Lab 3 Activity 1 - Adding references effectively using Reference Management Tool

Objective - Introduce students to add references effectively in MS Word 2016.

1. Create a sample research document with a title: "Climate Change Impacts."
2. Write a short introduction of at least 100 words.
3. Insert a heading "References" using the "Heading 1" style.

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Solutions:

Task 1:

- Open MS Word from the start menu.
- Type the content.

Task 2:

- Write introduction.

Task 3:

- Insert a heading 1 named "References" from the styles pane.

Climate Change Impact

Climate change has become one of the most pressing global challenges of the 21st century. It refers to the long-term alteration of temperature and typical weather patterns in a place, with significant consequences for ecosystems, human societies, and economies. The primary driver of climate change is the increased concentration of greenhouse gases such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) in the atmosphere due to human activities like burning fossil fuels, deforestation, and industrial processes. This document explores the various impacts of climate change, including rising temperatures, sea-level rise, changing weather patterns, and their effects on biodiversity and human health.

Rising Temperatures:

One of the most noticeable effects of climate change is the steady increase in global temperatures. According to NASA, the average global temperature has increased by approximately 1.2°C since the late 19th century. This rise in temperature leads to more frequent heatwaves, higher energy demand for cooling, and severe droughts in many regions. The agricultural sector, in particular, suffers from unpredictable temperature fluctuations, reducing crop yields and leading to food insecurity in vulnerable regions. Furthermore, extreme heat is linked to increased mortality rates, especially among the elderly and those with preexisting health conditions.

Sea-Level Rise:

The rise in global temperatures has led to the melting of glaciers and ice sheets, particularly in the Arctic and Antarctic regions. As these massive ice structures melt, the water runs into the oceans, causing global sea levels to rise. According to the Intergovernmental Panel on Climate Change (IPCC), global sea levels have risen by about 20 centimeters since 1900, and they are projected to rise by another 30 to 110 centimeters by 2100, depending on emissions scenarios. This rise in sea levels threatens low-lying coastal communities, leading to flooding, property loss, and displacement of populations. Major cities like New York, Mumbai, and Jakarta are at significant risk of coastal inundation.

References:

1. NASA, "Global Climate Change: Vital Signs of the Planet," NASA, https://climate.nasa.gov, accessed January 2025.
2. Intergovernmental Panel on Climate Change (IPCC), "Climate Change 2021: The Physical Science Basis," IPCC, https://www.ipcc.ch, accessed January 2025.
3. World Health Organization (WHO), "Climate Change and Health," WHO, https://www.who.int, accessed January 2025.

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Lab 3 Activity 2 - Add citation using Zotero

Objective - Students would learn to use citation utilizing Zotero application in MS Word 2016.

1. Install Zotero and set up a library with at least 3 references (books, articles, or websites).
2. Insert citations into the document using Zotero's Word plugin. Example citation style: APA.
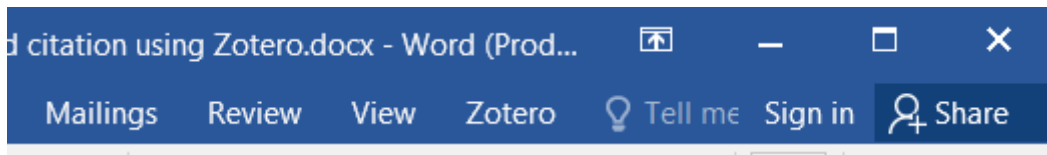3. Add an in-text citation at the end of a sentence discussing a specific fact

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Solutions:

Task 1:

- Install zotero.
- Go to https://www.zotero.org/download/

Task 2:

When you install Zotero, the **Zotero Word plugin** should be installed automatically. It adds a **Zotero tab** to your Word ribbon, making it easy to insert citations and create bibliographies.

- Open your Microsoft Word 2016 document.
- Place your cursor where you want to insert the citation.
- Go to the Zotero tab in the Word ribbon.
- Click on the "Add/Edit Citation" button.
- A pop-up box will appear, allowing you to search for the reference you want to cite.

- Type part of the reference's title, author's name, or keywords in the search box.
- Select the appropriate reference from the list.
- Zotero will insert the citation in your document in the APA format (or another style if specified).

Task 3:

This book was very nice until I try to read it. (Jail, n.d.)

Lab 3 Activity 3 - Creating Bibliography

Objective - Enable students to create bibliography using Zotero.

1. Generate a bibliography at the end of the document using Zotero.
2. Ensure to format all citations correctly and match the chosen citation style.

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Solutions:

Task 1:

- Open your document in Microsoft Word 2016.
- Place your cursor at the location where you want the bibliography to appear (typically at the end of the document).
- Go to the Zotero tab in the Word ribbon.
- Click on the "Add/Edit Bibliography" button.

- Zotero will automatically create and insert the bibliography for you at the end of the document based on all the citations you've inserted throughout your document.
- Zotero will format the bibliography according to the citation style you have chosen (e.g., APA, MLA, Chicago, etc.).

Task 2:

Zotero formats citations and the bibliography according to the style you select. To ensure the citations and bibliography match the **APA format**, you need to set **APA style** in Zotero.

Set the Citation Style to APA:

- Open Zotero (the Zotero desktop application).
- Go to Edit in the menu bar, then select Preferences.
- In the Preferences window, click on the Cite tab.
- Under the Styles section, make sure APA is selected. If it's not, you can select it from the list or click Get More Styles to download it from the Zotero repository.
- After selecting APA, click OK to apply the settings.

An Example of Climate Change

Efforts to improve the climate have become essential as the world confronts the consequences of climate change. Transitioning to renewable energy sources, such as solar, wind, and hydroelectric power, plays a crucial role in reducing greenhouse gas emissions and mitigating global warming. In addition to adopting cleaner energy alternatives, improving energy efficiency in industries, homes, and transportation systems can significantly reduce carbon footprints. Reforestation and afforestation initiatives are also vital in combating deforestation, as trees act as natural carbon sinks, absorbing large amounts of CO_2. Furthermore, advancing sustainable agricultural practices, such as precision farming, reduces the environmental impact of food production. (*Game of Wars*, n.d.) Governments, businesses, and individuals must collaborate to support policy changes, innovations in green technologies, and lifestyle shifts that prioritize environmental sustainability,(*Good But Best*, n.d.) ensuring a healthier planet for future generations. (Jail, n.d.)

Bibliography

Game of Wars. (n.d.).

Good But best. (n.d.).

Jail, S. (n.d.). *Very nice book* (3th ed., Vol. 2).

Lab Assignment: Creating a Professional Report Using MS Word 2016

Objective: The goal of this lab assignment is to enable students to apply advanced MS Word 2016 features, including designing a professional report, effective page setup, adding headers and footers, managing page numbers, and citation with the bibliography. This hands-on experience will enhance students' skills in structuring and formatting documents professionally.

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On the next page…

Assignment Instructions:

Designing Professional Report

1. Create a new document and give it an appropriate title for your chosen topic.
2. Insert a cover page using MS Word templates, customizing it with your name, date, and other necessary details.
3. Include a table of contents for easy navigation.
4. Add a "Summary" section and write an introductory paragraph for the topic, formatting it with justified alignment.
5. Apply consistent styles to headings and subheadings.

Page Setup

1. Adjust page layout by setting margins to 1 inch on all sides.
2. Experiment with both portrait and landscape orientations for certain sections of the report.
3. Apply a custom page size if needed and add page colors and borders to make the report visually appealing.
4. Divide the document into multiple sections and assign different margin settings for each.

Headers and Footers

1. Add a header with your name and a footer with the current date.
2. Insert a logo or symbol in the header, resizing it as needed.
3. Apply different header/footer settings for the first page and subsequent pages.
4. Include a horizontal line and file path in the footer for easy reference.

4. Page Numbers

1. Insert page numbers at the bottom of each page, experimenting with different placements (e.g., right, center).
2. Use Roman numerals for the first section (e.g., cover page, table of contents) and Arabic numerals for the main content.
3. Restart page numbering in a new section of the document if needed.
4. Ensure to display page numbers across the entire document.

Assignment Requirements:

1. Minimum word count: 500 words.
2. Follow the specified structure and complete all four activities.
3. Submit the final document as both .docx and .pdf files.

This assignment encourages students to integrate various MS Word features, creating a well organized, professional report on a topic of their choice.

Exploring Environmental Sustainability

Environmental sustainability refers to the practice of meeting the needs of the present without compromising the ability of future generations to meet their own needs. It encompasses a broad range of actions and principles aimed at reducing the human impact on the planet and ensuring that natural resources are available for the long term. The core idea is to create a balance between economic, social, and environmental factors to foster a healthy, sustainable world for both humans and wildlife. With the rising threats of climate change, biodiversity loss, and ecosystem degradation, environmental sustainability has become one of the most urgent challenges of our time.

One key component of environmental sustainability is the efficient use of natural resources. This involves reducing waste, conserving water, and utilizing renewable energy sources such as solar, wind, and hydropower. The goal is to reduce reliance on non-renewable resources like fossil fuels, which contribute significantly to global warming and environmental degradation. Transitioning to a circular economy is another vital strategy in this regard, where products are designed to be reused, recycled, or repurposed, reducing the need for raw materials and minimizing waste. For instance, recycling materials such as metals, plastics, and paper helps conserve resources, reduces pollution, and saves energy.

Sustainable agriculture is another important aspect of environmental sustainability. Traditional farming methods often deplete soil nutrients, pollute water sources, and rely on chemical fertilizers and pesticides that harm ecosystems. In contrast, sustainable farming practices aim to minimize environmental damage by promoting soil health, reducing pesticide use, and conserving water. Techniques such as crop rotation, agroforestry, and organic farming help maintain biodiversity, reduce carbon footprints, and create a more resilient food system.

Biodiversity preservation is an essential factor in environmental sustainability. Ecosystems rely on a wide variety of species to maintain their functions and health, but human activities such as deforestation, pollution, and habitat destruction are pushing many species to the brink of extinction. Protecting natural habitats and restoring damaged ecosystems through conservation efforts and habitat restoration is critical to preserving biodiversity. In addition, reducing pollution, especially plastic waste, and protecting marine ecosystems from overfishing are necessary to maintain the health of our oceans.

One of the major challenges in achieving environmental sustainability is the need for collective action. Governments, businesses, and individuals all play a role in creating a more sustainable future. Governments can implement policies and regulations that incentivize sustainable practices, such as carbon pricing, emissions reduction targets, and the promotion of green technologies. Businesses can invest in cleaner production methods, reduce their carbon footprints, and adopt sustainable supply chains. Individuals, too, can contribute by making conscious decisions in their daily lives, such as reducing energy consumption, supporting sustainable brands, and minimizing waste.

Education and awareness are also crucial for fostering environmental sustainability. By understanding the environmental challenges we face and the steps we can take to address them, people are more likely to adopt sustainable practices and advocate for policies that protect the planet. Sustainability should not just be an abstract concept, but a guiding principle for how we live and interact with the world around us.

Summary

In conclusion, environmental sustainability is a multifaceted issue that requires global cooperation, innovation, and commitment. By making changes in how we produce, consume, and live, we can create a sustainable future that benefits both the planet and future generations. The time to act is now, and every effort counts in protecting the Earth's resources for the long term.