J. Roth/Study Skills 94

THE RESEARCH SUMMARY ASSIGNMENT

Point Values for This Assignment

Submit Research Topic by its due date—Thursday, May 12……**10 points possible**

Oral Reports— Monday, June 6……..……..**50 points possible**

Outline, Summary, and Sources Page—Friday, June 10……..**100 points possible**

NOTE: Your research summary will not be accepted late for any reason.

The time has come when all of us must become our own teachers. With knowledge currently doubling every four to five years, schools alone cannot provide the education necessary to meet the demands of a successful job and life.

To better prepare ourselves, this quarter we will learn and practice research skills by creating a *research summary*, which consists of a brief outline, the summary itself, and a list of sources (books, magazines, journals, websites, interviews) found useful in learning about the topic.

Good research summaries need time to "cook" in the mind in order to actually learn something. Poor research summaries are begun and finished a night or two before they're due. Sometimes they receive a passing grade, but the student learns little other than that he or she hates research assignments. So let's start early, learn a little each day about our topic, and give this assignment a chance.

Helpful Skills in the Process:

1) To be able to read critically and listen critically; in other words, to be able to understand what we read and hear, and think about it by asking intelligent questions. Along with this, we should remember to question the truth of what we read (particularly on the Internet) or hear until we find outside support (corroboration) for it.

2) To be able to synthesize information, in other words, to combine information to create new ideas.

3) To be able to organize and support what we discover.

4) To be able to report clearly about our discoveries and give proper credit to those who are owed the credit.

The Steps to Follow:

1) Select a subject you have always wanted to know more about, something of real interest to you.

2) Browse databases (library catalogs, *ProQuest, Opposing Viewpoints, CQ Researcher, eLibrary*, trustworthy websites) to get a sense for your subject's size and available sources.

3) Try to narrow your subject **by picking only *a piece* of it** and begin studying sources about that piece in detail--locate ***a minimum of four to six good sources***. (Remember--a source can be a magazine article, a book, a video, a legitimate Internet source, and an interview.)

4) Submit the name of your topic (up to **10** points possible for a well-focused idea) by **Thursday, May 12.**

5) Continue to locate and study sources that teach you more about your topic. Give yourself time to think, question, synthesize.

6) Prepare a brief outline of what you have learned about your topic to serve as a guide for actually writing the summary. To create this outline, simply list the two or three most important things you have learned during your study. Each entry on this list will become a roman numeral on the outline.

7) Using this outline as a guide, write a brief summary of your discoveries.

8) Provide an alphabetized list of your sources following MLA guidelines.

9) **At all times during the process** please follow closely the two research summary examples provided for you.

10) **At all times during the process** please be prepared to share with me your work to that point. Expect me to ask to see it.

Your summary is due no later than Friday, June 10. Oral reports Day will be Monday, June 6.

This assignment will not be accepted late for any reason, so start early and work on it regularly.

DUE DATES AND POINTS BREAKDOWN

Research Summary

- *Focused Topic Idea—10 points*--**Due by Thursday, May 12**
- *Completed Research Summary*—**-Due no later than Friday, June 10**

Research Summary Parts and Values

Outline--15 points

Summary—70 points

List of Sources—15 points

Proper use of English will figure into the grade your summary earns.

(Additional Discretionary Points may be awarded during this process.)

Research Summary Assignment Check Sheet

CHECK SHEET—Please submit this form with your Research Summary

____Outline at the beginning of the report (the two or three most important things you learned about your topic presented in outline format).

____ Summary—clearly written presentation of your discoveries, proofread and edited to show respect for the English language and your reader.

____ Sources page—An alphabetized list of the sources you used (minimum of three to five)—sources page conforms to MLA guidelines (please see the following page for examples).

____Summary closely follows one of the two samples presented in class.

Example #1—a generic research summary

REPAIR OF THE HUBBLE SPACE TELESCOPE EXAMPLE

OUTLINE

I. Description of Original lens defect

II. Possible solutions

A. A new telescope

B. Computer enhancement

C. A corrective lens

III. Method of repair

A. Description of the corrective lens

B. Installation of the corrective lens

IV. Results

SUMMARY

Several years ago, the Hubble Space Telescope was launched from a space shuttle flight. Astronomers had hoped that with the Hubble Space Telescope orbiting high above Earth's cloudy atmosphere, several questions about how the universe works and was formed could be answered. Unfortunately, after the telescope was in orbit, technicians discovered that the telescope lens had a flaw that made the pictures it sent to earth fuzzy. This was a major disappointment to those hoping to peer deeper into space. Fortunately, in December 1993, astronauts aboard another space shuttle mission were able to install a lens that corrected the problem.

For several months after first discovering the problem, scientists considered three possible solutions. One was to build and launch a new telescope. This would cost millions of dollars and delay any deep space study for several years. Another solution was to build a super computer that could clear up the pictures the current Hubble sent to Earth. However, even a super computer would have to "guess" several parts of an enhanced picture because of the flaw in the original lens. A third solution was to build and install a corrective "contact lens" for the Hubble, much as doctors make for humans with vision problems.

Scientists decided to build and install a corrective lens, with construction beginning in June of 1992. The lens was designed to bring into focus the flawed part of the original telescope lens. The plan called for astronauts on a space shuttle mission to install the corrective lens and make fine adjustments. If this worked, the original Hubble Space Telescope would be saved along with millions of dollars and several years of work.

In December 1993, a space shuttle mission was launched with the corrective lens on board. No one including the most informed mission specialist or astronaut knew what to expect since an installation and repair of this magnitude hundreds of miles above earth had never been attempted. However, after many hours of aggravating effort astronauts finally succeeded in putting the corrective lens in place.

A few stressful weeks of "tuning" the lens followed. Scientists now report that the Hubble's vision is perfect. The corrective lens installed by the astronauts exceeds all expectations in repairing the flaw. Because of the success of the repair effort, big questions such as how our universe began and its eventual fate may be answered.

Sources

Baker, Elaine. Black Holes and Hubble. New York: Roundhill Press, 2008.

The Edison Page. Web. 5 May 2007.

"The Hubble Finally Works." The Spokesman Review 17 Jan. 2000: B3.

Jacobs, Alice L. and Marilyn Moore. "Correcting the Hubble's Sight." Scientific Adventures Nov. 2004: 68-72.

Landis, Carl. Personal interview. 12 Oct. 2007

Nova. PBS Television. 15 Jan. 2005.

Orion Web Reference. 5 Feb. 2001. Orion Space Imaging. Web. 16 Oct. 2007.

Example #2—a career research summary

MATH TEACHER AS A CAREER EXAMPLE

OUTLINE

Introduction

Outlook

Requirements

Working Conditions

Conclusion

Sources

SUMMARY

A Career Teaching High School Math

Introduction:

Teaching is one of the oldest professions and one of the most important to the health and progress of society. Today's teachers are even more influential because they in some ways have replaced the parents in the role of raising the next generation. I have found that teaching high school math is the career I want to pursue.

Outlook:

Estimates show a growing need for all types of teachers including math teachers in the next few years because many of today's teachers will soon reach retirement age. In addition, a growing need for math exists if students are to be able to compete in a high-technology world.

Requirements:

A 4-year college degree is required to teach high school math. The courses include math courses as well as education courses to learn how to communicate the math knowledge to the students. In addition, at least a six-month student teaching practicum is required to earn provisional state certification. After receiving state certification, a new teacher has three years to complete a "fifth year" or master's degree to receive permanent certification.

Working Conditions:

A high school math teacher teaches from September through June. His or her day begins around 7 a.m. and ends around 3 p.m. Some afternoons and evenings there are meetings required as well as time to grade student papers and prepare lessons for the next day.

High school math teachers in District 81 teach five sections of math a day, each section lasting about fifty minutes and each class having about thirty students. Sections can include beginning math and arithmetic through calculus. Classroom environments

can be traditional or lab-oriented.

Conclusion:

After exploring this career field, I am even more convinced that it is the job I want. I feel I am ready and willing to spend the years in school necessary to achieve this.

Sources

Between Math and a Hard Place. Jan. 2000. Web Careers. Web. 22 Nov. 2007.

Hill, Robert. "Teaching Opportunities for the Future." Career Report March 2005: 34-38.

Landis, Carl. Personal interview. 5 Oct 2007.

Murphy, Angela. Teaching Math and Science in the Next Century. New York: Publicist Press, 2000.

National Teachers of Mathematics Association. 2000. Web. 23 Nov. 2007.

Norland, Roberta. Telephone interview. 3 Nov 2007.

Study Skills 94 Name:_____

J. Roth

FOCUSED TOPIC IDEA—10 points

Due no later than Thursday, May 12, 2011

The topic for my research summary will be

_____

The summary itself is due *no later than Friday, June 10*, and must follow either the *Hubble Space Telescope* or the *Career Report* example. Please note: This assignment will not be accepted late for any reason, so start early and work on it regularly.