

Nateghian, Nooshin. “English language needs of Iranian students of Civil Engineering: Are the courses aligned with workplace needs?” *English for Specific Purposes*, vol. 76, Oct. 2024, pp. 122–135, <https://doi.org/10.1016/j.esp.2024.08.002>.

The author wanted to understand the role of English among engineers, particularly civil engineers in Iran. The author used multiple sources of data to understand this, like interviews, classroom observations, field notes, and group discussions. Using this data, the author discovered that in addition to proficiency in English, civil engineers also need to do things like discuss technical issues, attend conferences, read specific genres, and communicate. All of those things require proficiency in English. However, based on the data, the author believes that university programs (specifically those in Iran) aren't designed according to those specific needs for the students, so the author wants to develop a curriculum for universities that teaches English in a way that meets civil engineering students' needs. I think this is a good source because it details the exact role of English in the field of engineering (specifically civil engineering) and why it is important to be proficient in English. This source uses multiple sources of data to support the main argument. This source also applies to the field of engineering as it is about civil engineering, a large engineering field especially in other countries that might not be as proficient in English. This source would help me show the importance of being proficient in English in engineering.

Çal, Akif, et al. “The what – how – why of English in the workplace: Perspectives from Turkish engineers.” *European Journal of Engineering Education*, vol. 47, no. 2, 27 July 2021, pp. 333–352, <https://doi.org/10.1080/03043797.2021.1946014>.

The researchers wanted to understand the role of English in the workplace, particularly in many different types of engineering in Turkey, to try to get universities to equip engineering students with better communication skills so they can be successful. The findings show that English isn't as important for daily tasks but is more important for recruitment and promotion. In addition, they show that receptive skills are more important in engineering fields (at least in Turkey) compared to productive skills. Lastly, they also argue that the use of English in the workplace depends on the type of company it is being used in. The authors aim to modify the engineering programs in Turkey to prepare Turkish engineers through detailing the role of English according to them. I think this is a good source because it uses the findings from the study and the data to come to a conclusion. It also involves Turkey, a country that may not be as proficient in English but still have many different types of engineering. This source is a little bit different than the first source as it doesn't view English as very important in the workplace like the first source does, but the authors believe it is still important for different reasons. This source could both support my argument as well as be kind of a counterargument.

Hodges, Amy, and Leslie Seawright. “Transnational Technical Communication: English as a business lingua franca in engineering workplaces.” *Business and Professional*

***Communication Quarterly*, vol. 86, no. 4, 21 Feb. 2023, pp. 498–513,
<https://doi.org/10.1177/23294906231154860>.**

The authors wanted to find the role of English as a “business lingua franca” (BELF) in the workplace, particularly in engineering workplaces. To do this, they did a study examining the experiences of 10 engineers that graduated from a university in the Arabian Gulf. When using BELF, business professions have a diverse set of language practices based on personal and professional experiences, and those practices constantly evolve according to new situations and interactions. BELF involves more collaboration and responsiveness, as well as responsive explanations to seek clarity in communication. In some countries like Qatar, engineers also adapt their writing and communication for different audiences (much like BELF), which they felt was crucial to their early success on the job. The authors want instructors to provide methods centering intercultural professional communication instead of using English as a standardized language. I think this is a good source because it provides another potential way English is used in the engineering workplace, in this case mainly through business. It does also serve as a counterargument in a way as it opposes using standardized English.

**Cunningham, Christine M., et al. “Affordances of Engineering with English learners.” *Science Education*, vol. 105, no. 2, Mar. 2021, pp. 255–280,
<https://doi.org/10.1002/sce.21606>.**

The authors want to determine how engineering can be used when learning English. While that part isn’t exactly my research question, this source does mention how for some people, English being a second language (and therefore harder to learn) could lead to them leaning towards a more engineering or science-related field. This could lead to the possibility that not only is English not exactly necessary for success in the field, finding it harder to learn English might actually be what makes some people more successful in their field. I think this is a good source because it provides several examples of students in different situations of learning English, whether it is their native language or if they are learning it, and how it relates to them and engineering or other related fields. This source may also serve as a possible counterargument.

Zhang, Ying, et al. “Maximizing disability diversity, Language Diversity, and productivity: A study in apparel manufacturing.” *Production and Operations Management*, vol. 32, no. 12, Dec. 2023, pp. 3783–3800, <https://doi.org/10.1111/poms.14073>.

The authors mainly observe the relationship that different types of diversity, specifically disability and language diversity (which we would be using for this essay), have with team productivity. The authors run a study and develop models to determine the impact that inclusion would have on team productivity. They determined that team productivity may have a negative effect if workplaces focus on both disability and language inclusion. This source is a little harder to connect to the research question, especially since it was focused on “apparel manufacturing” and not engineering and that it wasn’t completely about language. However, I still think it may

be a decent source because it provides a model that shows the impact that language diversity may have on success in the workplace.