LESSON PLAN TEMPLATE:

Name of the class:	Detecting implicit bias in academic papers (part 2) – towards diversifying Open Scholarship (continuation)
Suitable context: (e.g., entry-level/ undergraduate/postgraduate	Undergraduate/postgraduate- suitable to discuss open scholarship and the language used to promote inequality within an open scholarship sphere.
Total time: (e.g., 1 hour, 2 hours, 1 day)	~ 1 hour
Pre-requisites:	This lesson is a continuation of the "lesson bias" block. Before starting this lesson, students should first be introduced to Implicit Bias in Academic Papers part 1.
Related resources (e.g. slides, assignment materials, lecture recordings, etc)	*Interactive materials to be used in class can be accessed here.* *For skim reading:* *Azevedo, F., Middleton, S., Mai Phan, J., Kapp, S. K., Gourdon-Kanhukamwe, A., Iley, B., Elsherif, M. M., & Shaw, J. J. (2022). Navigating academia as neurodivergent researchers: promoting neurodiversity within open scholarship. Observer.* *For jigsaw reading:* *Article 1 - Zwaigenbaum, L., & Penner, M. (2018). Autism spectrum disorder: advances in diagnosis and evaluation. BMJ: British Medical Journal, 361. https://www.jstor.org/stable/26959693* *Article 2 - Faras, H., Al Ateeqi, N., & Tidmarsh, L. (2010). Autism spectrum disorders. Annals of Saudi medicine, 30(4), 295–300. https://doi.org/10.4103/0256-4947.65261*
Learning outcomes:	1. To discuss and recognise researchers' implicit bias, 2. To familiarise students with the neurodiversity paradigm (raise awareness and focus on diversity and inclusivity) 3. To discuss how ableist language may influence public perceptions

Time	Activity	Instructor notes

5 minutes	Introduction - ask students if they remember the main points covered in part 1 of the lesson and whether they remember how left-handedness was portrayed in the article they read. What other groups of people were discriminated against in the article?	
15 minutes	**Neurodiversity paradigm - introduction** **Academic skills: skim reading, synthesising information from sources, source evaluation** Tell students they are going to look at examples of biassed / discriminatory language used in more current papers. Ask students look at two sources that focus on neurodiversity. They can be found here (Activity 3) and below: *Azevedo, F., Middleton, S., Mai Phan, J., Kapp, S. K., Gourdon-Kanhukamwe, A., Iley, B., Elsherif, M. M., & Shaw, J. J. (2022). Navigating academia as neurodivergent researchers: promoting neurodiversity within open scholarship. Observer.* FORRT neurodiversity tweet How is neurodiversity presented in these sources? What is neurodiversity / neurodivergence? – see more questions in the column to the right —->>> Ask students whether these sources are reliable - ask them to research FORRT and decide what makes these sources reliable (collaboration of researchers / publications and outlets (peer reviewed) / formal institutional	Ask students to work in pairs or individually and either discuss or reflect on their understanding of the paradigm. Help them notice that neurodiversity covers all human beings and is seen as non-pathological. Discuss human variation and notice how men and women were described in the first article. Point out that men were seen as the norm and women were compared to that norm with the focus on deficits. Note: this is an introduction to help students notice the analogy in the way neurotypicals and non-neurotypicals are seen. Tell students this paradigm is also referred to as Critical Neurodiversity Studies and ask

	partnerships / awards / authors and their profiles etc.) FORRT website Talk about online sources and discuss how to evaluate them (authorship / affiliation, accountability, relevance, currency etc.) If you think your students may benefit from this, introduce the CRAAP test.	students to draw analogies with Critical Gender / Race Studies.
20 minutes	**Neurodiversity – looking at examples of ableist language, noticing implicit bias and discrimination embedded in the language. Noticing the default deficit approach to neurodivergence.** Jigsaw reading Divide students in pairs. Student A skims article 1 and student B skims article B. Emphasise that they have only 5-7 minutes and should focus on identifying the authors' perceptions of Neurodiversity. How do they see neurodivergent folks? ● *Article 1 - Zwaigenbaum, L., & Penner, M. (2018). Autism spectrum disorder: advances in diagnosis and evaluation. BMJ: British Medical Journal, 361. https://www.jstor.org/stable/2695969 3* ● *Article 2 -* Faras, H., Al Ateeqi, N., & Tidmarsh, L. (2010). Autism spectrum disorders. *Annals of Saudi medicine*, *30*(4), 295–300. https://doi.org/10.4103/0256-4947.65261 Ask questions about the language and perceptions of the authors regarding ND (see questions on the handout)	Monitor student reactions – it is very likely that some of your students are neurodivergent and may be triggered by these articles. Draw similarities between these articles and the one from 1904 discussed in Part 1 of the lesson. Talk about how the use of language deepens discrimination and influences the methods used by scientists + influences results. If time allows, discuss scientific objectivity / subjectivity

15 minutes	**Identifying biassed and discriminatory language in recent publications:** Interactive activity - [Activity 5](#) Ask students to match the fragments from recent publications on neurodiversity to the relevant analysis. Students can do the activity on their laptops / phones or it can be done on the main computer and projector.	Talk about Sapir-Whorf hypothesis and introduce the term "minoritisation". Ask students how traits can be described in a negative / positive way depending on the attitude. Ask students to come up with more examples.
5 mins	**Introduce extension reading:** Refer students to the following paper: *Bottema-Beutel, K., Kapp, S. K., Lester, J. N., Sasson, N. J., & Hand, B. N. (2021). Avoiding Ableist Language: Suggestions for Autism Researchers. Autism in adulthood : challenges and management, 3(1), 18–29. https://doi.org/10.1089/aut.2020.0014* and ask them to compare the language presented in both columns. Ask for feedback.	How could the papers from jigsaw reading avoid biassed language?
Final: ~ 3 minutes	Ask students for comments and reflections. Get them to summarise the main message of this lesson in a few words. How can this be applied to everyday life?	How can we pay more attention to the language we use? How can we notice bias? How can early career researchers avoid

		reusing language that discriminates?