Guidelines for Summary Report

Whether you are an Esri Canada GIS scholarship recipient, an Esri Young Scholar (EYS) applicant, or both, you need to submit a report of your work to accompany your poster. For EYS applications, the report must be submitted as a story map. Scholarship recipients are encouraged to submit a story map but may choose to submit a formal written report, instead. Regardless of the format, you need to think about what you should include and how you want to include it.

The stated requirements for the report are:

Scholarship: "Your report should contain a summary of your project or research goals, methodology and results that supports the content of your poster. You should include maps and other graphics as appropriate.

"You must include your name, the name of your institution and an appropriate title. You should also acknowledge any group members or other researchers that contributed to the project or research.

"Written Report: The main body (excluding title page, captions and references) should not be more than 1000 words. You should follow your institution's or department's formatting guidelines for, e.g., line spacing, font, and referencing style.

"Story Map: All sections in your story map should be an appropriate length to be both informative and engaging. You may choose to use a more informal style than you would use in a written report. You must include proper citations, including for any images that are not your own. Since it is an interactive format, you may also consider including links for readers to learn more about a topic."

Esri Young Scholar Award: "A story map that explains the work presented in the poster. Story maps must be public (shared with everyone). Story maps should complement the contents of the poster. Include maps, diagrams and images as and where appropriate to explain your research."

That doesn't give you a lot in the way of instructions, does it? But you should notice a few (or several) key points:

- *Summary*. This means main points only, not a lot of details… but make sure you clearly explain the goals, methodology and results and do it in such a way that supports and complements the poster. In other words, don't use the exact same text in both the report and the poster, but rather adapt the text to the report format and add additional details that you couldn't fit or didn't think were appropriate to use in your poster.

- *1000 words maximum*. This applies to the written report but may also be used as a guideline for the story map. While no one will actually count the words, it will be noticeable if your written report is well over the maximum – and also if it is well under.

  In the case of a story map, if your sections are too long, readers may skip over parts or stop reading entirely, while if sections are too short, readers may feel that there is something missing. In both cases, you might consider including links to external content where the reader can learn more about the topic if they are interested. Consider writing the draft in Word or other word processing software to make it easier to check the length and edit as needed.

- *References*. Yes, you need references. Anything that is not your own and not common knowledge needs to have a citation (University of Toronto Libraries, 2016). That includes any images or graphics that you did not create yourself! Hint: Use the References tab in Word or other citation tools to keep track of your sources and to format in-text citations and the list of references.

  If you are submitting a story map, consult the blog post Citation and references for sources in ArcGIS StoryMaps to see how you can include information about your sources in your story map. You must make sure you have permission to use any images or graphics you use in your story map and that you include photo credits. Even if you find the images on a site like Unsplash that does not require attribution, you should give credit to the photographer.

- *Include maps*. Should be self-evident. Choose maps that are relevant to your work and include legend, scale, labels and/or North arrow as needed to help the reader understand each map.

  With story maps, you have the choice between static maps (embedded as images) and interactive maps. You will need to decide which is most appropriate for each map you include. With the ArcGIS StoryMaps builder, you can also create map tours, assemble collections of items such as configurable apps and dashboards, and add other immersive content.

- *Include other graphics or illustrations*. They say a picture is worth a thousand words (aside: this is a common saying so it does not need a citation). Since you are limited to 1000 actual words in the written report, use flow charts, graphs and other illustrations to help tell your story. Remember to include references for any graphics or illustrations that are not your own work.

  Although you may have the exact same text in your story map as you would in a written report, the story map format is inherently a more visual format and a good story map needs to have visuals. These ArcGIS blog posts have some good tips on how to include images and other visual elements in your story map: Visual storytelling: Bring your narrative to life with an effective mix of photos, A guide to working with images in ArcGIS StoryMaps, Including charts in ArcGIS StoryMaps, and Using graphics to enhance your storytelling.

- *Formatting guidelines*. This can cover everything from font size and line spacing, to spelling and punctuation conventions, to how authors are listed in the references. Follow any guidelines that your instructors have asked you to use for assignments and find out if your department or institution has a style manual. If not, consider consulting the Writing Tips Plus (ou Clés de la rédaction) tool that is available along with other writing tools through the Language Portal of Canada.

  You may not have as much control over the formatting of a story map as you do over a written report. Nevertheless, there are a lot of features in the ArcGIS StoryMaps builder that you can use to customize the appearance of your story map. Read this growing list of Quick tips for mastering the ArcGIS StoryMaps builder as well as Making smart type choices for ArcGIS StoryMaps for ideas on how you can give your story map its own look.

Content

The above points mostly describe *how* you should write your report. But that leaves the question of *what* you should write, and it is a question you need to consider very carefully. To give you an idea of how quickly the word count can go up, this document is already over 1000 words and all it is, so far, is two and a half pages of mostly general guidelines. Note that it also uses the aforementioned trick of linking to external content for interested readers to learn more.

Whether a written report or a story map, your report will need to explain your project or research, or, more specifically, summarize your goals, methodology and results:

- Goals: Why did you do the project? (Note: "because it was assigned" is not a valid answer.) What were you hoping to accomplish? Were you trying to prove a hypothesis? Establish a relationship between different factors? Develop a new approach for analyzing a certain type of data? Create a resource (map or app) for a particular audience or purpose?

  Express your goals clearly and concisely. If your work was inspired by someone else's, make sure you acknowledge them. Provide introductory or background information about your project so your reader knows why it is important and where they can go to learn more about it.

- Methodology: This is the procedures, techniques or set of methods you used in your research. When (if) you are writing your thesis, you can go into great theoretical detail, but remember the 1000-word limit here.

  You might mention The Geographic Approach - ask, acquire, examine, analyze, act (Artz, 2008) or some other common methodology you may have followed, or you can simply describe the methods you used. You might also create a flow chart or include a ModelBuilder model to show

the process you followed while attempting to accomplish your project goals. Just make sure the labels in the chart or model can be read easily.

- Results: Did you accomplish what you were hoping to accomplish? Were there any surprises? Why or why not? Is there any follow up work you'd like to do? How can you show your results in a way that the reader can understand? One map? Multiple maps? A table? A chart?

  Your results will most likely include a map, but not necessarily. If they don't, remember that the guidelines do say "include maps" so you will need to figure out where else in your report a map would be appropriate. Also, remember that your results shouldn't be only visual. You need to introduce every figure, whether it is a map, chart, table, etc., in the text and you need to include some kind of concluding statement after presenting the results.

Style and Formatting

There are no specific style or formatting requirements so you are essentially free to use whatever font face, font size, line spacing, writing style, etc., you want. However.

- Remember who will be reading the paper or the story map and why you are submitting it (particularly for EYS applications). Let that guide you in your choice of colours and fonts, and that includes colours and fonts in maps and other illustrations. All text should be legible.

- Even in short documents, headings can be used to provide structure and help guide the reader. (Unless they are the uninspired and uninspiring "Introduction" and "Conclusion," which will just waste two of your 1000 words.)

- Use a bibliography (works cited) instead of footnotes or endnotes for any citations.

- Check your spelling and grammar (or have someone else check it) and look for things like commonly confused or misused words and things that some consider to be errors, such as split infinitives. If you don't know what a split infinitive is, see Split infinitives (Translation Bureau, Government of Canada, 2020).

- Use Canadian spelling. In particular, *metre* is the proper spelling for the unit of length, not *meter*.

More about Story Maps

Story maps have become a popular way for people to share their research, their geography-related interests, and their stories in general. Terminology note: a "story map" is the finished product. "Esri Story Maps" refers to the collection of classic templates, such as Story Map Tour and Story Map Journal. "ArcGIS StoryMaps" refers to the latest story map builder.

If you've never created a story map before, and are new to ArcGIS Online overall, check out A beginner's guide to ArcGIS Online to find resources to get started, as well as the webinar The New ArcGIS StoryMaps: Effortless Digital Storytelling for any Audience.

The ArcGIS StoryMaps product page is a good place to learn more about what you can do with story maps, explore story maps shared by others, and find resources (often in the form of story maps!) to help you plan and build your story map.

Works Cited

Artz, M. (2008, December 21). *What is The Geographic Approach?* Retrieved March 30, 2016, from GIS and Science: http://gisandscience.com/2008/12/21/what-is-the-geographic-approach/

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