Discussion and Analysis of Utilizing ASCE Standards for Writing in Comparison to MLA Format for Civil Engineering Students

Introduction

This white paper will discuss and analyze two different writing standards. The first, MLA, is very common and widely known among students at both the high school and collegiate levels. The second, ASCE Standards for Writing, is a highly technical writing guide put out by the American Society of Civil Engineers. This guide is very specific to the civil engineering discipline. This paper identifies, defines, and compares the two styles of writing with civil engineering students in mind. At the end of the paper, I recommend civil engineering students use the ASCE standards for writing to prepare them for the professional world as opposed to the MLA format, which they are more familiar with.

Purpose and Requirements

The purpose of this paper is to compare the ASCE Standards for Writing with the MLA format for use by civil engineering students. Students in the Arizona State University Ira A. Fulton School of Engineering civil engineering program who are working on their senior design project will use this paper to determine the writing standard they will use throughout their project and its documentation.

The civil engineering department at Arizona State University (ASU) has never identified a standard for the students' writing and, as such, a variety of writing standards are used by students. Sometimes, students do not use a writing style at all. This lack of consistency can be confusing for students who are conducting the work and faculty who are grading it. Many times, professionals are also brought in to advise or grade the projects which can add another layer of complexity if a standard writing convention is not established.

Arizona State University has asked for a comparison of the MLA writing style, which is used in nearly all ASU classes and which students are likely most familiar with, and the ASCE Standards for Writing, which is more applicable to the work the students are

doing but may require additional research and learning on top of their already rigorous classwork.

ASU is looking for a standard style to use within the civil engineering department that is:

- Easy to understand and follow
- Applicable to students during their studies and after graduation
- Consistent across civil engineering professions

Keeping this in mind, I did a comparison of the two writing styles head to head to determine which would be better to implement as a standard in the civil engineering program at ASU.

Each style discusses general information and the advantages and disadvantages of the respective style.

MLA Format

General Information

The Modern Language Association format, more commonly known as the MLA format is one of the most common styles of writing and formatting. Its most common uses are by "researchers, students, and scholars in the literature and language fields to use a uniform way to format their papers and assignments." (2021)

As such, most English and literature classes in both high school and college-level courses require the use of the MLA Format. This means students across the country, and including ASU civil engineering students, are familiar with and can use MLA formatting easily.

Advantages

There are several advantages to the MLA format, primarily consisting of its ease of understanding. The basics of the format work in nearly every situation and include one-inch margins all the way around, indenting every paragraph ½", 12 point font, double spaced, and using a standard and a font that is "easy to read, such as Times New Roman" (2021).

This is incredibly simple for students to implement into their papers and to remember off the top of their heads. During school, I could crank out a paper with MLA format in my sleep. It is consistent and easy to use. Even some of the more obscure rules are still

fairly simple such as indenting quotations by one inch or leaving one space after all punctuation marks.

Disadvantages

The disadvantage of MLA formatting in this context is that it is really meant for literature and language usage. In technical writing and documentation, it might not provide the support needed for the data and figure-heavy documentation that civil engineers use.

Example

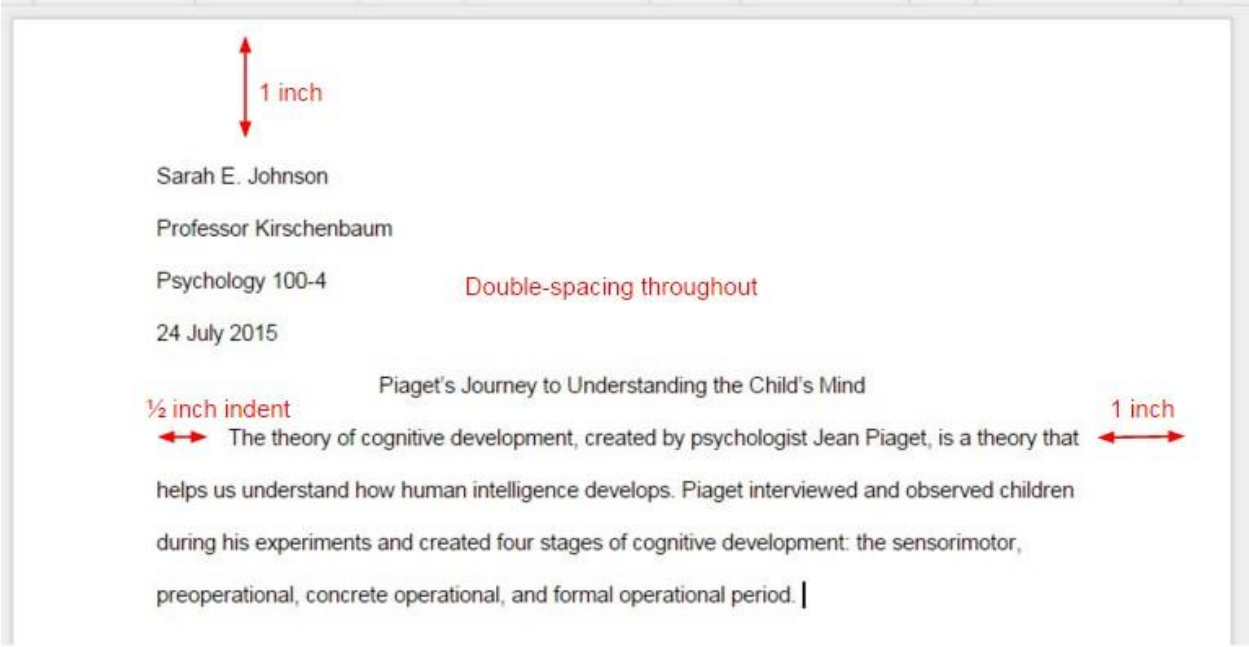

Figure 1: MLA formatting sourced from https://www.easybib.com/guides/citation-guides/mla-format/

ASCE Standards for Writing

General Information

The American Society for Civil Engineers (ASCE) has a standard for writing which is encouraged for all civil engineers to use. The goal of the standard for writing is that documents are clear and concise for all intended audiences. It includes rules for every aspect of the document from verbiage used to formatting to the organization of footers.

It is a highly controlled document that has a very clear purpose: to make technical writing methodical and easy to understand. The ASCE Standards for Writing document also takes a lot of the guesswork out of documentation for civil engineers who typically use documents as a recording or transfer of information as opposed to most literature or language individuals where the writing itself is purpose.

Advantages

The ASCE Standards for Writing have a lot of advantages for civil engineers. It lays out incredibly precise and strict rules for engineers to use. This can help engineers, who have very literal brains, formulate their ideas in a productive way.

These rules not only handle formatting but also the use of conjunctions, lists, and acronyms. Every possible aspect of the writing process is covered in the ASCE Standards for Writing. This standard is specifically designed for the civil engineering industry and the types of reports and information that are used on a regular basis within the field.

Disadvantages

The main disadvantage of the ASCE Standard for Writing is the sheer number of rules that they dictate. It is not something that could be easily memorized and would need to be consulted on a regular basis. This makes it hard to learn and even implement. The document outlining the rules is 13 pages long, which means there are a lot of details that include everything from formatting to punctuation.

This could be challenging for students who are not only learning how to design and implement projects themselves but also having to document their research in reports and updates.

Discussion

Civil engineering students have a very heavy school load and both MLA format and the ASCE Standard for Writing offer advantages and disadvantages. They are likely already familiar with the MLA format and have used it regularly for other classes. On the other hand, the ASCE Standard for Writing is likely a document they will become incredibly familiar within their professional careers.

While the MLA format brings familiarity, there is still a lot of room for creativity and movement of information. This could add more stress to the students as they are working their way through a major report for an undergraduate career project.

On the other hand, the ASCE Standard for Writing is much more strict and regulated which in turn makes documents very standardized and easy to read for anyone who picks them up. Any project which uses those standards has a clear-cut report that is directed at a specific audience. The standards themself ensure this. It also makes sure that verbiage is as clear and concise as possible. This can be a huge benefit to young engineers who need to master report writing.

Recommendations

The above information leads me to recommend the ASCE Standard for Writing to the ASU Ira A. Fulton College of Engineering civil engineering students. This is a straightforward standard that will not only help them formulate the best possible reports but also help them in their future careers in the civil engineering field.

Using this standard also ensures that all students are working to the same level and all reports should be consistent across the board. This will be of immense aid to any advisors brought in to help on the projects and to all professionals consulted on the grading of the projects.

Ultimately, though, becoming familiar with the ASCE Standard for Writing helps students both during school and in their professional careers, even if it is a bit more work to understand in the short term. There are long-term benefits of using the ASCE Standard for Writing for civil engineering students.

Conclusion

The Arizona State University civil engineering students should use the ASCE Standard for Writing in order to help prepare them for their professional careers and to ensure their project documentation during their senior design projects is concise and impactful.

This standard will be key to the professional and educational development of civil engineering students and is a standard that should not only be implemented during the senior design process but also introduced during the earlier years of education at Arizona State. The engineering program is dedicated to preparing its students for professional careers and implementing the ASCE Standard for Writing will do just that.

References:

A. (2010). *AMERICAN SOCIETY OF CIVIL ENGINEERS Standards Writing Manual* (2010 ed.). ASCE.

Staff, E. (2021, January 01). Mla format: Everything you need to know here. Retrieved February 25, 2021, from https://www.easybib.com/guides/citation-guides/mla-format/