GIS Career Awareness Learning Module # 4
Version 4.0 July 28, 2008

Putting Them All Together: Our Future with GIS

- **Estimated Time: 2.0 hour**
- **Learning Goal:** Students will synthesize what they have learned in the first three GIS Career Learning Modules by exploring how GIS can be a valuable tool for businesses, organizations, and society; and why GIS skills would be worthwhile to have for various careers.
- **Platforms:** PC, Mac, or UNIX.
- **Software Tools Required:** A Word Processor such as Microsoft Word or Word Perfect
- **Allied to California Content standards:** GIS Learning module #1 can be allied to the following California Content standards:
  - **English-Language Arts Content Standards**
    1.1 (Writing) Establish a controlling impression or coherent thesis that conveys a clear and distinctive perspective on the subject and maintain a consistent tone and focus throughout the piece of writing.

Section 1 – Career Learning Module Final Essay Structure

In your last learning exercise, you will be required to compose a 500-word essay about what you have learned in the first 3 GIS Career Learning Modules and why GIS skills would be valuable to have for careers in various industries. (Note: 500 words is approximately 2 ½ pages of typed double-spaced text or 5 pages handwritten on college-ruled note paper.)

This will actually be easier than you think because you already did most of the work! You will be able to use and copy parts of your completed work from the final essay questions in the previous learning modules (*Section 2* in *GIS Career Learning Module 1, Section 7* in *GIS Career Learning Module 2,* and *Section 3* in *GIS Career Learning Module 3*).

This section guides you with structuring your essay with an outline. You will first work with the body paragraphs of the essay then, you will add an introduction and a conclusion.

Your general essay structure will consist of the following outline:

Why GIS Skills Would be Valuable to Have for Careers in Various Industries
Essay Outline

I. **Introduction**
   (In this paragraph, you will quickly introduce the main idea or argument of this essay followed by what you will present in Paragraphs II through IV below. Remember that the main idea or argument of this essay is, "Why GIS Skills would be Valuable to Have for Careers in Various Industries**."** You can actually use the headings of Paragraphs II through IV below to guide your introduction.)

II. **The Idea of the Digital Earth and How It Can Help Us**
   (In this paragraph, you can use some of your previous work from Section 2 of Learning Module 1. You can copy the material, modify it, or add new material as you see fit.)

III. **GIS Applications in Various Industries and Careers**
   (In this paragraph, you can use some of your previous work from Section 7 of Learning Module 2. You can copy the material, modify it, or add new material as you see fit.)

IV. **The Cutting Edge and Future of GIS**
   (In this paragraph, you can use some of your previous work from *Section 3* of *Learning Module 3*. You can copy the material, modify it, or add new material as you see fit.)

V. **Why GIS Skills Are Valuable to Have for Careers in Various Industries**
   (This is the only completely new stuff that you will have to write for the essay. In this paragraph, you will argue why GIS skills are valuable for employees and

employers using supporting ideas from Paragraphs II through IV above. You must support your ideas and arguments.)

VI. **Conclusion**

(You will quickly restate the main idea or argument of this essay---"Why GIS Skills Would be Valuable to Have for Careers in Various Industries"---followed by a very brief recap of the major ideas and arguments that you presented in Paragraphs II through IV above.)

Okay, now it is time to refine this outline. This will guide you in completing the essay. In these Paragraph sections for Roman numerals II through V, you will be able to write down the <u>major</u> ideas or arguments that you will include in your essay. You should write a sentence or two for each idea or argument you will make for the corresponding paragraphs on your separate answer sheet. Remember to support your arguments or ideas with examples. These examples could come from what you have done in these learning modules, what you have seen or heard about, or what you imagine. Generally, most of your ideas or arguments are acceptable as long as you explain and support them for the reader.

Main Ideas and Arguments for the Body Paragraphs (Paragraphs II through V)

II. *The Idea of the Digital Earth and How It Can Help Us*
(In this paragraph, you can use some of your previous work from Section 2 of Learning Module 1. You can copy the material, modify it, or add new material as you see fit.)

    A.
    B.
    C.

III. *GIS Applications in Various Industries and Careers*
(In this paragraph, you can use some of your previous work from Section 7 of Learning Module 2. You can copy the material, modify it, or add new material as you see fit.)

    A.
    B.
    C.

IV. *The Cutting Edge and Future of GIS*
(In this paragraph, you can use some of your previous work from Section 3 of Learning Module 3. You can copy the material, modify it, or add new material as you see fit.)

    A.
    B.
    C.

V.   *Why GIS Skills Are Valuable to Have for Careers in Various Industries (This is the only completely new stuff that you will have to write for the essay. In this paragraph, you will argue why GIS skills are valuable for employees and employers using supporting ideas from Paragraphs II through IV above. You must support your ideas and arguments.)*

     A.

     B.

     C.

Now, that you have filled in the major ideas of what you will argue and discuss in the essay body paragraphs (Paragraphs II through V) on the separate sheet of paper, you will have more than enough information to compose your 500-word essay! To assist you, you may refer back to the outline of the entire essay on page 3.

For Paragraph I, start by introducing the topic which is why GIS skills would be valuable to have for careers in various industries and then give your readers a "preview" of what you will discuss in the body paragraphs by covering some of the most important points that you listed in for the body outline above (Paragraphs II through V on pages 3 and 4).

For the body paragraphs (Paragraphs II through V), try to use your body outline (pages 3 and 4) to help you write the content for this section of the essay. That's why you outlined this section previously. Try to make each of the statements and arguments you make in these paragraphs flow together by associating them with your main essay topic (why GIS skills would be valuable to have for careers in various industries).

For your conclusion (Paragraph VI), restate the topic you introduced in your opening paragraph (Paragraph I) and summarize the essay by quickly describing only the strongest statements and arguments that you covered in detail in the body paragraphs. This conclusion should strongly remind the readers why you believe GIS skills would be valuable to have for careers in various industries.

If you follow these steps, you should have a great essay in a relatively short amount of time since you have plenty of ideas from the essay sections in the previous learning modules and a good outline to guide your writing. The final essay will contain all of the paragraphs in the essay outline on page 3 and 4. Remember to support your arguments with examples. The length of the essay should be at least 2 pages typed double-spaced (These are approximately 3 pages written on college-ruled note paper.) Please remember to check your spelling and grammar. Good Luck!

Student Survey

This learning module was developed specifically for you---the students---in order to expose you to GIS and related geospatial technologies.

GIS and related geospatial technologies, similar to what you worked with in this learning module, are major components of one of the most important new industries for career growth. Businesses, organizations, and governments are increasingly seeking skilled talent in this industry.

Now, to benefit other students and the authors of this learning module, you are required to finish this Student Survey and please send it back to the San Diego State University NSF-ATE team. We would greatly appreciate your input. Please take time to answer these questions as openly and honestly as possible. **They will not affect your grade or score.** You can provide your feedback to your teacher/educator along with the learning module answers on the separate answer sheet.

Thank you for helping us improves our modules!

S-9: What did you like best about this learning module four? Why?

S-10: What did you like least about this learning module four? Why?

S-11: Was there anything that was really hard to understand or difficult to complete in this module four? What was it? Why?

S-12: Is there anything in this learning module four that we can add, exclude, or change to make it better? What is it? Why?