
7. คลุมถุงพลาสติกด้วยผาเช็ดตัว เพื่อไม่ให้น้ำแข็งเย็นมือ (ทำหรือไม่ทำก็ได้)
8. กิ้งถุงขนาดกลางจนกว่าครีมหรือกะทิจะกลายเป็นไอติม (ใช้เวลาอย่างน้อย 10 นาที)

เรื่อน่ารู้

เกลือทำให้น้ำแข็งเย็นขึ้นโดยทำให้จุดหลอมเหลวและจุดเยือกแข็งของน้ำแข็งลดลง

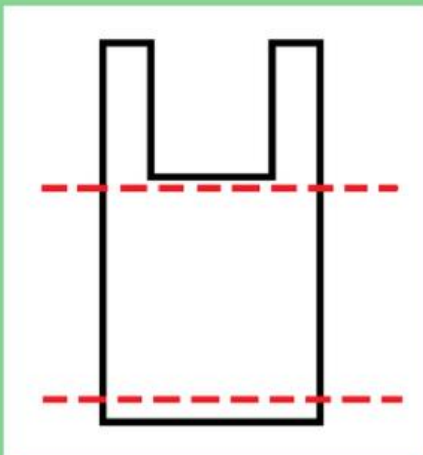
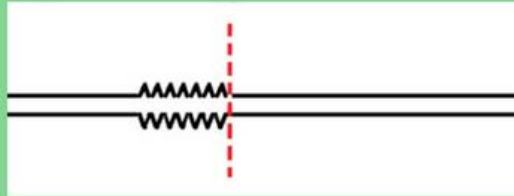
ประดิษฐ์ว่าวที่บ้านง่ายๆ

<https://www.youtube.com/watch?v=deejPoTYIGQ>



อุปกรณ์

- ถุงพลาสติก 1 ใบ
- หลอดงอได้ 7 หลอด หรือหลอดงอไม่ได้ 5 หลอด
- ปากกามาร์กเกอร์
- กรรไกร
- สกอตเทป
- ดินสอไม้ หรือกิ้งไม้
- เส้นด้าย (ใช้ไหมขัดฟันหรือเชือกขาวแดงก็ได้)



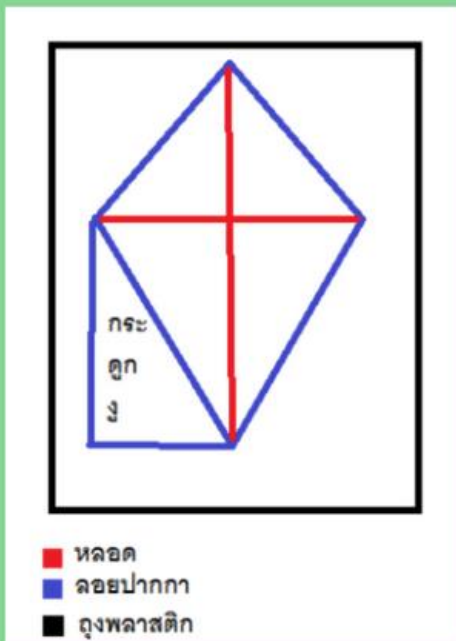
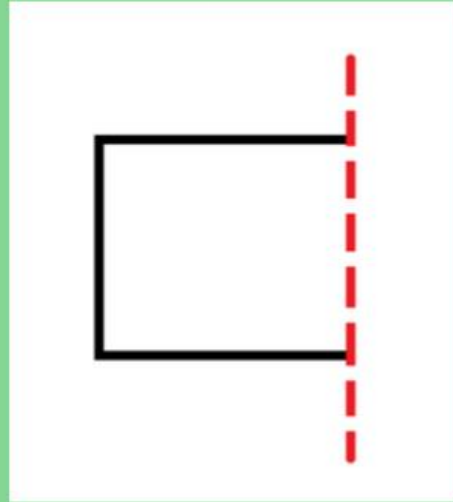
วิธีทำ

1. เทครีมหรือน้ำกะทิลงในถุงอันเล็กให้เต็มครึ่งถุง
2. สำหรับหลอดงอได้ ให้ต่อหลอด 4 หลอดเข้าด้วยกัน โดยยัดหลอดเข้าไปในอีกหลอดหนึ่ง หลังจากนั้นให้ต่อหลอด 3 หลอดเข้าด้วยกันโดยใช้วิธีเดียวกัน สำหรับหลอดงอไม่ได้ ให้ต่อหลอด 3 หลอดเข้าด้วยกัน โดยยัดหลอดเข้าไปในอีกหลอดหนึ่ง หลังจากนั้นให้ต่อหลอด 2 หลอดเข้าด้วยกันโดยใช้วิธีเดียวกัน
3. พันเทปบนข้อต่อ
4. ตัดส่วนปากถุงที่เป็นหูหิ้วและตัดส่วนกันถุงออก



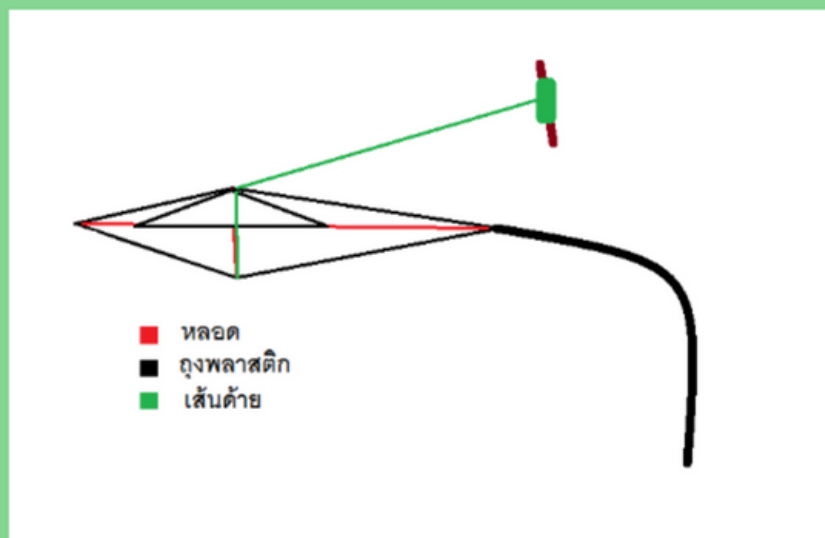
SATI

5. ตัดส่วนด้านข้างของถุงพลาสติกออก
เพื่อทำให้มันกางออกได้
6. กางถุงออก
7. วางหลอดบนถุงพลาสติกให้เป็นโครงงวาว
8. วาดรูปวาว
และสามเหลี่ยมรูปหนึ่งเพื่อเป็นกระดูกงวาว
9. ตัดรูปวาวและกระดูกงวาวออก
10. ตักโครงหลอดไว้บนรูปวาวด้วยเทป
11. แปะกระดูกงูไว้บนโครงหลอดที่ยาวกว่า
(ตามรูปที่สำเร็จแล้ว)
12. ผูกด้ายเส้นหนึ่งไว้บนปลายสองด้านของโครงหลอด
แนวนอน
โดยให้ตรงกลางของด้ายแต่ละปลายแหลมของกระดูกงวาว (ถ้างก็ดูรูปที่สำเร็จแล้วได้นะ)



13. นำด้ายเส้นใหม่ (ด้ายยาวๆ)
มาผูกไว้ตรงกลางของด้ายเก่า
(ตรงปลายของแหลมของกระดูกงู)
14. แปะเทปทับทุกเงื่อนไขที่ผูก
15. ผูกอีกปลายหนึ่งของเชือกใหม่ไว้บนดินสอหรือกิ่งไม้
แล้วเก็บด้ายด้วยการม้วน
16. ตัดถุงพลาสติกที่เหลือให้เป็น 2-4 เส้น
แล้วผูกมันเข้าด้วยกันให้เป็นเส้นยาวๆ
ที่จะถูกนำไปใช้เป็นหางวาว
17. แปะหางวาวตรงข้างใต้ของวาวด้วยเทป

วาวที่สำเร็จควรดูเหมือนดังนี้



เรื่อนำรู้
กระดุกงวาวช่วยวาวบินในอากาศที่มีลมแรง

การสอนวาดภาพสีน้ำ

<http://adventures-in-making.com/toolbox-8-watercolor-techniques-for-beginners/>



อุปกรณ์

- กระดาษ
- พู่กัน
- สีน้ำ
- แก้วน้ำ



ครูผู้สอนทำการสอนวัยรุ่ นวิธีการทาสีซึ่งรวมถึงเ ทchnikในการวาดภาพ

- การระบายเรียบสีน้ำ
- การไลโทนสี
- การวาดซ้อนทับกันจำนวนหลายๆ
- การวาดลวดลาย
- ขนาดพู่กัน
- แอลกอฮอล์
- การวาดด้วยดินสอและแรงเงา
- หมึกปากกา

ออกกำลังกายโดยไม่ใช้อุปกรณ์

อาจารย์ผู้สอนต้องแน่ใจว่าทุกคน จะอยู่ท่าทางที่ถูกต้อง กรณีไม่มีอาจารย์ผู้สอนผู้เรียนก็สามารถช่วยเหลือซึ่งกันและกันในการจัดท่าทางให้ถูกต้องได้

สอนการออกกำลังกายส่วนต่างๆ ของเราโดยไม่จำเป็นต้องใช้อุปกรณ์ รวมทั้ง การอบอุ่นร่างกายและการผ่อนคลาย กล้ามเนื้อ

- ส่วนกล้ามเนื้อท่อนอกและคอ - ท่ายกตัวนั่ง ท่าครันช์ ท่ากระดานตะแคง
- ส่วนกล้ามเนื้อหน้าท้องและหลังช่วงกลาง - ท่ากระดานคว่ำ
- ส่วนกล้ามเนื้อหน้าท้องและขา - ท่านอนหงายยกขาขึ้นลง
- ส่วนกล้ามเนื้อหน้าท้อง - ยกก้นท่าสะพาน
- ส่วนขา - ท่านั่งยอง
- ส่วนขา - ท่าย่อเข่า
- ส่วนหน้าอก - ท่าวิดพื้น

การออกแบบตกแต่งสวน

อุปกรณ์
- อุปกรณ์ตกแต่งสวน
- อุปกรณ์อื่นๆแล้วแต่ทักษะที่จะสอน

อาจารย์ผู้สอนมีการสอนทักษะด้านการตกแต่งสวนให้แก่วัยรุ่น (อาจจัดทำไดบนชั้นดาดฟ้าของ the Hub สถานที่ที่พวกเขามีการจัดทำสวน อินทรีย์อยู่แล้ว)

- การวิเคราะห์ดินและการรักษา
- การทำปุ๋ยหมัก
- แสงแดด
- การเริ่มปลูกเมล็ดพืช
- การแปรรูปเมล็ดพืชเพื่อใช้ปลูก
- กระจกดอกไม้อ
- การขยายพันธุ์พืชจากการตัดลำต้น
- การโยกย้าย
- การรดน้ำ
- การคลุมดิน
- การจัดการศัตรูพืช
- การเล็มต้นไม้
- การเก็บรักษาอุปกรณ์

SATI

Appendix O: 7 Cups of Tea account creation instructions

7cups.com เข้าเว็บไซต์ตามนี้เลยนะ

พืดของฉั้น

รางวัลแห่งชีวิต
#DiscoverHongKong

ท่องเที่ยวในฮ่องกง รับโชคกลางปีก็ได้

DiscoverHongKong.com | ใจกว้างรับแสง

กรุงเทพมหานคร >

26°C มีเมฆเป็นส่วนมาก 0.0%

อ.	พ.	พท.	ศ.	ส.
☀	☀	☀	☀	☀
32°	32°	32°	33°	34°
22°	23°	23°	24°	23°

ข้อมูลจาก Foreca | อัปเดตแล้ว 12 นาทีที่ผ่านมา

พรีเมียมฟรี >

14 ก.พ.

7 Cups of Tea | Online T >

7cups.com

แล้วจะเข้ามาเจอหน้าแบบนี้

Start a Free 3-day Therapy Trial Become a Listener

จะใช้เว็บไซต์นี้ได้ ต้องสมัครสมาชิกก่อนนะ

MemberLogin

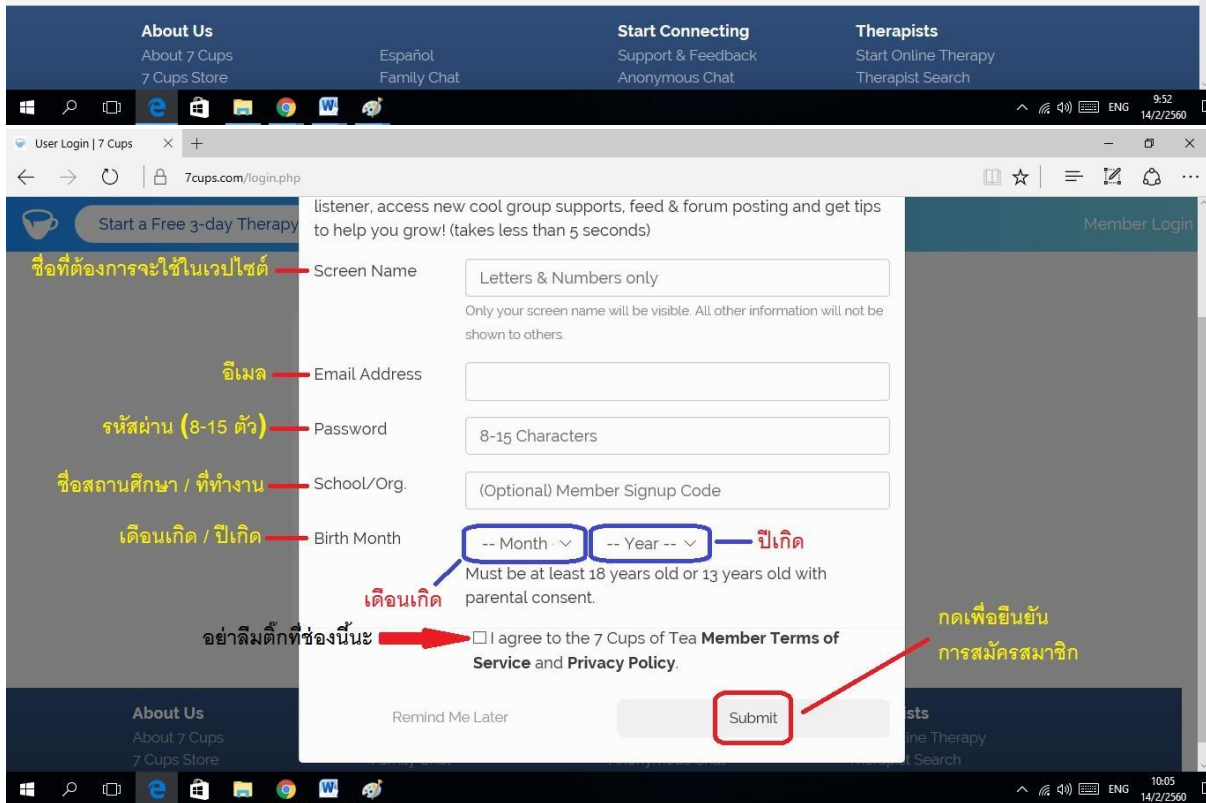
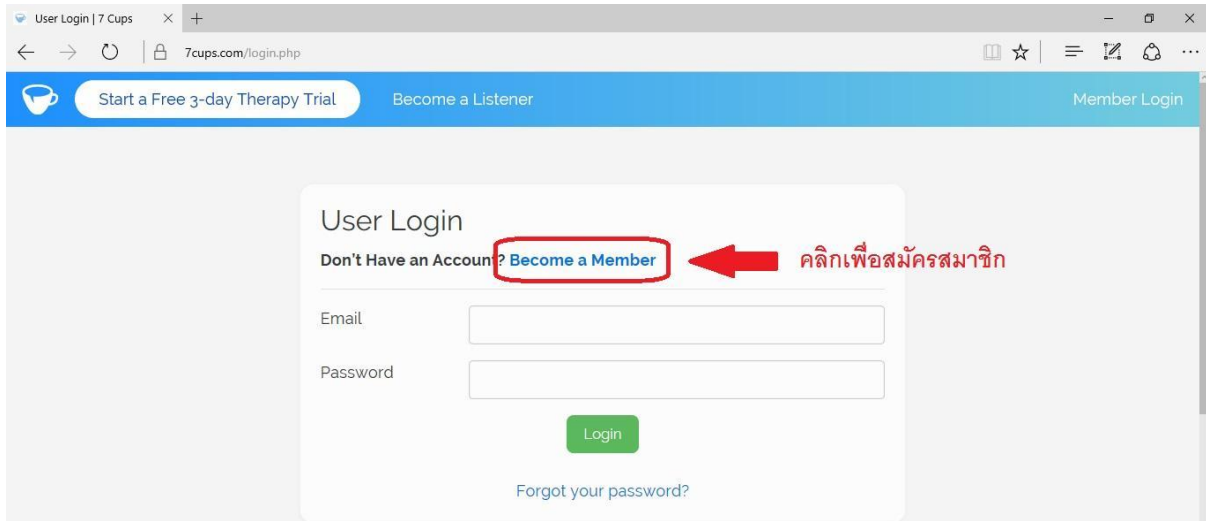
Need to talk?

Connect with caring people for online therapy & counseling

Free, anonymous and confidential online text chat with trained listeners, online therapists & counselors

Get Started

13,989,569 Conversations



User Login | 7 Cups

7cups.com/login.php

Start a Free 3-day Therapy Trial

Become a Listener

Member Login

Create a Free Member Account

Almost done! Just a few more seconds so we can better help!

On a scale of 1-10, with 10 being "very distressed," how distressed are you?

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	2	3	4	5	6	7	8	9	10

Which of the following best describes the issue you are struggling with?

-- Select One --

Remind Me Later

Submit

คลิกที่นี่เลย

About Us
About 7 Cups
7 Cups Store

Español
Family Chat

Start Connecting
Support & Feedback
Anonymous Chat

Therapists
Start Online Therapy
Therapist Search

My Growth Path | 7 Cup

7cups.com/member

Path

Chat

Community

Start a Free 3-day Therapy Trial

Become a Listener

1. คลิกที่นี่

- My Conversations
- Connect Now
- Browse Listeners
- Group Support Chat
- Chat with an Online Therapist
- Find a Therapist Near You

2. หน้าต่างนี้จะด้งขึ้นมา

3. คลิกที่นี่

Start Risk Free for 30 Days

My Progress

Embraced®

63 Growth Points to Next Level

Your Cup is Half Full

ou're on a 1 day

7

6

5

4

3

https://www.7cups.com/BrowseListeners/

The image shows a screenshot of a web browser displaying a page from 7cups.com. A modal dialog box is centered on the screen with the following text: "Want to better understand yourself? Take this emotional wellness test! Less than 2 minutes." Below this text are two buttons: "maybe later" and "Take the Test". The "maybe later" button is highlighted with a red rectangular border. A red line points from this button to a Thai annotation "คลิกที่ปุ่มนี้" (Click this button). Another Thai annotation "ถ้าหากว่าหน้าต่างนี้แจ้งเตือนมา" (If this window alerts me) is positioned to the left of the dialog box. The background shows a grid of listener profiles with "Leave Message" buttons. The browser's address bar and Windows taskbar are also visible.

Need to Talk to Someone × +

7cups.com/BrowseListeners/?agegroup=&expertise=&country=&language=Thai&keyword=&sortBy=

Path Chat Community Start a Free 3-day Therapy Trial Become a Listener

Want to better understand yourself?
Take this emotional wellness test! Less than 2 minutes.

ถ้าหากว่าหน้าต่างนี้แจ้งเตือนมา

maybe later

Take the Test

คลิกที่ปุ่มนี้

acupofchoc Hello! I'm glad to talk to you. I'm a listener. You can talk to me. I'll be here for you. LISTENS OVER 8

andraR andra, and I'm glad to talk to you. I'd be happy to help you. OVER 18

Leave Message

Leave Message

Leave Message

10:55 14/2/2560