

Unit Materials Sampler

Includes instructor and student materials for Lesson 1 of 7

L551 Project 3

Ralph Quarles

“What a Pain!”: Sorting out drug claims for arthritis cures **Lesson 1: Questioning and Planning the Search for Drug Information**

Project Note: This document contains both the 8th and the 10th grade materials for Lesson 1. While the materials would not be combined of course in actual use, I've grouped the parts that differ here to put the pairs of instructor and student materials together in each section for easy comparison. Parts not called out in two sections would be the same in both lesson plans. Discussion of student material follows the supplemental resources listing at the end of Instructor Materials in this same document.

Instructor Materials

1. 8th Grade

Introduction

The students will be engaged in assessment of modern drugs and investigation of the claims of those involved in making or marketing pharmaceuticals. To allow focus and congruity in the assignments, the unit target for inquiry will be drugs related to treatment of arthritis. This ailment was chosen since it is relatively common and, according to the Arthritis Foundations list, offers focus on one area yet plenty of drugs to illustrate the difficulty of assessment and choice.

The overall unit learning objective is to become able to use information resources for information inquiry related to health information in discovering facts about various drugs. Communication of results will be via creation of a visual map using Inspiration/ Kidspiration software to compile results in a way that allows visual contrast of drug properties, effectiveness, side effects, and use. As a reflective and teaming exercise, the students will bring their visual charts for reference as they form a tough informed audience for 10th grade students acting out their roles as panel participants representing various viewpoints of those in the pharmaceutical industry. The senior's presentation becomes a reflective exercise for the 8th graders as they hear the 10th graders “sell” their various viewpoints on the drugs about which the 8th graders have learned. The end result is a discussion on who was the most reliable “witness” about arthritis drugs and a vivid lesson in hearing how various interest groups may skew facts to represent one point of view in treatment or services. Both groups benefit in this sort of “capstone” to their units with the example of how prior research can prepare a consumer to accurately access a medical sales pitch as the 8th graders have the opportunity to catch the 10th graders in inaccuracies or omissions of fact.

Unit Materials Sampler

Includes instructor and student materials for Lesson 1 of 7

L551 Project 3

Ralph Quarles

2. 10th Grade

The students' overall unit learning objective will be to gain ability to use information resources in assessing industry viewpoint and bias in the reports or resources of those involved in making or marketing pharmaceuticals. To allow focus and congruity in the assignments, the unit target for inquiry will be drugs related to treatment of arthritis. This ailment was chosen since it is relatively common and, according to the Arthritis Foundations list, offers focus on one area yet plenty of drugs to illustrate the difficulty of assessment and choice.

Teams of 10th graders will adopt the role of various drug industry stakeholders such as researchers, industry analysts, lobbyists, federal regulators, marketers, and end users. Preparation for their role will require advanced health science skills and associated information literacy skills as they conduct targeted research to gather facts and assess resources to discover underlying bias, community motivation or goals, and a body of facts and method likely to be adopted by their chosen segment's viewpoint in regard to various drugs. In addition, they will need to conduct their research collaboratively as a team and decide on distribution of both preparation and presentation tasks. Communication of results will be via a live "play" where the 10th graders act out their roles in an interactive panel intended to persuade an audience for or against specific drug treatments. Their experience in the acting also serves as a group opportunity for reflection on relative merits of what they hear regarding pharmaceuticals, listening for "hidden agendas" versus fact, and the importance of solid research as they are challenged by the audience who will come equipped with their own research results.

For this first lesson, the objectives are to introduce the students to the process of information inquiry by McKenzie's model, provide a brief overview of the unit for perspective, and to complete the first stage of the inquiry process by facilitating the student's formation of research questions and plan.

Relevant Instructional Standards

For details and contrast of maturity in effort between grade levels, see Unit Overview

1. 8th Grade:

Information Literacy Standards 1 (indicators 4 & 5), 2 (indicators 1 & 2), 3 (indicator 4), and 9 (indicator 1).

Indiana Health Standards: 8.2.1, 8.2.2, 8.4.3

1. 10th Grade:

Information Literacy Standards 1 (indicators 4 & 5), 2 (indicators 1 & 2), 3 (indicator 4), and 9 (indicator 1).

Unit Materials Sampler

Includes instructor and student materials for Lesson 1 of 7

L551 Project 3

Ralph Quarles

Indiana Health Standards: 10.2.1, 10.2.2, 10.4.3

Instructional Approach

The model used for the units is the Research Cycle model of Jamie McKenzie (See overview of unit for details and references). The portion of the cycle addressed in Lesson 1 is the introduction of the students to the research unit and the research process, plus work on the initial formation of questions and research plan.

Work Plan and Physical/Virtual Resources

This lesson will span one class period as the first of seven lessons. 8th and 10th grade classes will both pursue their respective questioning and planning phases of the information inquiry unit in lesson 1.

By one week prior to class, the media specialist will have provided a temporary “health research center” display to highlight available resources in the library and in the community related to this lesson and the unit as a whole.

The computer lab has been reserved for you. The modules are online, linked from the class web site, and ready for use. Instructors have the lead to introduce each lesson and act as primary contact for consultation and assessment during this lesson. The media specialist will be present as partner to answer any emergent questions regarding process of information inquiry or the research cycle model.

Presentation Materials

For presentation materials, see the separate files listed below and also linked off my project page for grading purposes of the project since I do not really have access to link them from the DCHS site as they would be for actual instruction:

8th grade: quarles.lesson1.module8th.pdf

10th grade: quarles.lesson1.module10th.pdf

Learning materials provided to students for each lesson will include:

1. Coordinated yet separate lesson guides for 8th and 10th grade students including overview of the lesson, directions, and a starter resource list. (delivered via instructor presentation materials)
2. directional guides and handouts with examples as applicable (as listed in instructor supplemental resources and in the presentation materials)

Unit Materials Sampler

Includes instructor and student materials for Lesson 1 of 7

L551 Project 3

Ralph Quarles

3. A timeline of activities for the unit overall with self-assessment checklists (included in the presentation materials but in actual practice, would also be posted on the class websites)

Feedback and Evaluation Overview.

A combined self and instructor assessment chart are referenced in the presentation modules. They may be used additionally for Lesson 1 to place the lesson in context of the unit and the entire research cycle as well.

8th and 10th grade assessment of information literacy mastery:

Student self-assessment:

http://www.bcpl.net/~sullivan/modules/tips/rubrics_sec/stud_rubric.html

Assessment by instructor

http://www.bcpl.net/~sullivan/modules/tips/rubrics_sec/teach_rubric.html

Assessment of health standard learning products:

(combined self and instructor assessment checklists)

8th grade graphic organizer assessment for Inspiration product:

http://www.bcpl.net/~sullivan/modules/tips/rubrics_sec/graphic_org.html

10th grade group aspects of work:

http://www.bcpl.net/~sullivan/modules/tips/rubrics_sec/group_wk.html

10th grade persuasive argument in chosen role: (hand out to students to keep lesson 1 in perspective of unit for planning of inquiry but not really used for real until lesson seven. (modified version of

http://www.bcpl.net/~sullivan/modules/tips/rubrics_sec/editorial.html)

Persuasive Dialog in Character

<i>Element</i>	Possible Points	Earned Assessment	
		Self	Teacher
Knowledge of the issue and perspective chosen are shown by facts and information used.			
The main ideas are clearly stated and presented in enough detail to support chosen position.			
Supporting details and information appropriate to the topic are accurate and consistent with chosen role.			

Unit Materials Sampler

Includes instructor and student materials for Lesson 1 of 7

L551 Project 3

Ralph Quarles

The writer anticipates and responds convincingly to other viewpoints and questions.			
The research goes beyond the scope of the classroom and basic “starter” references.			
References to source information are given for added emphasis and effect.			
The tone of the discussion is rational and logical, with any heated debate staying on topic and not personal.			
The style and role is maintained throughout.			
Presentation is well organized.			
Correct grammar is used throughout.			
The presentation is clearly audible and understandable throughout.			
Total:			

Instructor References and Supplemental Resources

Instructional Process

North Daviess Junior-Senior High School (2005). NDHS Web Portal. Available at <http://ndbus.ndaviess.k12.in.us/highshare/>

American Association of School Librarians. Information Power. Chicago: American Library Association (1998). Available at http://www.ala.org/ala/aasl/aaslproftools/informationpower/InformationLiteracyStandards_final.pdf

Indiana Academic Standards for Health Education (2002). Available at http://www.doe.state.in.us/standards/standards2000_health.html

McKenzie, Jamie (2000). Research Cycle Model. Available at <http://questioning.org/module/module3.html> .

Unit Topical Resources (not all listed here are age appropriate for 8-10 grade lexile levels unless noted with “**”)

*Arthritis Foundation (2005). Arthritis Today’s Drug Guide 2005. Available at <http://www.arthritis.org/conditions/DrugGuide/types.asp>

Unit Materials Sampler

Includes instructor and student materials for Lesson 1 of 7

L551 Project 3

Ralph Quarles

*Inspire.net. Available at <http://lore.inspire.net/subject.html> - Go to “student researcher” and then the health area. As an instructor, you may also find the health related subject searches listed directly on this URL to be of use, but unless students read well above grade level, the medical jargon and complex sentences may prove confusing.

About.com Arthritis links. Available at <http://arthritis.about.com/cs/druggen/a/arthdrugoptions.htm> - general info. This site will introduce the students to solid basic data but also expose them to ads for arthritis drugs, which will require some reminders to screen sites for accuracy and usefulness. Most are fine for average teen reading levels but there is some medical jargon at some sites.

National Institute of Arthritis and Musculoskeletal and Skin Diseases. Available at <http://www.niams.nih.gov/hi/topics/arthritis/ffrheumatoid.htm> -. Other areas of this site also provide authorization information since the organization is a subset of the National Institute of Health. This pick, however, is specifically designed to be at a reading level that makes it assessable easily to all above about 4th grade level Lexile. It provides Fast Facts about Arthritis per the title but also many links to additional information.

*Kid’s Health for Teens. At <http://www.kidshealth.org/teen/> - outstanding consumer health info site written especially for teens; not as much specifically on arthritis drugs here but excellent for background.

Other possible areas to look for resources: More hospitals than not have good consumer health online resources to be found via simple search at <http://www.google.com>

For aid in giving tips to students regarding assessment of web resources, the following guides are recommended:

Finding primary sources:

<http://memory.loc.gov/ammem/ndlpedu/lessons/psources/source.html>

1 page handout for assessment of web resources

<http://tammypayton.net/courses/search/handouts/assess.pdf>

The following are additional resources for the 10th grade unit, but included here for both as supplemental to the 8th grade lessons as desired (most chosen to represent particular viewpoints as much as whether factual information is included so will require careful use with the 8th grade learning objectives. If marked with \$ sign, then recommended as a “non-example” of an unbiased authoritative site useful in the 8th graders practice in assessing sources):

Unit Materials Sampler

Includes instructor and student materials for Lesson 1 of 7

L551 Project 3

Ralph Quarles

- \$ Mercola Health Newsletter at <http://www.mercola.com/2002/apr/24/centocor.htm>
 - \$ Testimony on arthritis drugs by citizen action group at <http://www.citizen.org/publications/release.cfm?ID=6758> –
 - Food and Drug Administration’s Arthritis Drug Advisory Committee at <http://www.fda.gov/cder/audiences/acspage/arthritismeetings1.htm> -
 - \$ Drug Industry analysts news about Pfizer, Inc.’s drugs’ for arthritis http://www.newratings.com/analyst_news/article_492942.html -
-
-

“What a Pain!”: Sorting out drug claims for arthritis cures

Lesson 1: Questioning and Planning the Search for Drug Information

Project Note: While the materials would of course be created and handed out separately in actual use, since all have been referenced or provided elsewhere in project materials, the material is not repeated here but only referenced.

Student Materials

3. 8th Grade

Introduction and directions: - Included/linked in lesson 1 presentation module file

Handouts and help sheets: - Included in instructor materials & overview

References: - Included/linked in lesson 1 presentation module file

Examples/non-examples: - Included/linked in lesson 1 presentation module file

Assessments: - Included in instructor materials & overview

4. 10th Grade

Introduction and directions: - Included/linked in lesson 1 presentation module file

Handouts and help sheets: - Included in instructor materials & overview

References: - Included/linked in lesson 1 presentation module file

Examples/non-examples: - Included/linked in lesson 1 presentation module file

Assessments: - Included in instructor materials & overview