Go to Moodle and take the Syllabus quiz

7 minutes, 10 questions

#### Finding and Evaluating Academic Sources Week 1 Lesson 3

English for Academic Purposes



Source: De Chazal, E., & Moore, J. (2021). Oxford EAP: A Course in English for Academic Purposes. Advanced/C1.



- Finding and Evaluating Academic Sources
- Reading strategies
- Exploring journal abstracts

#### Lesson objectives

By the end of the lesson students should:

- Know where to find scholarly sources
- Be able to evaluate academic sources
- Learn about the reading strategies
- Learn about the journal abstracts

#### Warm up

What problems do you see in these pictures? What are the causes of these problems? How can they be solved ?



Source: https://www.habitatforhumanity.org.uk/blog/2018/09/relative-absolute-poverty/



Source: https://www.provide-education.co.uk/10-ways-to-promote-gender-equality-in-the-classroom/



Source:

https://bangkok.unesco.org/content/5th-asia-pacific-meeting-education-2030-apm d-delivering-inclusive-and-equitable-quality



Source:

https://www.smart-ener gy.com/industry-sector s/policy-regulation/glob al-clean-energy-invest ment-tops-300-billion-fo r-the-fifth-year-in-a-row/

## Finding and Evaluating Academic Sources

Selecting two+ research articles



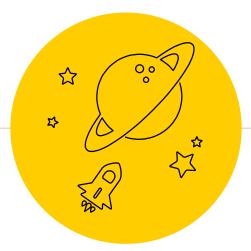
### What types of research sources do you know?



Source: https://pressbooks.bccampus.ca/technicalwriting/chapter/findingevaluating/#footnote-596-1

#### **Types of Research Sources**

- Primary and Secondary Sources
- Primary sources "report directly on research undertaken by the authors" (Chazal & Moore, 2017, p. 40)
- Secondary sources "report on research carried out by others" " (Chazal & Moore, 2017, p. 40)



## Why only the journal articles?

#### Academic journal articles:

- Undergo a rigorous pre- and post-publication review process
- Considered reliable because they are peer-reviewed – critically evaluated by academics in the same discipline
- Publish up-to-date information and the latest theories

#### Where to find them? Use the university IP address

- https://scholar.google.com/schhp?hl=en&as\_sdt=0,5
- search.ebscohost.com
- sciencedirect.com
- apps.webofknowledge.com
- scopus.com
- hub.sciverse.com
- doaj.org
- erxiv.org



For academic journal articles

# Why do you think journal articles could be challenging to read?

- Background knowledge is necessary
- Subject-specific vocabulary
- Purpose make a claim, develop an argument, or share an opinion
- Research either the author's **own** or the work of other scholars on the subject. The text is likely to include **many references** to other researchers
- Specificity a narrow, highly specific topic
- Formatting is standardized: Abstract, Background or Literature Review, Methods, Results, Discussion, Conclusion, and Reference sections
- Lack of distracting visuals

#### **Reading strategies:**

Decide relevance based on:

- title
- abstract
- Conclusion
- Look at References

Read the article titles below and decide should you continue reading their abstracts for the essay on air pollution and modern technological solutions:

- What are the best combinations of fuel-vehicle technologies to mitigate climate change and air pollution effects across the United States (Tong & Azevedo, 2020).
- Developments of Electric Cars And Fuel Cell Hydrogen Electric Cars (Wilberforce et al., 2017).

#### - Air pollution and modern technological solutions

- What is an abstract?
- Read two abstracts of the articles
- Decide if you should read their conclusions
- Why is it important to read the conclusion of a paper?
- How could a list of references be useful for you?

**Abstract:** Tong, F., & Azevedo, I. M. (2020). What are the best combinations of fuel-vehicle technologies to mitigate climate change and air pollution effects across the United States?. *Environmental Research Letters*, 15(7), 074046.

The transportation sector is the largest contributor to CO2 emissions and a major source of criteria air pollutants in the United States. The impact of climate change and that of air pollution differ in space and time, but spatially-explicit, systematic evaluations of the effectiveness of alternative fuels and advanced vehicle technologies in mitigating both climate change and air pollution are lacking. In this work, we estimate the life cycle monetized damages due to greenhouse gas emissions and criteria air pollutant emissions for different types of passenger-moving vehicles in the United States. We find substantial spatial variability in the monetized damages for all fuel-vehicle technologies studied. None of the fuel-vehicle technologies leads simultaneously to the lowest climate change damages and the lowest air pollution damages across all U.S. counties. Instead, the fuel-vehicle technology that best mitigates climate change in one region is different from that for the best air quality (i.e. the trade-off between decarbonization and air pollution mitigation). For example, for the state of Pennsylvania, battery-electric cars lead to the lowest population-weighted-average climate change damages (a climate change damage of 0.87 cent/mile and an air pollution damage of 1.71 cent/mile). In contrast, gasoline hybrid-electric cars lead to the lowest population-weighted-average air pollution damages (a climate change damage of 0.92cent/mile and an air pollution damage of 0.77 cent/mile). Vehicle electrification has great potential to reduce climate change damages but may increase air pollution damages substantially in regions with high shares of coal-fired power plants compared to conventional vehicles. However, clean electricity grid could help battery electric vehicles to achieve low damages in both climate change and air pollution

**Abstract :** Wilberforce, T., El-Hassan, Z., Khatib, F. N., Al Makky, A., Baroutaji, A., Carton, J. G., & Olabi, A. G. (2017). Developments of electric cars and fuel cell hydrogen electric cars. *International Journal of Hydrogen Energy*, 42(40), 25695-25734.

The world continues to strive in the search for clean power sources to run the millions of different vehicles on the road on daily basis as they are the main contributors to toxic emissions releases from internal combustion engines to the atmosphere. These toxic emissions contribute to climate change and air pollution and impact negatively on people's health. Fuel cell devices are gradually replacing the internal combustion engines in the transport industry. Some notable challenges of the PEMFC technology are discussed in this paper. High costs, low durability and hydrogen storage problems are some of the major obstacles being examined in this investigation. The paper explores the latest advances in electric cars technology and their design specifications. The study also compares the characteristics and the technologies of the three types of electric cars now available in the market.

### Assignment

 On the third lesson create a list of references in APA style in MS Word doc/padlet/Teams/One Note (the choice of the platform depends on the instructor)

#### Sources

Journal Article Reading Comprehension Strategy. (2017, October 13). Asthma Educator. https://getasthmahelp.org

- Last, S. (2019, January 1). 5.2 Finding and Evaluating Research Sources Technical Writing Essentials. Pressbooks. https://pressbooks.bccampus.ca/technicalwriting/chapter/findingevaluating/#footnote-596-1
- Migrants and their Vulnerability to Human Trafficking, Modern Slavery and Forced Labour | IOM Online Bookstore. (n.d.). International Organisation for Migration. Retrieved December 8, 2020, from <u>https://publications.iom.int/books/migrants-and-their-vulnerability-human-trafficking-modern-slavery-and-forced</u> <u>-labour</u>
- Note-Taking Template for Journal Articles. (n.d.). Learning Center of THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL. Retrieved December 7, 2020, from <u>https://learningcenter.unc.edu/tips-and-tools/note-taking-template-for-journal-articles/</u>
- Washington SBCTC & Lumen Learning. (n.d.). Finding and Evaluating Research Sources | American Literature I. Writing About Literature. Retrieved December 7, 2020, from

https://courses.lumenlearning.com/suny-americanlit1/chapter/reading-finding-and-evaluating-research-sources/

### • Thank you for your attention!

