Teaching About Interdisciplinary Health Lesson Plans In Middle School And High School: A Primer For New Teachers And Teacher Candidates

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Abstract
As part of the study for potential teacher candidates in the California State University credentialing program, it is necessary to introduce these future middle school and high school teachers to a health framework and curricular issues involving teaching about adolescent health. These new teacher candidates are required by state law to have an understanding of what adolescence is, and comprehension about the health status of teens. They must also provide a healthy environment in which students can learn. Additionally, these teachers may teach health in the secondary arena.

Introduction
When introducing health science concepts to new teacher candidates, it often becomes apparent that they have had little information in this field. Most student candidates are expecting to teach in other disciplines, and sometimes are not sure why they need a class dealing with health issues. One objective of the class is to broaden students’ horizons to new ideas in prevention, interdiction, and re-socialization of their population to healthier lifestyles, and, often to reeducate them about personal behaviors or habits. Teachers must be healthy to instill healthy concepts. Currency is always a concern when introducing these teacher candidates to health topics and research. The interdisciplinary approach accomplishes several of these goals.

A recent thrust in middle school education has been to educate students in teams, pods, “colleges,” or other group identifiers, to promote cohesion. Within these teams, students form a positive aspect of ethnocentrism. Additionally, the creation of an identity within small groups helps students make the transition to a new, larger environment such as movement to middle school from elementary education or middle school to the high school. Team teaching has been shown to successfully integrate disciplines as teachers coordinate the scope and sequence of the topic. Therefore, students in core disciplines may be studying a subject like plague from: a mathematics and statistics point of view, and describing health behaviors and symptoms historically. English writings and comprehension may be used to describe how the disease affected persons of that era. History classes might show how society was affected and changed over time as a result of the disease, and, through social studies, the cultural implications of plague can be presented. A student may have a better understanding of the idea of “Plague,” and its ramifications, if they study about it concurrently in their classes or pod. Contemporary issues such as drug problems or nutritional deficits can be approached this way.

The Focus
Students are introduced to the idea of interdisciplinary education in their university class, Health Education for Secondary School Teachers, as part of the state requirement for their secondary teaching credential. The assigned lesson plan related to reading, writing and doing math across the disciplines, may also include health, history, industrial technology, home economics, or other courses that are required for middle school or high school students. The purpose of the assignment is to: 1) familiarize these teacher candidates with
knowledge about the adolescent student; 2) give the teacher candidates a perspective on how teams may approach a topic area; and 3) allow the teacher candidates to feel comfortable with future teaching about or incorporating health science within their own disciplines of choice.

Information about concept areas in health science is introduced. The importance of becoming and staying healthy is stressed, both from the student perspective as well as from a teaching perspective. The ideas of health promotion and disease prevention are clarified, and teacher candidates are shown how to compile resources for their discipline area and for health education.

The examples of student work will show how, for example, statistics (the candidates discipline) can be incorporated with a health concept so that a team approach can be used to integrate the information. Students in high school English class may be asked to write an essay about how the plague ravaged much of the world during its pandemic.

A template is provided (California Healthy Kids Resource Center) (CDE, 2003a) for the university students to use as a guide. Also, a completed lesson plan is provided for reference. This sample lesson is taken from the Health Connections project coupling HIV/AIDS and Literature in the middle school funded by the California Department of Education through California Healthy Kids. Additionally, the website for the California Health Framework for K-12 is accessed (CDE, 2003b). These guides help to unify the assignment, and the lesson plan is graded using a rubric. University students are informed about the multitude of ways to construct a lesson plan, and the district, school, department, or other teachers in their discipline area may have preferences for how the lessons are constructed.

Once the students have chosen a concept area of health as their topic, the plan takes shape. Will it be a one day lesson? Is it part of a unit of study? These are questions that are clarified before beginning. Students must incorporate this health topic and the objectives for that topic into the plan along with objectives from their own discipline. The Ready, Set, Go format (from California Healthy Kids) is used.

The following represents a portion of the university curricular assignments in Health Education for Secondary School Teachers (see Appendices). The assignment entails constructing a lesson plan in which the teacher candidates incorporate their discipline along with a health topic. The plan is designed to be a one day lesson.

Construction of the lesson plan is an individual assignment; however, bi-weekly discussion in class and in groups with their colleagues, keeps a timeline intact, and minimizes clarification and trouble shooting.

Once the assignment is complete, the rubric is attached and the student receives his or her assessment of the project. The culminating experience of this work is sharing with students in the class each of the projects. They are circulated, and students may provide their own comments to other students’ work. It is encouraged that students keep their work and develop a portfolio of items that may be used for future interviews, or work in their future classroom.

One student developed a lesson plan incorporating health with computer science and discovered that the California Framework for Computer Literacy is still in its inception. This student devised new resources and new objectives to complete the lesson plan.
References

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Appendix A1
by Jeanne Tanner
Interdisciplinary Art and Health Lesson Plan
Using J. Lawrence Style Painting Creating Theme
“Reasons To Say No to Drugs”

Grade 9-12

Overview
Students will learn about the artist Jacob Lawrence, and will view his work as he focused on heroes in the midst of hardship. Students will see slides of Lawrence’s work from the migration series. They will be given a timeline to help illustrate the struggles Lawrence was depicting in his paintings. Students will be told about how he researched the subject as a form of inspiration. Students are to create a classroom series of paintings entitled “reasons and strategies for saying no.” Students now become the researching artist, they will be given a handout on drugs and their effects. Students must take notes as a researcher would do because there will only be a classroom set of the handout due to its lengthy form. Students will be given extra credit points for research beyond what is covered in class. Information must be documented for extra credit. Using the research information, students are to create an original painting based on the style of Jacob Lawrence. Composition must be worked out on paper in rough sketch form before starting the final painting. Students will turn in paintings along with self-evaluation sheet filled out plus any proof of extra research. *Note students may include text or narration with their artworks.

READY

Standards Based Learning Objectives: Health: Standard 3 from the California Health Framework
The student will understand and demonstrate behaviors that reduce the risk of becoming involved in potentially dangerous situations and will know how to react to situations in ways that help to protect his or her health.

Learning Objectives
Student will be able to:
1. Examine the influence of tobacco, alcohol, and other drug use on performing physical tasks and making judgments.
2. Select ways that reduce the risk of becoming involved in potentially dangerous situations.

Visual Arts: Content Standard 3
Choosing and evaluating a range of subject matter, symbols, and ideas.

Learning Objectives
Student will be able to:
1. Explore and understand prospective content for works of art.
2. Select and use subject matter, symbols, and ideas to communicate meaning.

Standard 6
Making connections between visual arts and other disciplines

Learning Objectives
Student will be able to
1. Identify connections between the visual arts and other disciplines in the curriculum.
SET

Teacher Preparation
Send home a letter to each student’s Parent/Guardian detailing drug information that will be cover in this lesson. (Guardian must sign Letter before the first day of the lesson). (Letter: Appendix A1)

- Give a brief overview of the lesson the day before the lesson.
- Run off timeline information paper: (class room set) (Appendix B1)
- Run off Visual aid for students. (Appendix C1)
- Run off Drug information sheet: (class room set) (Appendix D1)
- Run off self evaluation sheet (Appendix E1)

Teachers Materials
- Slides of Jacob Lawrence’s migration series (John P. Getty Museum – Public domain)
- Slides of previous student work (if available)
- Slide projector
- History of the Harlem Renaissance

Student Materials
1. Tempera paint in primary colors plus black and white
2. Brushes, small medium and large sizes
3. 12”x 18” hard board or masonite, (if funds are a problem use the backs of mat board or illustration board, size can be variable by 12”x 18” would be best because we are working like J. Lawrence)
4. Sketch paper
5. Pencils
6. Paper to take notes

Teachers Alert
Be sure to offer parents/guardians and others an opportunity to examine any and all information that will be covered in this lesson. Remind parents/guardians and others that the web addresses to link to drug and some other information is provided in the permission letter for them to accesses at their convenience.

Caution: students may have explicit question dealing with the issues of drugs and possibility other issues such as the migration depicted in the paintings reviewed in this lesson. Student may need to talk with parents, guardians, counselors, or others who hold positions or credentials in this area.
Motivating Activity
1. Show slides of art works; give a brief history of the works and what they are based on. Do not rush through slides, give students time during the viewing of each slide to ask question, give options, etc.
2. Ask questions during slide viewing:
   a. How do you feel about this art work?
   b. How do the colors or images make you feel?
   c. Do you think that the artist was able to convey his massage clearly?
   d. Do you think anything would help the viewer understand these works better; such as including text along side the pieces?
3. Hand out Visual aid for students. (Appendix C1)
4. Hand out timeline information paper: (class room set) (Appendix B)
5. “Getting into the artist’s shoes.” Students are asked to think like the artist. They see a social problem, (drug abuse). They need to research the problem so that they understand it enough to convey the problem to their viewers through their own art work.
6. Hand out the drug information sheet (class room set) (Appendix D1). Students need to take notes as a researcher. With only one class room set of these hand outs, let them know that any extra research in this area, if documented, results extra credit points.
7. Students are to choose a drug or drugs or just drugs in general to focus on to use as information to create their own original social awareness painting.
8. Have an open discussion about the drug information. During discussion ask questions:
   a. What if a friend...?
   b. What if someone asked you to...?

Use these and other questions to get the students to thinking about how the can use the drug information to create an original artwork. Have students brainstorm on paper on ideas for their artwork. The overall theme they will be working on is: Why and/or how to say no, and the social awareness of drug abuse.

If possible, have a place where students will be able to show their finished work in public. If this can be accomplished, let students know ahead of time so this will make the project take on special significance. A social awareness painting is meant to create social awareness, for the piece to fulfill its purpose it should be seen by the public

Lesson
After the motivating activity, students should have an idea of what they are going to paint.
1. Ask student to sketch ideas for their paintings on paper. Spend a day at least on this. Give individual feedback to students on their ideas.
2. Student will now sketch a final composition for their painting on canvas. Included with this sketch should be general ideas about any narration or text they are thinking about including with the final piece.
3. Remind student that these are still are pieces in the creation state and that nothing is complete at this point.
4. Have students turn in final sketches with written ideas.
5. Return sketches with comments before brushes start applying paint.
6. Students are to create their social awareness paintings using tempera paint, brushes, and hard board (see materials for other options)
7. Hand out student self evaluation sheet (Appendix E1)
8. Student are to hand in self-evaluation sheet along with final sketch(s), text or narration (optional) and final piece.
9. There will be a class critique of the art works. Only positive criticism, and comments are allowed
10. Display work in a public place. (Check with local vendors, non-profit galleries, places on campus, or a university.)
Appendix A2
Sample Letter to Guardians

Date

Dear Parent(s)/Guardian(s)

As a portion of the curriculum this semester, your student will be studying a lesson combining health and visual art. They will be creating social awareness paintings. The paintings will be relating to drug abuse. Students will be researching drug information so that they can use the information to paint paintings that will use the theme, “Why and How to Say No to Drugs.” They will develop an awareness of the dangers of drug use, investigate ways to refuse risky situations, and skillfully portray this in their art.

Your student will not be asked to disclose any personal information while studying this lesson. Figures used in the paintings will be fictional persons. You may peruse the material at any time during the semester. I encourage you to talk with your student about ways to healthfully maintain strong values, strong self-esteem, and refusal skills. This may help to prevent drug abuse, by using and sharing accurate and adequate, age appropriate information.

Also attached to this letter is a list of web sites that are the information resources for this lesson. Please discuss this with me at any time; I look forward to hearing from you.

Sincerely,

Name of Teacher

* Student, please have your parent or guardian read, sign and date this letter. It must be returned to me at least one day before our lesson begins.

cc. Principal’s Name
Appendix A3
Timeline
Selected Events in American History and the Life of Jacob Lawrence
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1619: The first slave ship sailing under a Dutch flag arrives in Jamestown, Virginia.
1793: First Fugitive Slave Act passed—allows judges to decide the status of an alleged fugitive slave without a jury trial.
1807: U.S. prohibits the importation of slaves but widespread smuggling continues until about 1862.
1821: Harriet Tubman is born a slave in Maryland.
1849: Harriet Tubman escapes slavery—the next year she begins making frequent trips to the South to guide more than 300 slaves to freedom using the Underground Railroad, and becomes known as the "Moses of her people." The Underground Railroad, a system created in the Northern states, helped escaping slaves at various secret stops with food, shelter, and encouragement.
1850: Second Fugitive Slave Act passed—its severity leads to abuses and an increase in abolitionists.
1852: Harriet Beecher Stowe's novel, Uncle Tom's Cabin, is published, greatly contributing to popular anti-slavery feelings.
1857: The Supreme Court delivers the Dred Scott decision denying citizenship to black people and legalizing slavery in all territories, including the West.
1860: November. Abraham Lincoln is elected President. He opposes the spread of slavery to the western territories.
1860-1861: Eleven southern states secede from the Union and form the Confederate States of America. This leads to Civil War.
1861-1865: Civil War. The economies of the Northern and Southern states were fundamentally different, (Southern states being reliant on large plantations and slave labor) and disagreements peaked over the issue of slavery. The Northern states opposed the expansion of slavery into the Western territories while the Southern states were afraid the North would block them from expanding slavery and even from keeping slavery legal in the South. The war lasted four years and resulted in the North's victory, the abolition of slavery, and the eventual reunification of the United States.
1863: January 1st. Lincoln issues the Emancipation Proclamation, freeing the slaves of the Confederate states. Enables the Union to recruit black soldiers and nearly 180,000 enlist. Lincoln says the Proclamation was "the central act of my administration, and the greatest event of the nineteenth century."
1864: Fugitive Slave Acts repealed.
1865: Congress ratifies the 13th Amendment to the Constitution—freeing all slaves in the United States. April. Lincoln is assassinated.
1865-1877: Reconstruction period during which the Confederate states are readmitted to the Union, upon acceptance of the 14th and 15th Amendments, intended to insure civil rights. Many political, social, and economic problems arise during this time.
1868: Congress ratifies 14th Amendment granting citizenship rights to blacks.
1870: 15th Amendment ratified—the right to vote shall not be denied on account of race or color.
1914-1918: World War I.
1915-1940: The Great Migration. A period in which hundreds of thousands of black Americans moved from the South to the North, seeking better lives and opportunities.
1867: September 7. Jacob Armstead Lawrence was born in Atlantic City, New Jersey.
1920: The 19th Amendment gives women the right to vote.
1920s: Harlem Renaissance—a period of artistic and literary revival in which black artists, writers, and musicians flourish, documenting their lives and their culture in a fresh way.
1929: Great Depression begins—decade in which the economy spirals downward with stock prices dropping, resulting in massive unemployment, bank failures, reduced spending levels, and decline in manufacturing. The depression eventually leads to Franklin D. Roosevelt's New Deal.
1930: Lawrence moves with his family to Harlem. Attends daycare program where he studies arts and crafts with Charles Alston.
1934: Lawrence drops out of high school to work when his mother loses her job.
1935: Lawrence begins painting scenes of life in Harlem.
1937: Zora Neale Hurston, a writer associated with the Harlem Renaissance, publishes novel Their Eyes Were Watching God. Picasso uses Cubism to make social commentary in Guernica, a mural-size painting inspired by Nazi bombings of a Basque town during the Spanish Civil War.
1938: Lawrence begins research for series on Frederick Douglass, the Maryland slave turned abolitionist, speaker, and writer. Langston Hughes publishes his collection of poems entitled A New Song.
1939-1945: World War II.
1939: Lawrence completes series of 32 panels, The Life of Frederick Douglass, and begins research for the Harriet Tubman series.
1940: Lawrence completes The Life of Harriet Tubman, a 31-panel series. Lawrence begins research for The Migration of the Negro at the Schomburg Collection.
1941: Japanese attack Pearl Harbor, U.S. joins WWII. Lawrence completes The Migration of the Negro, painting the 60 panels simultaneously.

1942: Publication of Richard Wright's novel, Native Son. CORE (Congress of Racial Equality) formed by University of Chicago students.
1943: Lawrence is inducted into the U.S. Coast Guard. The following year, he is assigned to the first racially integrated ship in U.S. Naval history.
1948: Lawrence is commissioned to create illustrations for Langston Hughes' One-Way Ticket, a collection of poems.
1954: U.S. Supreme Court rules that public school segregation is unconstitutional.
1955: Rosa Parks is arrested for refusing to sit in the black section of a segregated bus in Montgomery, Alabama. Civil Rights Movement begins.
1964: Civil Rights Act passed—its goal is to end discrimination based on race, color, religion or national origin.
1965: Lawrence creates his first known self-portraits.
1967: Lawrence completes paintings for Harriet and the Promised Land.
1968: Martin Luther King, Jr. assassinated. Lawrence begins to create paintings of builders, a motif which becomes a primary element in his work over the next 30 years.
1969: Lawrence completes 22 ink drawings for illustration of Aesop's Fables. Other artists have illustrated Aesop's Fables including Alexander Calder in 1931, the American sculptor best known for his mobiles.
1970: Lawrence accepts full professorship at University of Washington.
1971: Lawrence is commissioned to create a silkscreen print for the 1972 Munich Olympic Games.
1976: Lawrence co-founds the Rainbow Art Foundation in New York City with Romare Bearden, Willem de Kooning, and Bill Caldwell to assist young printmakers in the production, exhibition, and marketing of their work.

1980: Lawrence completes first mural—Exploration—for Howard University.

1985: Lawrence creates group of eighteen color-pencil drawings on builders theme. Lawrence completes mural entitled Theater for University of Washington performance Hall.

1991: Lawrence is one of four artists commissioned to design murals for a new subway complex at Times Square.

1996: Lawrence completes design for 72-foot long mural for Times Square.

1998: Lawrence completes twelve paintings on the builders theme.

1999: Lawrence completes twelve paintings on games theme.

2000: June 9. Jacob Lawrence dies in his sleep at the age of 82.
Appendix A4
The National Clearinghouse for Alcohol and Drug Information

Drugs of Abuse

Drug Categories for Substances of Abuse
Narcotics, Alfentanil, Stimulants, Amphetamine, Cocaine*, Benzedrine, Codeine, Benzphetamine, Crack Cocaine*, Butyl, Nitrite, Fentanyl, Dextroamphetamine, Heroin, Methamphetamine, Hydromorphone, Methylphenidate, Ice, Phenmetrazine, Meperidine, Methadone, Hallucinogens, Bufotenine, Morphone, LSD, Nalorphine, MDA, Opium, MDEA, Oxycodone, MDMA, Propoxyphene, Mescaline, MMDA, Depressants Amobarbital, Phencyclidine, Benzodiazepine, Psilocybin, Chloral Hydrate Chlordiazepoxide, Cannabis, Lorazepam, Diazepam, Marijuana, Glutethimide, Tetrahydrocannabinol, Meprobamate, Methaqualone, Alcohol, Ethyl Alcohol, Nitrous Oxide, Pentobarbital, Steroids, Dianabol, Phenobarbital, Nandrolone, Secobarbital.

*Cocaine, while classified under the Controlled Substances Act (CSA) as a narcotic, is also discussed as a stimulant.

Drug Category Profile

Table 1
List of Narcotics and Drug Action

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dependence (Hours)</th>
<th>How Used/ Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opium</td>
<td>High, High</td>
<td>Oral, Smoked 3-6</td>
</tr>
<tr>
<td>Morphine</td>
<td>High, High</td>
<td>Oral, Smoked, Injected 3-6</td>
</tr>
<tr>
<td>Codeine</td>
<td>Mod., Mod.</td>
<td>Oral, Injected 3-6</td>
</tr>
<tr>
<td>Heroin</td>
<td>High, High</td>
<td>Smoked, Injected, Sniffed 3-6</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>High, High</td>
<td>Oral, Injected 3-6</td>
</tr>
<tr>
<td>Meperidine</td>
<td>High, High</td>
<td>Oral, Injected 3-6</td>
</tr>
<tr>
<td>Methadone</td>
<td>High, High</td>
<td></td>
</tr>
</tbody>
</table>

What are Narcotics?
Drugs used medicinally to relieve pain
High potential for abuse
Cause relaxation with an immediate "rush"
Initial unpleasant effects - restlessness, nausea

Possible Effects
Euphoria, Drowsiness, respiratory depression, Constricted (pin-point) pupils

Symptoms of Overdose
Slow, shallow breathing, clammy skin, Convulsions, coma, possible death

Withdrawal Syndrome
Watery eyes, runny nose, yawning, cramps, Loss of appetite, irritability, nausea
Tremors, panic, chills, sweating

**Indications of Possible Misuse**
Scars (tracks) caused by injections, Constricted (pin-point) pupils, Loss of appetite, Sniffles, watery eyes, cough, nausea, Lethargy, drowsiness, nodding, Syringes, bent spoons, needles, etc.

**Drug Category Profile**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dependence Physical/ Psychological</th>
<th>How Used</th>
<th>Duration (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbiturates</td>
<td>High/High</td>
<td>Oral</td>
<td>1-16</td>
</tr>
<tr>
<td>Methaqualone</td>
<td>High/High</td>
<td>Oral</td>
<td>4-8</td>
</tr>
<tr>
<td>Tranquilizers</td>
<td>High/High</td>
<td>Oral</td>
<td>4-8</td>
</tr>
<tr>
<td>Chloral Hydrate</td>
<td>Mod./Mod.</td>
<td>Oral</td>
<td>5-8</td>
</tr>
<tr>
<td>Glutethimide</td>
<td>High/Mod.</td>
<td>Oral</td>
<td>4-8</td>
</tr>
</tbody>
</table>

**What are Depressants?**
These are drugs used medicinally to relieve anxiety, irritability, and tension. They have a high potential for abuse, development of tolerance, they produce a state of intoxication similar to that of alcohol. Combined with alcohol, this increases the effects, and multiplies the risks.

**Possible Effects**
They may produce sensory alteration, anxiety reduction, intoxication, and, in small amounts, may cause calmness, and relaxed muscles. In larger amounts they cause slurred speech, impaired judgment, and loss of motor coordination. Very large doses may cause respiratory depression, coma, or death. Newborns of abusers may show dependence, withdrawal symptoms, behavioral problems, and/or birth defects.

**Symptoms of Overdose**
Shallow respiration, clammy skin, dilated pupils, Weak and rapid pulse, coma, death

**Withdrawal Syndrome**
Anxiety, insomnia, muscle tremors, loss of appetite, abrupt cessation or reduced high dose may cause convulsions, delirium, death

**Indications of Possible Misuse**
Behavior similar to alcohol intoxication (without odor of alcohol on breath), Staggering, stumbling, lack of coordination, slurred speech, Falling asleep while at work, difficulty concentrating, Dilated pupils
Drug Category Profile

Table 3
List of Stimulants and Drug Action

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dependence</th>
<th>How Used</th>
<th>Duration (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cocaine</td>
<td>Possible/High</td>
<td>Sniffed, smoked, injected</td>
<td>1-2</td>
</tr>
<tr>
<td>Amphetamines,</td>
<td>Possible/High</td>
<td>Oral, injected</td>
<td>2-4</td>
</tr>
<tr>
<td>Methamphetamine,</td>
<td>Possible/High</td>
<td>Sniffed, Oral, injected</td>
<td>2-4</td>
</tr>
<tr>
<td>Phenmetrazine,</td>
<td>Possible/High</td>
<td>Oral, injected</td>
<td>2-4</td>
</tr>
<tr>
<td>Methylphenidate,</td>
<td>Possible/Mod.</td>
<td>Oral, injected</td>
<td>2-4</td>
</tr>
<tr>
<td>Other Stimulants,</td>
<td>Possible/High</td>
<td>Oral, injected</td>
<td>2-4</td>
</tr>
<tr>
<td>Ice</td>
<td>High/High</td>
<td>Smoked, Oral, Injected, Inhaled</td>
<td>4-14</td>
</tr>
</tbody>
</table>

Stimulants
Drugs used to increase alertness, relieve fatigue, make one feel stronger and more decisive; used for euphoric effects or to counteract the "down" felling of tranquilizers or alcohol

Possible Effects
Increased heart and respiratory rates, elevated blood pressure, dilated pupils and decreased appetite; high doses may cause rapid or irregular heartbeat, loss of coordination, collapse; may cause perspiration, blurred vision, dizziness, a feeling of restlessness, anxiety, delusions

Symptoms of Overdose
Agitation, increase in body temperature, hallucinations, convulsions, possible death

Withdrawal Syndrome
Apathy, long periods of sleep, irritability, depression, disorientation

Indications of Possible Misuse
Excessive activity, talkativeness, irritability, argumentativeness or nervousness
Increased blood pressure or pulse rate, dilated pupils, Long periods without sleeping or eating, Euphoria
*Cocaine, while classified under the Controlled Substances Act (CSA) as a narcotic, is also discussed as a stimulant.

Substances of Abuse - Brief Profiles: Cocaine
Also known as: Coke, Dust, Snow, Flake, Blow, Girl

You Probably Know Why Cocaine Is Abused…
For a care free feeling, for euphoria, relaxation, and to feel in control

Did You Know…
A cocaine "high" lasts only about 5 to 20 minutes. Cocaine use may cause severe "mood swings" and irritability. You need more and more cocaine each time you want a "high. This is called tolerance. Cocaine increases your blood pressure and heart rate -particularly dangerous if you have a heart condition. One use can cause death. Possession and use, unless prescribed by a physician, are illegal and can result in fines and arrest.
Substances of Abuse - Brief Profiles: Crack
Also known as: Crack, "Crack cocaine", Freebase rocks, Rock

You Probably Know Why Crack Is Abused...
To produce a quick high, to feel powerful, and to produce euphoria

But Did You Know That...
Crack is almost instantly addictive? One use could cause a fatal heart attack. Repeated use may cause insomnia, hallucinations, seizures, paranoia. The euphoric effects of crack last only a few minutes. Crack possession and use are illegal in all fifty states. There are more hospitalizations per year resulting from crack and cocaine use than any other illicit substance.

Substances of Abuse - Brief Profiles: Ice
Also known as: Meth, Crystal, Crank, Methamphetamine

You Probably Know Why Ice is Abused...
Temporary mood elevation, exhilaration (high), and increased mental alertness
As an “upper” to increase wakefulness

But Did You Know That...
Ice is extremely addictive? Sometimes with just one use, Ice can cause convulsions, heart irregularities, high blood pressure, depression, restlessness, tremors, and/or severe fatigue. An overdose can cause coma and death. When one stops using Ice, one may experience a deep depression. Ice causes a very jittery high, along with anxiety, insomnia, and sometimes paranoia.

Substances of Abuse - Brief Profiles: Inhalants
Some of the substances that are abused:
Butyl nitrite, Amyl nitrite (Gas in aerosol cans), Gasoline and Toluene vapors (Correction fluid, glue, marking pens)

You Probably Know Why Inhalants are Abused...
To experience a quick, inexpensive” high”

Inhalants May Cause
Loss of muscle control, and/or slurred speech, drowsiness or loss of consciousness, excessive secretions from the nose and watery eyes. They may also cause brain damage and damage to lung cells
Drug Category Profile

Table 4
List of Hallucinogens and Drug Action

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dependence</th>
<th>How Used</th>
<th>Duration (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCP-</td>
<td>Unknown/High</td>
<td>Smoked, Oral, Injected</td>
<td>Up to days</td>
</tr>
<tr>
<td>Angel Dust</td>
<td>Unknown/High</td>
<td>Smoked, Oral, injected</td>
<td>Up to days</td>
</tr>
<tr>
<td>Loveboat</td>
<td>Unknown/High</td>
<td>Smoked, Oral, Injected</td>
<td>Up to days</td>
</tr>
<tr>
<td>Green/Red Dragon</td>
<td>None/Unknown</td>
<td>Smoked, Oral, Injected</td>
<td>Up to days</td>
</tr>
<tr>
<td>LSD-</td>
<td>None/Unknown</td>
<td>Oral</td>
<td>8-12 hours</td>
</tr>
<tr>
<td>Acid-</td>
<td>None/Unknown</td>
<td>Oral</td>
<td>8-12 hours</td>
</tr>
<tr>
<td>Mescaline, Peyote,</td>
<td>None/Unknown</td>
<td>Oral</td>
<td>8-12 Hours</td>
</tr>
<tr>
<td>Psilocybin,</td>
<td>None/Unknown</td>
<td>Oral, Injected</td>
<td>8-12 hrs.</td>
</tr>
<tr>
<td>Designer Drugs*</td>
<td>Unknown/Unknown</td>
<td>Oral, injected, smoked, sniffed,</td>
<td>Variable</td>
</tr>
<tr>
<td>Ecstasy - PCE</td>
<td>Unknown/Unknown</td>
<td>Oral, injected, smoked,</td>
<td>Variable</td>
</tr>
</tbody>
</table>

Hallucinogens?
These are drugs that produce behavioral changes that are often multiple and dramatic. No known medical use, but some block sensation to pain and use may result in self-inflicted injuries. "Designer Drugs", made to imitate certain illegal drugs, are often many times stronger than drugs they imitate.

Fun, Stimulation or depression, Behavioral changes

Did you know that…
One use of LSD or PCP can cause multiple and dramatic behavioral changes. Large doses of hallucinogens may cause convulsions, ruptured blood vessels in the brain and irreversible brain damage. Many hallucinogens cause unpleasant and potentially dangerous "flashbacks," long after the drug was used. Most hallucinogens cause "hallucinations," i.e., changes in perception of time, smell, touch, etc.

Drug Category Profile

Table 5
List of Cannabis Derivative and Drug Actions

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dependence</th>
<th>How Used</th>
<th>Duration (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana ,pot, grass</td>
<td>Unknown/Moderate</td>
<td>Smoked, Oral</td>
<td>2-4</td>
</tr>
<tr>
<td>Tetrahydrocannabinol</td>
<td>Unknown/Moderate</td>
<td>Smoked, Oral</td>
<td>2-4</td>
</tr>
<tr>
<td>Hashish</td>
<td>Unknown/Moderate</td>
<td>Smoked, Oral</td>
<td>2-4</td>
</tr>
<tr>
<td>Hashish Oil</td>
<td>Unknown/Moderate</td>
<td>Smoked, Oral</td>
<td>2-4</td>
</tr>
</tbody>
</table>
What is Cannabis?
The hemp plant is where marijuana and hashish are produced; Hashish consists of resinous secretions of the cannabis plant; Marijuana is a tobacco-like substance

Possible Effects
Euphoria followed by relaxation; loss of appetite; impaired memory, concentration, knowledge retention; loss of coordination; more vivid sense of taste, sight, smell, hearing; stronger doses cause fluctuating emotions, fragmentary thoughts, disoriented behavior, psychosis; may cause irritation to lungs, respiratory system; may cause cancer

Symptoms of Overdose
Fatigue, lack of coordination, paranoia, psychosis

Withdrawal Syndrome
Insomnia, hyperactivity, sometimes decreased appetite

Indications of Possible Misuse
Animated behavior, loud talking, followed by sleepiness, Dilated pupils, bloodshot eyes
Distortions in perception; hallucinations, Distortions in depth and time perception; loss of coordination

Substances of Abuse - Brief Profiles: Marijuana
Also known as: Pot, Grass, Joints, Roaches, Reefer, Weed, Mary Jane

Marijuana is abused to gain...
Relaxation, Euphoria

Did you know that...
Marijuana may cause impaired short-term memory, a shortened attention span and delayed reflexes? During pregnancy, marijuana may cause birth defects. Marijuana may cause a fast heart rate and pulse. Repeated use of marijuana may cause breathing problems. Possession of marijuana is illegal in all fifty
Drug Category Profile

Table 6
List of Alcohol Drug Actions

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dependence</th>
<th>How Used</th>
<th>Duration (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>Possible/Possible</td>
<td>Oral</td>
<td>1-4</td>
</tr>
</tbody>
</table>

What is Alcohol?
Liquid distilled product of fermented fruits, grains and vegetables
Used as solvent, antiseptic and sedative, Moderate potential for abuse

Possible Effects
Intoxication, Sensory alteration, Anxiety reduction

Symptoms of Overdose
Staggering, Odor of alcohol on breath, Loss of coordination, Slurred speech, dilated pupils, Fetal alcohol syndrome (in babies), Nerve and liver damage

Withdrawal Syndrome
Sweating, Tremors, Altered perception, Psychosis, fear, auditory hallucinations

Indications of Possible Misuse
Confusion, disorientation, loss of motor nerve control, Convulsions, shock, shallow respiration, Involuntary defecation, drowsiness, Respiratory depression and possible death

Alcohol
Also known colloquially as: Booze, Juice, Brew, Vino, Sauce

You probably know why alcohol is abused--
It is used as a relaxation drug, for sociability, and as an inexpensive high

But did you know that-
Alcohol is a depressant that decreases the responses of the central nervous system?
Excessive drinking can cause liver damage and psychotic behavior.
As little as two drinks can impair coordination and thinking.
Alcohol is often used by substance abusers to enhance the effects of other drugs.
Alcohol continues to be the most frequently abused substance among young adults.

Drug Category Profile

Table 7
List of Steroids and Drug Actions

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dependence</th>
<th>How Used</th>
<th>Duration (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dianabol</td>
<td>Possible/Possible</td>
<td>Oral</td>
<td>Day/Weeks</td>
</tr>
<tr>
<td>Drug</td>
<td>Dependence</td>
<td>How Used</td>
<td>Duration (hours)</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>----------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Nandrolone</td>
<td>Possible/ Possible</td>
<td>Oral</td>
<td>Day/Weeks</td>
</tr>
</tbody>
</table>

**What are Steroids?**
Synthetic compounds available legally and illegally. These are drugs that are closely related to the male sex hormone, testosterone. There is moderate potential for abuse, particularly among young males

**Possible Effects**
Increase in body weight, Increase in muscle strength, Enhance athletic performance
Increase physical endurance

**Symptoms of Overdose**
Quick weight and muscle gains, Extremely aggressive behavior or "Roid rage"
Severe skin rashes, Impotence, withered testicles, In females, development of irreversible masculine traits

**Withdrawal Syndrome**
Significant weight loss, Depression, Behavioral changes, trembling

**Indications of Possible Misuse**
Increased combativeness and aggressiveness, Jaundice, Purple or red spots on body; unexplained darkness of skin, Persistent unpleasant breath odor, Swelling of feet or lower legs

**Types of steroids:**
Anabolic (male hormone)- steroids most frequently abused for muscle increase
Cortical
Estrogenic (female hormone)

**You probably know that steroids are abused to…**
Increases strength, Increase muscle size, Help muscles recover
steroids may cause- Severe acne, rashes, stunted growth, and sexual function problems? Women take on masculine traits, develop hairiness, behavioral changes, and aggressiveness ("roid rages")
Long-term effects, such as cholesterol increases, heart disease, liver tumors, cancer, cataracts and death may ensue.
Appendix A5
Self Evaluation Sheet

Name ____________________________
Period __________   Date __________________

1. Content: (What is in the piece about?)

2. Form: (Art formal elements; line, shape, color, value, texture, composition.)

3. Context: (Environment surrounding the making of the piece, i.e. what research, information, planning, ideas, inspiration, etc. went into the making of this piece)

4. Technique: (How did you use the tools, and what tools did you use to create the final piece)

5. Comments: (this will not graded). What did you think of the project, outcome, and things you learned? If you could make changes to the project they would be? (If you run out of room continue on back. Include question number)
Works Cited


Appendix B1
By Lani Green

Informative and Persuasive Web Design About Teens and Drugs

Lesson Overview
The focus of this lesson is basic web design, implementation and research for Grades Nine and Ten. The students will create a unique web site designed to display information on drugs affecting high school students. They will develop preventive measures that can be taken in a persuasive format. This will be achieved by utilizing information gathered from their own research done on the Internet, school surveys and discussion boards, and techniques gathered in class through discussion groups.

Standards: Basic Learning Objectives

Computer Technology
There are no standards currently used for Computer Science courses. However, computer literacy classes are taught in secondary schools and there were a few websites describing efforts in the direction of establishing standards in this field.

The Commission on Technology in Learning is a site that can be reached off of the California department of education site or directly using this address: http://www.cde.ca.gov/ctl/index.html

(For this assignment I will suggest artificial standards)

Standard 1:
1. The student will understand and demonstrate the use of basic file structures.

To demonstrate this, a student will be able to place files and folders in a structure at least three deep and be able to retrieve the information given a path.

Standard 2:
The student will understand and demonstrate the use of Networks: LANs, MANs, and WANs.

To demonstrate this, students will be able to navigate, search and collect information from the Internet, and/or the network for that school.

Learning Objectives
Students will be able to:
1. Perform a variety of queries for their research topic using the major search engines available on the Internet.
2. Organize and store information for their website.
3. Design and create their own website.
Health

Standard 3:
The student will understand and demonstrate behaviors that reduce the risk of becoming involved in potentially dangerous situations and will know how to react to situations in ways that help to protect his or her health.

Students in high school who meet this standard will be able to:
1. Examine the influence of tobacco, alcohol, and other drug use on accomplishing physical tasks and making judgments. See the California Health Framework retrieved from http://www.roe.ca.gov/challengelHealthydlhlhighschool.pdf

Learning Objectives

Students will be able to:
1. Recognize the pressures involving drug use and offer ways to work around these pressures.
2. Examine and demonstrate the effects of tobacco, alcohol and other kinds of drug use.
3. Understand the legal consequences of drug use.
4. Demonstrate and inform community of signs and resources related to teen drug use with the use of the website.

English- Language-Arts

Content Standards

2.0 Writing Applications (Genres and Their Characteristics)
Students combine the rhetorical strategies of narration, exposition, persuasion, and description to produce texts of at least 1,500 words each. Student writing demonstrates a command of standard American English and the research, organizational, and drafting strategies outlined in Writing Standard 1.0.

2.4 Write Persuasive Compositions
a. Structure ideas and arguments in a sustained and logical fashion.
b. Use specific rhetorical devices to support assertions (appeal to logic through reasoning; appeal to emotion or ethical belief; relate a personal anecdote, case study, or analogy).
c. Clarify and defend positions with precise and relevant evidence, including facts, expert opinions, quotations, and expressions of commonly accepted beliefs and logical reasoning.
d. Address readers' concerns, counterclaims, biases, and expectations.

California State Department of Education. URL: http://www.cde.ca.gov/standards/

Learning Objectives

Students will be able to:
1. Write persuasive content on their web sites using their research and information in a manner they feel best targets those they are trying to reach.
2. They will be able to present this information in a logical and concise manner.
Set

**Teacher Preparation:**
1. Run off Survey questions and discussion topic handout
2. Prepare the file cabinet with objects to find and the path needed to locate them. Que video
3. Set up website accounts for students
4. Set up discussion board online
5. Create web site for the survey

**Materials**
Computers connected to the Internet.
Paper and pencil
Questions
File cabinet materials

**Teacher Alert**
Here is an excerpt of an article from the National Institute for Drug Abuse:

The Internet offers unique marketing opportunities, with interactive online media particularly attractive to young people. These include free giveaways and branded merchandise in exchange for personal information (for use in marketing the product); promotion of products through games, icons, and cartoon characters; and chat rooms where youngsters can exchange information on tobacco, alcohol and other drugs. Most of these sites are not edited for content and can be easily accessed by users of all ages.


Letting teenagers search for drug information on the Internet may lead to information that is in opposition to the intention of the lesson. Within the computer labs at schools, the sites that are related to the one given above should be added to the list of sites filtered out during Internet research. However, this may not be-controlled at home and a letter should be sent home notifying the parents of the content addressed in this lesson and of programs they can use to safeguard the internet activity at home. (Teacher Alert: Parent Letter)
Motivating Activities
These activities are used to prepare the students for the creation of their web site.

Discussion
The students will begin by getting into groups of two and discussing some questions they have surrounding drug use for their age group, circumstances they or a friend have experienced, and estimations on what percent of their school student body is using drugs on a monthly basis. Once the groups have had some time to discuss things, the groups will break up and each student will anonymously fill out a form (Appendix A) that they can write some of the questions and opinions. This will be submitted and used as topics for the discussion board that the teacher creates prior to this lesson as well as the questions posed on the survey site.

Students will be given the Internet address of the sites for their use as well as the rest of the student body. This will be an anonymous forum for the teens to express their view on this topic.

Toward the end of the lesson, the logs from the discussion board and results from the survey will be reviewed in class.

Web Design Analysis and Search Techniques
In class, we will discuss and perform various searches for websites, given a topic. We will share search engines we use and what they are best at searching. When we find the website we are looking for then we will discuss the design and organization elements of the site.

We will then discuss the important points such as: speed offloading, color, layout, how informative is the content given the intended purpose, ease of navigation around the site and other related elements.

File Structure
To aid in the multitude of files and folders that will be needed to organize and be retrieved for each web site, students will participate in a file structure activity described in (Appendix B).

Lesson
After the students have the research they gathered, design elements taken into consideration, understanding of basic file structure and the computers necessary to create a website, they will begin by completing it in 5 steps.

1. Choose a topic (content is as important as how it is displayed)
   a. Describe the drug the students have chosen to research
   b. Describe negative affects of this drug
   c. Describe way to avoid peer pressure in situation where students may come
      1) in contact with the drug they chose.
      2) Design layout
      3) Create template
      4) Put information on the topic in the template
      5) Upload, test the site and submit the URL of the site.
The main page on each website will be some sort of introduction page. It must clearly state a purpose. The page may be used to describe the drug the student chose to write on.

The site needs to have at least 3 links on it.
- a link back to the main class site
- a link to the negative affects page
- a link to the Preventive methods page

From here we will begin working on our individual websites. There will be a formal introduction of the basic tools we are working with, and then this will be in a relaxed environment. You are encouraged to help each other with ideas, resources, and techniques. You will need to keep a journal of the code, software, web sites, processes, debugging and so on that you use throughout this process. This journal will be used toward a end of the year project that will consist of making a student computing resource web site for the school.

**Beyond**

There are many ways this lesson can be extended here are some ideas:

1. Before students actually create the web site, they can draw content diagrams, navigation flowcharts of their website and/or storyboards using UML - unified manipulation language.
2. Collect statistics from discussion board and surveys and have the class create a spreadsheet graph of the results
3. Create a student club to be responsible for responding to and keeping up the discussion board and surveys
4. Use the final websites from the class and give an informational session for students, parents, and teachers on the problems, symptoms and solutions to the drug abuse problems in schools and home.
5. Have the students draw a diagram of how all of the web sites that have been made in class can be connected together. Keeping in mind about each web site’s graphics, content and so on.
Appendix B2
Questionnaire

Please complete the following questions. Circle Yes or No for each drug.

1. Have you ever experimented with: (circle one)
   a. Alcohol Yes No
   b. Cigarettes Yes No
   c. Ecstasy Yes No
   d. LSD Yes No
   e. Marijuana Yes No
   f. Inhalants Yes No
   g. Other Yes No

2. Have you use these drugs more than once a week?: (circle one)
   a. Alcohol Yes No
   b. Cigarettes Yes No
   c. Ecstasy Yes No
   d. LSD Yes No
   e. Marijuana Yes No
   f. Inhalants Yes No
   g. Other Yes No

3. Do you feel pressure from friends to use any of the drugs listed below? (circle one)
   a. Alcohol Yes No
   b. Cigarettes Yes No
   c. Ecstasy Yes No
   d. LSD Yes No
   e. Marijuana Yes No
   f. Inhalants Yes No
   g. Other Yes No

List below any questions you may have on the use of a drug by your peers or the harmful effects of specific drug. These questions may be chosen to use in a surveyor as a topic on the discussion website.
Appendix B3
File Structure Activity

For this group work, I will have some information on a piece of paper within one or more folders, within the file cabinet. The group will be given instructions to get to that piece of information.

Step 1
Once you have gotten the information, you will have to place the information somewhere else, at least 3 levels deep, after you have signed your name on it.

Step 2
Then you will need to write instructions for another group to find it. If the other group cannot find it, then the first group will have to see why their instructions may have not been complete.

Example: (this will be demonstrated)
Get Info:
File cabinet: A
Section: Dog
Folder: Puppy
Envelope: Golden Retriever
Paper: Owner
Change Info:
On paper Owner, change the owners name to your groups name Put info back:
File cabinet B
Section: Mammal
Folder: Dog
Envelope: Golden Retriever
Paper: Owner

Function

Procedure
One group will go first and: they will decide where they would like to place their document. It will not have any name on the document yet. This group will right instructions for the next group to find the document. The next group will find the paper and put their name on it. Then they will place it back into the file cabinet and write directions for the next group.

After the last group has placed the document back into the file cabinet, and when the first and every group’s name is on the piece of paper, then some reward can be given.
# Works Cited

<table>
<thead>
<tr>
<th>Work</th>
<th>Web Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dance Safe- This is Your Brain on Ectasy</td>
<td><a href="http://www.dancesafe.org/slideshow/">http://www.dancesafe.org/slideshow/</a></td>
</tr>
<tr>
<td>Ectasy Data</td>
<td><a href="http://www.ecstasydata.org">http://www.ecstasydata.org</a></td>
</tr>
<tr>
<td>Network in the Mix</td>
<td></td>
</tr>
<tr>
<td>The Vaults of Eurovid</td>
<td><a href="http://www.erowid.org/">http://www.erowid.org/</a></td>
</tr>
<tr>
<td>What U Do</td>
<td><a href="http://whatudo.org">http://whatudo.org</a></td>
</tr>
</tbody>
</table>