

A Reflective Journey - How General Education at Iowa State University Prepared Me for Intercultural Engineering Communication.

Public awareness about ongoing research and development in engineering is sometimes limited, particularly among groups distanced by language or cultural barriers. This can be especially prominent in the vast spheres of people who are unfortunately left out of the dialog because of language or cultural barriers. The understanding that a group of people have of developments in engineering will influence their enthusiasm, engagement, and the amount of influence they have as a stakeholder in how those developments are perceived and implemented. If minority groups are left out in their understanding of the challenges of engineering due to language or cultural differences from the developers and researchers, then they will unfortunately be left out of the decisions about how those technologies affect them. I believe my general education experiences at Iowa State University have prepared me to fill a portion of this communication gap.

During my time at ISU, I dove into courses that emphasized cross-cultural understanding and communication. This began with my immersion into Spanish 102 – 303, extended into the realm of societal norms with A M D 165 - Dress and Diversity in Society, and culminated in a historical exploration through Hist 221 - Survey of United States History I. These courses each deal with multicultural interaction from different perspectives, the linguistic, the visual, and the dynamics of power.

Most of my general education experiences here at ISU (Iowa State University) have been oriented towards understanding and communicating across cultural and language boundaries. At ISU, I enrolled in general education courses such as Spanish 102 – 303, A M D 165 - Dress and Diversity in Society, and Hist 221 - Survey of United States History I.

In my numerous Spanish courses, I Learned about Latin American culture through language, which prepared me to interact and communicate with people of Latino descent. I Gained skill and confidence in interacting with people from different nationalities. Learned about how language can be used to indicate what assumptions and perspectives a culture is making, and how that perspective shapes the way they see and communicate about the world. This new understanding has prepared me to solve engineering problems with a global perspective, and on diverse teams. As an engineer, this skill isn't just about communicating. When working on projects that might be implemented in Latin American countries, or even in diverse communities in the US, understanding the local culture can lead to designs that are more effective, more accepted, and more beneficial for the communities they serve.

In A M D 165 - Dress and Diversity in Society- I learned about how culture affects dress, how dress affects culture, how dress is used for communication, and how diverse groups have historically approached dress in America. This prepared me to consider the visual elements of communication, how the way a person may dress is a representation of their broader culture and experiences. This has prepared me to engage with the visual communication elements of engineering design. I am prepared to make design and engineering decisions with consideration to the visual cultural impacts that any choice of design will communicate, and to listen to a broader audience of input when considering what my visual designs may be communicating.

The visual component in an engineering project goes beyond aesthetics. For instance, if tasked with designing safety gear or equipment, understanding the cultural significance of colors, symbols, and dress can make the difference between a product that's embraced by the community and one that's rejected.

In History 221 - Survey of United States History I - I learned about the interactions between the various ethnicities and nationalities in the north American west. This class covered a multi-perspective view of the American expansion westward including multiple native American nationalities, the French, the Spanish, and the British. It discussed how these groups vie for power and the dynamics of communication between different cultural perspectives. Recognizing historical contexts can be invaluable. If, for example, an infrastructure project is being planned in a region with deep historical ties and conflicts, understanding those nuances could lead to more inclusive and accepted designs. This class prepared me to recognize the historical weight of intercultural interactions.

Looking ahead, I anticipate several challenges in the engineering field that will require a nuanced understanding of culture and history. For instance, as sustainable technologies evolve, it's imperative that we implement them in ways that respect local traditions and values. Moreover, as cities become increasingly globalized, infrastructure projects will need to cater to a diverse population with varied needs. Lastly, as we push the boundaries of digital technology, ensuring equitable access and understanding for all, irrespective of cultural or linguistic barriers, will be paramount. My education at ISU has equipped me not only to anticipate these challenges but to address them with empathy and insight.

My experience in my general education classes has prepared me to tackle the communication gap between the diverse public and the engineering world. It has prepared me to understand the continued context of intercultural communication to enable disadvantaged stakeholders to influence how engineering developments are implemented, and to include them in the discussion of how these technologies affect them. An enthused and engaged public is a source of funding, research, and application. By empowering all sectors of the public, we can ensure our engineering solutions are implemented with respect and incorporate diverse cultural perspectives.