

Topic: Create an AIDS Resource Booklet for Your County

Student Reading Level: Grade 5 to Adult

An integrated lesson plan covering 7 sessions of approximately 1 to 2 hours each.



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Lesson-Planning Approach

Students do not learn from what <u>you</u> do but from what you have them do.

Some learners perceive their "world" as a whole, where all things are interconnected and dependent upon each other. These "integrated" students face major challenges in coping with our dominant educational, social, and economic systems, which tend to present information in a linear fashion without the necessity of integration into meaningful context. Integrated students are at-risk of failing as they attempt to grasp information in ways that do not match their experience. Among large populations of atrisk students are many from Native American and similar cultures who do not regard their world as a sum of parts but as a blend of all that they experience.

This lesson plan does include some traditional, linear approaches to delivering information (checklists, rules, analysis, problem solving and organization). In addition to the traditional, linear delivery of information, this lesson plan also includes some of the following strategies, designed to appeal to at-risk students as they learn academic/life skills:

- Integration of technology
- Story telling/anecdotal information
- Non-competitive group and team work
- Performance-based assessment and rubrics
- Visual presentations and practice through technology and other means
- Project-based assignments that integrate family and community
- Activities appealing to multiple intelligences (Gardner)

Lesson Overview

Students create a booklet outlining and summarizing AIDS resources for their local area and county. Using information from websites, county health departments, hospitals,

and non-profit organizations, students will identify major questions dealing with AIDS issues and treatment. Local resources that can be used to help a person with AIDS are presented and summarized. Additionally, students will participate in a science activity that illustrates the spread of AIDS through a population by exchanging cups of laboratory fluids, then testing for a marker fluid. Website references begin with resources in the state of Colorado and then include National websites.

Lesson Objectives

Name of Project: AIDS Resource Booklet and Activity

Project Objectives: When students complete this project, they will be able to...

- **Use scientific observation** to conduct AIDS experiment.
- **Locate and interview** local AIDS resources
- ❖ Design and Create booklet using MS Word or other word processing program.
- ❖ Write summaries of each resource listed, and use photos or graphics
- **Use technology** to research websites and locate resources in the county area.

Integration of Other Functional/Academic Skills: (Critical thinking is required throughout the lesson.) Students will be able to...

Reading: Read information on AIDS, read community health information.

Writing: Write contents, format a document and write summaries about the

services each resource provides and how to contact them.

Technology: Search the internet for relevant sites, use computers to write and

prepare booklet.

Science: Conduct scientific experiment illustrating the spread of the AIDS

virus through the exchange of bodily fluids.

State/National Standards

http://www.cde.state.co.us/cdeassess/sci.htm#standards

Reading and Writing

- 1. Students read and understand a variety of materials.
- 2. Students read, select, and make use of relevant information from a variety of media, reference, and technological sources.
- 3. Students write and speak using conventional grammar, usage, sentence structure, punctuation, capitalization, and spelling.
- 4. Students apply thinking skills to their reading, writing, speaking, listening, and viewing.

Science:

1. Students understand the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.

- 3. Life Science: Students know and understand the characteristics and structure of living things, the processes of life, and how living things interact with each other and their environment
- 5. Students know and understand interrelationships among science, technology, and human activity and how they can affect the world.
- 6. Students understand that science involves a particular way of knowing and understand common connections among scientific disciplines.

Mathematics

- 3. Students use data collection and analysis, statistics, and probability in problem-solving situations and communicate the reasoning used in solving these problems.
- 4. Students use a variety of tools and techniques to measure, apply the results in problem-solving situations, and communicate the reasoning used in solving these problems.

Colorado Adult Education: Basic Life Skills Assessments

Colorado Certificates of Accomplishments:

Level One:

1R1 – Recognize and Use the Following Parts of Speech: Nouns, Pronouns, Conjunctions, Adjectives and Verbs.

1R7 – Interpret Simple Warnings, Danger Signs and Symbols (Predict Outcomes)

1R13 – Use Telephone Directory to Locate Information (Find Details)

1R14 - List Emergency Numbers and Identify Procedures for Placing Emergency Calls (Follow a Sequence)

1R15 – Interpret Basic Information Regarding Illness, Symptoms, and Doctor's Instructions (Follow Directions).

1R16 – Interpret Single Legend Maps and Request and Clarify Directions.

1W6 – Write Basic Notes

Level Two:

2R5 – Interpret, Request, Clarify, Give, Write and Follow Basic Directions for a Location (Follow a Sequence and Detailed Instructions).

2R7 – Interpret and Use Simple Maps Related to Travel

2R8 – Use Telephone Directory to Locate Specific Information (Evaluate Services, Compare and Contrast)

2R14 – Read a Passage or Sample Realia to Determine Fact and Opinion

2R16 – Read a Passage or Sample Realia and Find the Main Idea and Details

2R17 – Read a Passage or Sample of Realia and Summarize

2R18 – Recognize and Use Standard English Parts of a Sentence: Nouns, Pronouns, Verbs, Conjunctions, Adjectives, Adverbs, Prepositions, Comparatives, Superlatives, Direct and Indirect Objects.

2R19 – Demonstrate Ability to Use Organizational Features of Printed Text: Tables of Contents, Glossaries, Indices, Appendices, Prefaces, Afterwords, Captions, and Chapter Headings.

2W10 – Use Appropriate Punctuation and Capitalization

Websites [URLS that support lesson]

Required:

<u>www.cdphe.state.co</u> (This is the Colorado State Public Health website, and can be searched for general and specific AIDS information. You can also search for local and county health departments and AIDS testing sites)

<u>www.cdphe.state.co.us/dc//////hivsites.html</u> (Colorado Dept. of Public Health web page for useful web links.)

<u>www.bcap.org</u> (Boulder County AIDS Project website. Excellent and concise links, state and nationwide information)

<u>www.aidscentral.com</u> (Colorado HIV testing sites)

<u>www.thebody.com</u> (Excellent and comprehensive website including or linking you to just about anything you need to know regarding AIDS information, treatment, support, references, and research. Very likely one of the best sites on the web for AIDS information.)

Support:

Extensions from www.thebody.com:

<u>www.thebody.com/sfaf/damages.html</u> (good illustrations about how the AIDS virus works and causes illness)

<u>www.thebody.com/Forums/AIDS/Switching/Archive/Alternative/</u> (Alternative therapies for treating AIDS, and discussions about effectiveness)

<u>www.thebody.com/testing.htm#resources</u> (Getting tested for AIDS: where and how.) www.thebody.com/cria/winter98/fig1.html (Picture of how the AIDS virus replicates.)

Other Information and Visual Aids:

<u>www.rex.nci.nih.gov/behindthenews/vis/visframe.htm</u> (Immune system basics) <u>www.cdphe.state.co.us/ps/pp/earlychild/hec/overheads.pdf</u> (Outlines basics of HIV and AIDS transmission and infection.)

<u>www.pbs.org/wgbh/nova/aids/action.html</u> (Annotated video showing the life cycle and replication of the aids virus.)

<u>www.aids.org</u> (Leads you to the AIDS Research Information Center, AIDS Resource List, AIDS Virtual Library, Center for AIDS Prevention, and National Minority AIDS Council)

Pre-requisites (Skills required to process project)

Read at fifth grade level or above.

Possess basic computer skills to conduct word processing and search the web.

Required Materials

Phones to make calls
Paper to print out booklet
Local city or area telephone book
County or state map

Handouts (Refer to these in Lesson Plan) Include all Handouts!

Handout One: Sample Table of Contents

Handout Two: AIDS Activity Handout Three: Lesson Rubric

Required Equipment/Technology

Network accessible computers, also equipped with a word processing and printer.

For AIDS Activity:

Cups for each student

- .1 M Sodium Hydroxide solution
- .1 M Phenolphthalien solution

(Chemicals are available from teachers' science catalogs or High School Science departments, also online at www.eNASCO.com or through Carolina Biological Supply email Carolina@carolina.com pre-mixed in solution.)

THE LESSON

Students do not learn from what <u>you</u> do but from what you have <u>them</u> do.

(ET= Estimated Time)

Preparation (Day One – One Hour – additional time if needed)

Activity	Instructor Notes	ET
1. Discuss the topic of AIDS. Discuss	You may provide some initial	20
the importance of a local AIDS	statistics for your area to show	minutes
resource booklet for your county.	the relevance of the project in	
How can this help victims of AIDS in	your county. Ask, "How can we	
your area?	do this?" Outline steps as class	
	thinks of ideas.	
2. Discuss lesson rubric.	To effectively complete a	10-15
	resource booklet, you may split	minutes
	the class up into groups that	
	divide up the tasks.	
3. Look at your county or state map.	Inform the county health office of	20
Identify your county by name and the	your project. Do they have an	minutes;
area it covers.	AIDS medical specialist to review	more if
4. Choose a place that will allow you	the final booklet for accuracy and	needed
to give out your booklet (school or	suggestions? Is there a copy	
local library, county health office,	place in town or school resources	
youth center).	to make copies of the booklet for	
	distribution?	

Practice (Day Two – One hour – Allow for additional time on researching websites if needed)

Activity	Instructor Notes	ET
1. Look at Handout Two. Do the	Refer to Handout Two for activity	20
AIDS fluid activity	instructions	minutes
2. Research websites. Include a	Website resources have been	Minimum
search for AIDS information by your	included for Colorado to provide	1 hour,
county. Take notes on all	local resources. If you are	allow
information that you need to include	searching the web in another	time for
and begin to outline sections for your	state, search for your own county	searching
booklet. You may also use your local	or state health department web	and
telephone book.	pages. The national or general	learning
3. List the names and numbers of	web sites also have state-by-	
the county resources. List the	state directories.	
"names" of the websites and the		

information they contain.	

Practice continued (Days Three and Four— Allow for flexible time interviewing community members and resources as needed.)

This can be organized as an in-Length of 4. Interview your community school project if phones are resources that you have found. time Introduce yourself and explain your available, or an out-of-school depends project. What services do they offer project where the student meets on the with health or hospital staff. number and to whom? Do they have any information on AIDS in your county? of What information and advice would resources identified they like to see written in a and how community booklet? What other long county resources can they suggest? students can spend on this portion.

Performance (Days Five, Six, and Seven – Three hours plus additional time as needed until finished.)

time as necaca anti-minorical		
Instructions for students	Teacher notes	ET
Organize your notes into a Table		20
of Contents and divide information		minutes
into categories. Refer to Handout		
One to get ideas for organizing your		
booklet and including important		
information.		
2. Enter your information into your	Students may use MS Word or	As
word processing program, and	another word processing	needed
include any graphics from clipart or	program. Graphics can include	
photos that you would like to include.	images from clipart, photos, and a	
	clear copy of a local map marking	
	the location of the resources.	
3. Turn in your booklet to your	Review lesson rubric.	As
teacher for editing.		needed
4. Edit your booklet, Turn in your		As
final copy to your AIDS medical		needed
specialist for review.		
5. Put out your booklet for		
distribution. Good Job!		

Lesson Assessment Strategy (Formative – As the lesson progresses)

Preparation, Presentation and Overall Implementation (Instructor)

- 1. Are the instructions and expectations for the class clear from the beginning?
- 2. Am I spending sufficient time on modeling the skills I want students to acquire?
- 3. Is there enough variety in the lesson to appeal to most learning preferences?
- 4. How many learning intelligences am I addressing?
- 5. Are students "connecting" to lesson objectives? How?
- 6. How is this lesson "integrated?"

Performance and Practice (Student)

- 1. Do all students have the skills to follow instructions? If not, what measures am I taking to address the challenge?
- 2. Are all students participating in the activities either by active observation or by voicing their thoughts?
- 3. Am I identifying the strengths of each student and pairing/grouping people accordingly? What results am I getting?
- 4. How are students performing? Are all of them able meeting 80% of the lesson objectives? If not, what am I doing to help them achieve more?

Technology

Activity Checklist

- 1. Is the technology working?
- 2. How are students reacting to the technology, and what do I need to remember when I teach this lesson again?
- 3. How are students applying or wanting to apply their technical skills in other areas?

a.	Discuss the topic of AIDS in your county.
b.	Discuss rubric
C.	Identify county and area it covers.
d.	Choose distribution facility.
e.	Do AIDS fluid activity.
f.	Research websites. Look through phone book. Take notes.
	later decorate and a series

- g. Interview resource people.
- h. Organize your information.
- i. Write it all down in your word processing program. Insert clipart if desired.
- j. Edit your booklet with teacher and AIDS specialist.
- k. Distribute your booklet.

Handout One Sample Table of Contents

- 1. AIDS in "Your" County: Statistical Information. Who has it and how many?
- 2. County Health Resources
- 3. Local Hospital Resources
- 4. Clinics
- 5. Private Doctors and Conventional Medical Help
- 6. Alternative Healing Resources
- 7. Counseling and Support
- 8. Books and References
- 9. Getting an Aids Test
- 10. Potential medicines and Treatments
- 11. Prevention Behavior
- 12. Websites

Handout Two: Aids Activity

In this activity, students study the transmission and spread of a "virus" (represented by sodium hydroxide) from one "infected" person to the rest of a population through the exchange of "body fluids" (cups of water). All cups of water are then "tested" with several drops of phenolphthalien to reveal the newly "infected" people.

CAUTION: Sodium hydroxide is the same chemical as caustic soda or soda lye, and can be extremely dangerous if gotten on the skin, in the eyes, or ingested. Obtain these solutions previously diluted at .1Molarity from a high school science supply or from a science education supply company (online at www.eNASCO.com or through Carolina Biological Supply email Carolina@carolina.com pre-mixed in solution.)

Optional:

If appropriate, students may take role-playing one step further to show the ways in which the virus spreads. Students may label themselves as partners, a drug addict sharing needles, a health-care worker or a member of the public being exposed to bodily fluids, or a mother having a baby. One person can choose to practice consistent or occasional "abstinence" and refuse to exchange "fluids" with another person.

You need: (See Required Equipment for chemical sources)

Sodium hydroxide solution
Phenolphthalien solution
One cup of water for each student
(One cup is filled with sodium hydroxide solution instead of water.)

Directions:

Out of sight of the class, halfway fill one cup of with sodium hydroxide solution. Halfway fill the rest of the cups with plain water. Explain to the students to be sure not to spill the contents. Have the students rotate around in a group exchanging water – each student pours a little bit of their water in each others' cup. After all fluids have been exchanged, test for the "virus" present in each cup of "bodily fluid" by placing several drops of phenolphthalien in each cup. The cups with the "virus" (sodium hydroxide) in them will turn pink...indicating "infection".

Discuss the activity and results. Did the "virus" spread to all of the cups? Why or why not? Does it matter if a person has a lot or a little of the virus in their system to be infected? What could have stopped the spread of the "virus" to any or all the cups? Were there some people who were more likely to get "infected" than others?

Handout Two: Lesson Rubric

Name: Teacher: Date: Course:

Handling Emergencies and Placing Emergency Calls

Criteria:	Level 1	Level 2	Level 3
Cooperated as a team to create resource booklet.	Fully cooperated as a team member to create resource booklet.	Somewhat cooperated as a team member to create resource booklet. Needed some help focusing on task and contributing.	Limited cooperation as a team member to create resource booklet. Needed substantial help with communicating and cooperating.
Communicated and worked effectively with people at resource areas.	Fully communicated and worked effectively with people at resource areas. Gained complete information.	Communicated and worked somewhat effectively with people at resource areas. Needed some assistance in gaining information.	Needed frequent help in communicating with people at resource areas; needed frequent or continual help in gaining information.
Read and understood websites. Used phone books. Took complete notes and complete information.	Completely read and understood websites. Gained complete information, took thorough notes, got all AIDS information form phone books.	Somewhat read and understood websites. Gained complete information, took thorough notes, got all AIDS information form phone books.	Minimal reading and understanding of websites. Little information gained from phone books, notes minimal or with limited information.
Wrote accurate and effective booklet for local AIDS resources.	Wrote fully accurate and effective booklet for local AIDS resources. Ninety to 100% of all available information included.	Wrote somewhat accurate and booklet for local AIDS resources. Some resources missing or some information incomplete.	Wrote inaccurate and ineffective booklet for local AIDS resources. Only about 10 to 20% of county resources, websites, and local information included in final booklet.
Participated in and completed AIDS activity	Fully participated in and completed AIDS activity	Somewhat participated in AIDS activity. Needed additional encouragement to participate and answer activity questions.	Limited or no participation in AIDS activity.

Put finished booklet out for distribution.	Effectively put finished booklet out for distribution. Information is getting to those who need it.	Put booklet out for distribution with moderate effectiveness. Information may be getting to about 50% of people who need it.	Limited or no participation in distributing booklet. Limited information is getting to those who need it.
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Created With the Rubric Builder – www.rubricbuilder.on.ca