**Health Education Lesson Plan: Drugs and Medications**

**March 1, 2012**

**Descriptive Information**

**Skill Emphasis (NHES):** Decision Making (Post-Class Assessment)

**Grade Level:** 9 Grade

**Content Area:** Alcohol and Other Drugs (AOD)

**Content Descriptor and Sub Descriptors**:

 2. Short-Term and Long-Term Effects of AOD Use

 2.2 Physical, social, and emotional effects

 2.6 Effects of Marijuana use

**Title of Lesson:** “Marijuana Know How”

**PA Standard (Health & PE):**

10.1.6.E. Identify health problems that can occur throughout life and describe ways to prevent them.

10.2.9.D. Analyze and apply a decision-making process to adolescent health and safety issues.

**Curricular Connections:** Science

**Adolescent Risk Behavior:** Alcohol andDrug Use

**Behavioral Objectives:**

Cognitive- After participating in the “Catch it if you Can”, students will be able to describe the short-term physiological physical effects of marijuana.

Congitive- During the Think, Write, and Rotate activity, students will demonstrate decision making skills centered on concepts of marijuana.

Affective- During the class discussion, the students will contribute and value ideas from their peers regarding the use of marijuana.

 *Skill (Decision Making)* = During the Assessment Assignment, the students will practice the skill of decision making in a marijuana scenario.

**Brief Outline of Today’s Lesson**

1. Bell Ringer: YouTube Video
2. Introduction to the Lesson
3. Content and Instructional Strategies
	1. What is Marijuana?
	2. Effects of the Drug
	3. Signs of Abuse
4. In Class Learning Activity: “Catch It if You Can”
5. Assessment
	1. “Marijuana Scenarios” Worksheet
6. Final Thoughts/ Conclusion

**Expanded Outline of Today’s Outline**

1. **Bell Ringer**

YouTube Video.

http://www.youtube.com/watch?v=FqG18lTZapg&feature=related

This video is a PSA created by The National Youth Anti-Drug Media Campaign, abovetheinfluence.org. The PSA shows students who are placing leeches on their body to “fit in” to the social norms of the school, portraying the absurd effects of peer pressure. The students will observe the 2-minute video to get their minds set on drugs and the peer pressure of doing them. Immediately after viewing the video, the introduction will begin.

1. **Introduction to the Lesson**

I am sure some of you have seen this commercial. Why is this so ridiculous? (Allow for responses). Today we are going to talk about marijuana. Many of you are in the position of being peer pressured into doing things you know are wrong, but because it is looked at as the “cool thing” to do, some of us do it. In this lesson, we are going to talk about the physical effects of marijuana and how this could affect your everyday life as well as your future, as well as analyzing the decisions that lead to marijuana abuse.

1. **Content and Instructional Strategies**

\*\*Content will be presented to the students via PowerPoint. Questions will be asked to the students during the lecture (Q.).

Content-

 A. Marijuana is the most abused illicit drug in America. **Q**. Why do you think so?

* + Created from Hemp- Cannabis Sativa
		- THC (Tetrahydrocannabinol) is the main chemical compound in marijuana
		- THC is a psychoactive compound that acts on cannabiniod receptors in brain that affect connection strength between neurons.
	+ **Q.** What does marijuana look like or what forms does it come in? Dried shredded flowers and leaves, grey/green look
	+ Marijuana is ingested through the burning of the leaves and flowers, smoking.

B. Effects of Drug

* Short-Term Effects **Q.** What are some short-term effects?
	+ Memory and learning problems
		- THC causes the blocking of protein synthesis in the brain used for memory.
		- Struggle forming new memories due to hippocampus damage.
	+ Distorted perception (sight, sounds, time, touch)
		- Large doses may experience acute psychosis (hallucinations, delusions, etc.)
	+ Trouble with thinking and problem solving (persistent use makes this permanent)
	+ **loss of motor coordination**
	+ Increased heart rate
		- Heart attack is 4x more likely during first hour after smoking marijuana due to the blood’s lack of ability to carry oxygen.
* Long-Term Effects **Q.** If these are the short term, how would these affect the long run?
	+ Cancer- same amount if not more cancer causing chemicals as cigarettes
	+ Brian effects understanding is limited (inconsistent)
	+ Lung and airway damage
		- THC
	+ Impaired immune system
		- Medically used as an immunosuppressant to prevent organ rejection following a transplantation.

C. Signs of Abuse (Possible Visible Signs) **Q.** If someone was to use marijuana, what might they look like? How could you notice if one of classmates was using marijuana?

* + Seem dizzy and have trouble walking
	+ Seem silly and giggly for no reason
	+ Have very blood shot eyes
	+ Have a hard time remembering things that just happened.
1. **In-Class Learning Activity: “Catch It If You Can”**

 Instructor will demonstrate to the students the difference between a normal persons reflex skills compared to that of a person who has been smoking marijuana. The instructor will follow the subsequent directions:

* Ask a student to come up to the front of the class to demonstrate
* Hold up a ruler vertically by the 12 in. end and tell the student to prepare to catch the ruler with the thumb and pointer finger.
* Drop the ruler between the thumb and finger and see if the student can catch it (Usually he or she is successful).
* Now have the student soak his or her hand in the ice water for 2 minutes and repeat the activity. (It should be obvious that the first performance was better than the second. Reaction time was better the first time.)

All students will perform the experiment with a partner in order to show each student firsthand the physiological effects (performance-based assessment).

**Instructional Strategies**- Questions Last (Think, Write, Rotate activity occurs after lecture).

Students will practice work on skill of decision making by working their way through different questions based on decision making from the bell ringer video and in class activity. Students will combine so that there are 5 even groups to go through the question stations. Questions will go as followed:

* How are the leeches in the PSA video like smoking marijuana?
* What consequences could come from smoking marijuana?
* How could these consequences affect your daily life?
* How would these consequences effect your decision to smoke marijuana?
* If you decided not to use “leeches”, reflect on your decision. Do you feel this was the right choice for you? Are you happy with this decision?
1. **Assessment**

After the students perform “Catch It If You Can” Activity and the Think, Write, Rotate decision making activity are completed, have a small class discussion about the results. Use questions such as the following:

* “Which trial were your reflexes faster?”
* “Why did it feel like when your hand was iced?”
* “How would this affect your daily lives?”
* “What activities might be affected the most due to the slower reaction time?”

After the “Catch It If You Can” Discussion, hand out the “Paper Assessment: Effects of Marijuana” Assignment. Use the following scenario:

 *Bobby is in eighth grade and loves playing basketball. He is the point guard of his school basketball team and is the leading scorer this season in his league. He is a good student and is popular with his classmates. He has a big game coming up and has been a little stressed. He went over to his friend Chad’s house to grab a snack before practice, where Chad offers him Marijuana. Chad says “This will take your stress away, don’t worry no one will know”. Chad is one of his good friends and does not want to let him down. What should Bobby do?*

Score the paper using the following concepts criteria, skill cues, additional criteria, and analytical rubric.

* **Core Concepts**
	+ Content for Marijuana Use shows:
		- Accuracy
		- Comprehensiveness
		- Relationships among concepts
		- Conclusions drawn
* **Skill: Decision Making**
	+ Effects of Marijuana Use Paper shows progression through a decision-making process:
		- Identifies the decision to be made
		- Considers options and consequences
		- Takes action or makes decisions
		- Evaluates or Reflects on action
* **Additional Criteria**
	+ 2-full pages, double spaced, 12 pt font, 1-in margins.
	+ Address the following questions:
		- What decisions could Bobby make?
		- If Bobby decides to use the marijuana, what consequences could follow him? (consider the short and long-term effects we discussed in class)
			* How can these cognitive effects impact a student’s ability to learn and be successful in the school environment?
			* What types of safety and health concerns are associated with student use of marijuana?
		- If Bobby knew what you know about Marijuana, what decision would he make?
		- What have you learned as a result of writing this paper?
		- How will you use this information to make decisions about marijuana use in the future?

Analytical Rubric for the Post-Class Learning Activity “Marijuana Effects”

1. **Final Thoughts/ Conclusion to the Lesson**

Checking for Understanding (verbal)

* What are 2 Short-Term Effects of Marijuana? 2 Long-Term Effects?
* What ways are there to notice marijuana abuse (visible)?

“As we learned today, there are numerous different physical and mental affects of marijuana use, and we have seen different ways it can affect your everyday life. With this knowledge, you will be equipped to make the important decision to remain drug-free, and will realize that just because everyone is “Slugging”(YouTube Video), it is not worth it.”

1. **Classroom Management and Materials**
* Classroom Materials
	+ Handouts/Worksheets: “Bobby’s Big Decision” Directions, Analytical Rubric, Grading Assessment Form
	+ Other Materials: PowerPoint presentation slides, for each pair of students, the following: small bucket of ice water, towel, ruler.
* **Classroom Management**
	+ Traditional seating or teacher assigned seating for content delivery.
	+ Organized desks/chairs pulled away from rows to make pairs for in-class learning activity so students are seated with their activity equipment for quicker execution of the activity.

**Content References**

Activity Berger, Beth. (Bobby’s Big Decision). The Pennsylvania State University.

Mr. Mike Minarchick. PE and Health Instructor. Philipsburg-Osceola High School.

Wright, Bob (2000). Catch It. *PE Central: Health Lesson Ideas.* Retrieved from http://www.pecentral.org/lessonideas/ViewLesson.asp?ID=1273

U.S Department of Health and Human Services: National Institute on Drug Abuse (NIDA). (June

 2009). *NIDA InfoFacts: Marijuana.* Washington, DC: U.S. Government Printing Office. Retrieved April 27, 2010 from, [www.drugabuse.gov/PDF/InfoFacts/Marijuana09.pdf](http://www.drugabuse.gov/PDF/InfoFacts/Marijuana09.pdf).

U.S Department of Health and Human Services: National Institute on Drug Abuse (NIDA).

 (August 2009). *Marijuana: Facts Parents Need to Know.* Washington, DC: U.S. Government Printing Office. Retrieved April 27, 2010 from, [www.drugabuse.gov/PDF/PARENTS\_Marijuana\_brochure.pdf](http://www.drugabuse.gov/PDF/PARENTS_Marijuana_brochure.pdf).

**Appendices**

**Handouts for Students**

**Handout #1**

**Post-Class Learning Activity: Bobby’s Big Decision**

**(Skill to be Practiced: Decision Making)**

You have been assigned a 2-page paper on the topic of marijuana and its effects on students. This paper must be typed and must be 2 full pages of text (double spaced standard 12 pt. font, and 1 inch margins). Use the scenario below:

Scenario:

*Bobby is in ninth grade and loves playing basketball. He is the point guard of the Junior Varsity team at his school and is the leading scorer this season in his league. He is a good student and is popular with his classmates. He has a really big game coming up along with all his class work has been a little stressed. He went over to his friend Chad’s house to grab a snack before practice, where Chad offers him Marijuana. Chad says “This will take calm you down and take the stress away, don’t worry no one will know”. Chad is one of his good friends and does not want to let him down. What should Bobby do?*

In your paper you should address the following:

* What decisions could Bobby make?
* If Bobby decides to use the marijuana, what consequences could follow him? (consider the short and long-term effects we discussed in class)
	+ How can these cognitive effects impact a student’s ability to learn and be successful in the school environment?
	+ What types of safety and health concerns are associated with student use of marijuana?
* If Bobby knew what you know about Marijuana, what decision would he make?
* What have you learned as a result of writing this paper?
* How will you use this information to make decisions about marijuana use in the future?

Score of “Effects of Marijuana” will be developed from the attached analytical rubric.

Analytical Rubric for the Post-Class Assessment “Paper Assignment: Effects of Marijuana”

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **4** | **3** | **2** | **1-0** |
| **Content (Core Concepts)** | The response is complex, accurate, comprehensive, showing breadth & depth of information; relationships are described and conclusions drawn. | The response identifies relationships between 2 or more health concepts; there is some breadth of information, although there may be minor inaccuracies | The response shows some accurate information about the relationships between health concepts, but the response is incomplete and there are some inaccuracies. | The response addresses the assigned task but provides little or no accurate information about the relationships between health concepts. |
| **Decision Making** **(NHES/Skill)** | The response shows evidence of the ability to apply health skills; the response is complete and shows proficiency in the skill. | The response shows evidence of the ability to apply health skills; the response is mostly complete but may not be fully proficient. | The response shows some evidence of the ability to apply health skills; the response may have inaccuracies or be incomplete. | The response shows little or no evidence of the ability to apply health skills. |
| **Paper Content** | All questions addressed in the paper; all questions answered completely and thoroughly. | Majority of questions were addressed in the paper; majority of questions answered completely and thoroughly.  | Most questions were addressed; need to develop answers to create thorough and complete answer. | Few questions were addressed; few or no answers were completed and thorough.  |
| **Paper Length/ Mechanics** | The paper is 2 full pages of text, double-spaced, standard 12 pt font, 1 in margins. | The paper is 1.5 pages of text, double-spaced, standard 12 pt font, 1 in margins.  | The paper is 1 page of text, double-spaced, standard 12 pt font.  | The paper is less than 1 page of text, double-spaced, standard 12 pt font or 1 in margins not met.  |
| **Grammatical/ Typographical Errors** | Little- No grammatical errors  | Little- Few grammatical errors. | Moderate amount of grammatical errors.  | Many grammatical errors.  |

“Effects of Marijuana”

Grading Assessment Form

\_\_\_\_/4 points Content (Core Concepts)-Accuracy & Comprehensiveness

\_\_\_\_/4 points Decision Making (Skill)

\_\_\_\_/4 points Paper Content

\_\_\_\_/4 points Paper Length/ Mechanics

\_\_\_\_/4 points Grammatical/ Typographical Errors

\_\_\_\_/20 points Total Points

Comments: