



Volume 21 (2026), pp. 87-98
*American Journal of STEM Education:
Issues and Perspectives*
eISSN 30.3-1190 | Print ISSN: 3069-0072
Star Scholars Press
<https://doi.org/10.32674/3ad6hy78>

Speaking Science in a Foreign Tongue: Plurilingual Voices in U.S. Universities

Wilhelmina Antwi
The Pennsylvania State University, USA

ABSTRACT

The internationalization of STEM education has significantly transformed academic discourse in U.S. universities. However, research on how non-native English-speaking STEM students navigate linguistic challenges remains limited. This gap is especially important given that over half of the international students in the U.S. are enrolled in STEM fields, where technical language adds complexity to academic communication. Drawing on Communication Accommodation Theory and translanguaging perspectives, this study examines how international STEM graduate students navigate language barriers at their host institutions. Through in-depth interviews with 10 international graduate students from Africa and Asia, our analysis reveals systemic challenges, including inadequate institutional support and integration difficulties. Students develop sophisticated hybrid strategies that balance cultural identity preservation with academic demands, demonstrating advanced plurilingual competencies through metalinguistic awareness and navigation of disciplinary-specific language. This research enhances the understanding of multilingual academic discourse and provides insights into fostering more equitable educational environments in STEM fields.

Keywords: Academic challenges, international students, linguistic adaptation, plurilingualism, STEM education

Editors:

Dr. Cristina Alfaro, San Diego State University, USA
Dr. Krishna Bista, Morgan State University, USA

INTRODUCTION

In recent years, international student enrollment in the United States has surged dramatically, reaching 1,057,188 students in the 2022/2023 academic year—a 12% increase from the previous year and the fastest growth rate in over four decades (Korhonen, 2023). This global educational migration is driven by several factors: American institutions offer world-class educational opportunities, substantial financial support, and internationally recognized credentials (Saha, 2014). For international students, studying in the U.S. provides valuable opportunities to gain new perspectives in their fields, develop personally, and build global professional networks (Urban & Palmer, 2016; Rodriguez, 2018). Despite these advantages, international students face significant challenges. Beyond visa processing complications and financial burdens, many experience cultural adjustment difficulties that can lead to feelings of isolation and loneliness (Bordini et al., 2021; Girmay & Singh, 2019). Language proficiency also emerges as a particularly critical factor in successful acculturation, with European students—who often possess greater English fluency and cultural familiarity—generally experiencing smoother transitions than their non-European peers (Leong, 2015). The language dimension is especially significant considering that most international students come from countries where English is not the dominant language. In 2022/2023, the top three countries of origin—China, India, and South Korea—accounted for 56.9% of all international students (Institute of International Education, 2023). Furthermore, 53.2% of international students were enrolled in STEM programs, where technical language adds another layer of complexity to academic communication. This intersection—non-native English speakers navigating highly specialized STEM discourse—remains understudied. While scholarship has examined the broader implications of English as academic lingua franca (Navarro et al., 2022; Woodend et al., 2019), fewer studies have specifically investigated how international STEM students experience conducting and communicating research in a language other than their native tongue. This study addresses this research gap by examining the lived experiences of international STEM students in U.S. universities. Our investigation explores three dimensions: the linguistic challenges these students face, the strategies they develop to navigate academic expectations, and the sophisticated ways they employ their full linguistic repertoires in academic settings. By documenting these experiences, we aim to provide insights that can help institutions create more inclusive and supportive academic environments—benefiting not only international students themselves but also enriching the academic community through increased diversity of perspectives, approaches, and collaborative possibilities.

International Students in STEM Fields

The United States has long been a major destination for international STEM students, attracting them through a combination of world-class academic programs, cutting-edge research opportunities, and favorable immigration policies. The STEM Optional Practical Training (OPT) extension, which allows international students to work in the U.S. for up to 36 months after graduation, serves as a particularly strong incentive. Additionally, U.S. institutions offer substantial financial support through scholarships, grants, fellowships, and assistantships that make education accessible to international talent (Saha, 2014). Despite these advantages, recent trends suggest a concerning shift in global education mobility patterns. Jeong et al. (2021) identify that the U.S. is gradually ceding ground to competitor nations with more aggressive international student recruitment strategies.

Johnson (2020) documents this decline, noting that over the past two decades, the U.S. has lost significant market share of international students and researchers due primarily to increasingly stringent visa policies and declining student visa approval rates. This trend threatens the U.S. innovation ecosystem, as international students have historically been vital contributors to scientific advancement and economic growth in the United States.

English as a Lingua Franca in Academic Discourse

The role of English as a lingua franca (ELF) in academic discourse creates a complex landscape of both opportunities and challenges for international scholars. While ELF enables global scientific exchange and collaboration across different linguistic borders, it simultaneously raises significant concerns about inclusivity and equity in knowledge production and dissemination. Suzina (2021) argues that the dominance of English creates systematic barriers that potentially exclude non-English speakers and their unique perspectives from academic discourse. This creates a hierarchical structure that privileges English-speaking contributions while marginalizing others. The resulting dynamic discourages translations into languages other than English and limits meaningful participation of scholars from non-English-speaking backgrounds in global scientific conversations (Naka & Spahija, 2022). Beyond access issues, Long et al. (2019) highlight concerns about knowledge quality, cautioning that the pressure to communicate complex scientific concepts in a simplified form of English may lead to the distortion or oversimplification of nuanced ideas. This homogenization of scientific language threatens to narrow the conceptual frameworks available to researchers and potentially marginalize knowledge systems traditionally expressed in other languages.

Theoretical Framework: Communication, Accommodation and Translanguaging

This study integrates two complementary theoretical frameworks: Communication Accommodation Theory (CAT) and translanguaging theory. Communication Accommodation Theory (CAT), according to Dragojevic et al. (2015), examines how individuals adjust their communication styles during intercultural interactions. CAT identifies three primary dimensions of adjustment: convergence (adapting to match others' communication styles), divergence (maintaining or emphasizing one's distinct communication patterns), and maintenance (consistent communication regardless of context) (Leimgruber, 2022). This framework provides valuable analytical tools for understanding how international students navigate linguistic adjustments in English-speaking academic environments, particularly considering factors such as interlocutor behavior, group membership dynamics, and individual motivations. While CAT offers significant insights into communicative adjustments, we recognize its limitations in fully capturing the complex linguistic practices of multilingual speakers in academic settings. To address this, we incorporate translanguaging theory, which was initially developed by Williams (1994) and subsequently expanded by García and Wei (2014). Unlike traditional models that conceptualize languages as separate systems, translanguaging theory posits that multilingual speakers draw on a unified linguistic repertoire, moving fluidly between languages as needed. This perspective fundamentally challenges conventional views of language accommodation by emphasizing flexible language practices rather than maintaining distinct language boundaries. Further enriching our theoretical framework is Khubchandani's (1997) concept of plurilingual ethos, which highlights two essential elements of multilingual communication: serendipity (embracing uncertainty) and synergy (maintaining communicative commitment despite linguistic differences). Marshall and

Moore (2018) have demonstrated how this plurilingual ethos enables international students to navigate academic discourse more effectively than approaches focused solely on accommodation. By integrating these theoretical perspectives, this study addresses the following research questions:

- RQ1: What challenges do multilingual international STEM students face when communicating in English for academic and research purposes in the United States?
- RQ2: To what extent do multilingual international STEM students accommodate or resist pressures to conform to linguistic norms within English-speaking academic environments?
- RQ3: How do multilingual international STEM students employ their full linguistic repertoires and demonstrate aspects of plurilingual ethos in their academic communication?

METHOD

After obtaining IRB approval, we recruited participants using purposive and snowball sampling methods. The final sample consisted of ten graduate students from African and Asian countries who were actively engaged in STEM research. Demographic details revealed three male and seven female participants, all of whom used English for academic communication while speaking a native language other than English. The participants had been studying in the United States for periods ranging from 2 to 10 years. Between April and May 2024, we conducted in-depth interviews via Zoom, with each interview lasting approximately 25-40 minutes and following a semi-structured interview protocol. At the beginning of each interview, we obtained verbal consent and, with participants' permission, recorded the sessions for subsequent transcription and analysis. Interviews were transcribed with all forms of participant identification removed and pseudonymized. Transcripts were analyzed using Braun and Clarke's (2013) six-step approach to thematic analysis, involving identifying recurring themes and patterns, coding them, and interpreting their significance in relation to the research questions. Initial codes capturing patterns and concepts were generated, then organized into themes that were reviewed and refined to ensure relevance to the research questions.

RESULTS

Our interviews with 10 international STEM graduate students revealed rich insights into their linguistic experiences in U.S. academic environments. We organize our findings according to our three research questions, exploring their challenges, adaptation strategies, and plurilingual practices.

RQ1: Linguistic Challenges in Academic Environments

International STEM students encounter significant linguistic hurdles that affect both their academic performance and sense of belonging. These challenges manifest in several interconnected areas that impact their daily academic lives.

Comprehension and Expression Barriers

Most participants described a persistent struggle to understand diverse English accents while simultaneously finding it difficult to express complex technical ideas. Participant 6, who has spent five years studying Architectural Engineering in the U.S., captured this common experience:

"The biggest challenge is that I have difficulty understanding others. People in America have different accents... Even with American students, I sometimes can't understand them, especially when they speak fast. Listening is the first challenge. Sometimes, I also find it hard to express myself. I have many thoughts in my mind that I can easily express in Mandarin, but I struggle to express them in English."

Technical terminology presented particular difficulties in STEM classrooms, especially when concepts didn't translate directly between languages. Participant 5, a Computer Science student from China, recalled the struggles of her first semester:

"In the first semester, we had a coding class, and there were many words and symbols that were challenging to understand... In Chinese, we don't have direct equivalents for some of these symbols, so it was hard for me to understand."

These communication barriers were often managed through strategic preparation, as Participant 8, a Biomedical Engineering student, explained:

"Every time I talk with my postdoc, I first build it in my mind, like what I'm going to talk about and the problems I meet in my experiment. Because I think, in this way, it can help us improve the efficiency of communication because postdocs are always really busy."

Students who had been in the U.S. for shorter periods generally reported more acute language challenges, though the specific nature of these difficulties varied by field of study and prior English education.

Impact on Academic Performance

Language barriers directly affected classroom participation and academic performance. Participant 1, an Evolutionary Biology student from Ghana, shared how accent-related issues affected her classroom participation:

"The professor would not hear what I said and would ask me to repeat... I was like, what is the need to talk if I would be asked to repeat every time I talk? I would not ask a question in class, and I would not answer any question in class."

This experience of being silenced had tangible consequences for Participant 1's academic standing. She explained that despite attending every class, one professor "wouldn't give me an A because of my participation" after she stopped speaking up. The resulting grade impact "really hurt me," she admitted.

Participant 2, a Global Family Health student from Ghana, described how these experiences created a cycle of diminishing participation:

"Your accent or your pronunciation of words turns people off... the next time, you would be scared to speak up, because you feel you are not like the Americans who just come and just flow, and they are done, and everybody hears them."

Many participants described a gradual improvement in their comprehension abilities. Participant 1 noted that by her second semester, her "ears had gotten used to it." This

adjustment period varied among participants but represented a common trajectory of adaptation.

Limited Support Systems and Integration Challenges

Despite significant language challenges, participants consistently reported inadequate institutional support for their specific needs. Participant 2's noted that: "The international program office, IPO in my school, I wouldn't say I've had any direct resources from them so far." This sentiment was echoed by others who found existing support services either inaccessible or ineffective.

Beyond language support, participants described a lack of cultural sensitivity that further complicated their academic integration. Participant 1 shared an example about university policies that undermined authentic cultural events:

"If you want to have an event for Africans, it's just nice that you have African food, but they've made the restrictions so tight that you have to purchase food from the dining services from the university. And these people don't know how to cook the African meals."

These institutional barriers created profound emotional impacts for some participants. Participant 9, who arrived from Nigeria in 2022, described the psychological toll of inadequate support:

"The people I thought should have helped me integrate well were not welcoming... I would just talk to myself, like, I'm not sure I'm fit for graduate school, doubting myself, my capabilities, and my worth."

These integration challenges intensified language issues, creating environments where international students questioned both their linguistic abilities and their place in the academic community.

RQ2: Navigating Linguistic Norms: Adaptation, Identity, and Hybrid Strategies

In response to these challenges, participants developed diverse strategies for navigating linguistic expectations in their academic environments. They displayed a spectrum of responses ranging from full adaptation to active resistance, with many creating nuanced hybrid strategies.

Adaptation to Communication Norms

Some participants deliberately modified their speech patterns to enhance comprehension. Participant 1's experience as a teaching assistant provides a clear example:

"I used to mention water [WAR-TAH], right? And I was a TA... I'll tell the students to grab 50 mls of water, and they'll be looking at me. And they'll be smiling... And so, I had to learn to say go grab the water [WAR-DAH]."

This conscious modification of pronunciation aligned with what researchers have identified as convergence in cross-cultural communication. Participants who chose this strategy often did so in contexts where clear communication was essential for their professional roles, such as teaching or presenting research.

Identity Preservation

At the other end of the spectrum, some participants consciously resisted pressures to change their speech patterns, viewing such changes as a threat to their cultural identity. Participant 9 expressed this position clearly:

"As grad students, international students, whether it be undergrad or grad, we should not lose our identity in the name of you want them to accept us. I would say, for me, based on my own personal experience, live the way you would have lived."

Participant 8 offered a reflection on why maintaining familiar speech patterns was important during cultural transition:

"When I experience cultural shock, it feels overwhelming. From my personal experience, trying to change everything at once only adds to the pain because you don't fully understand what's happening. If everything changes, it feels like your mind is in chaos. But if you stick to your familiar behaviors, at least you can hold on to a sense of yourself."

This resistance to linguistic assimilation represented a deliberate choice to maintain cultural authenticity during a period of significant transition.

Hybrid Adaptation Strategies

Most participants developed nuanced approaches that balanced adaptation with identity preservation. These hybrid strategies allowed them to enhance communication effectiveness without sacrificing their sense of cultural identity.

Participant 3, who had been studying Agricultural and Biological Engineering for over three years, described how his approach evolved:

"When I first came to the US, and I was first confronted with that issue of accent... I tried to sort of pick up how they speak, sort of do an accent change... but with time as well, I realized that that is an unconscious bias... what I have rather resorted to now is still using, retaining my accent, but making sure that I am pronouncing those words as clearly as possible... I would rather do that but still maintain my accent. I want the other person to understand that this is my accent, but I'm still saying it the right way."

Participant 5 described developing different linguistic modes:

"When I'm speaking English, I adjust myself to be more similar to people who speak English... but then that started to also affect how I speak Chinese and how I interact with Chinese students... I can feel that I'm slightly different when I'm speaking another language... it gradually became natural to switch between these modes."

These hybrid strategies weren't static but evolved over time, with participants who had been in the U.S. longer generally reporting more nuanced and contextual approaches to linguistic adaptation.

RQ3: Beyond Binary Choices: Complex Linguistic Repertoires in Academic Settings

Metalinguistic Awareness as Foundation for Academic Communication

At the core of participants' plurilingual practices was a sophisticated awareness of how language structures shape knowledge and meaning. This metalinguistic awareness enabled them to navigate between different linguistic systems while engaging with complex academic concepts. Participant 10, a Biomedical Engineering student with eight years in the U.S., articulated structural differences between Chinese and English academic discourse:

"In Chinese, we don't usually have long connected sentences. For example, in English, we say, 'In this question, you will need to consider the function of DNA polymerase, which is a protein that helps synthesize DNA.' But in Chinese, it would be two separate sentences. Later when I speak English, I need to connect them... that's how English does it."

Participant 10 further noticed how her language systems began to influence each other:

"One of my friends actually told me, 'you are speaking Chinese in a way that you directly translate English.' So I suppose in the beginning, I spoke Chinese in a more native way. Gradually, I started to fuse elements of English into how I speak Chinese."

This insight reveals a sophisticated understanding of how languages interact within a multilingual repertoire, showing that this participant perceived changes in her first language as her second language became more dominant in academic contexts.

Strategic Approaches to Cross-Linguistic Meaning-Making

Participants developed sophisticated strategies for handling cross-linguistic challenges, particularly when confronting complex technical concepts. Rather than relying on direct translation, they employed contextual and disciplinary knowledge to build meaning across their languages.

Participant 8 explained her approach to understanding academic content:

"There is no translating website that really helps. If you translate English to your original language, it's really weird. You don't know what they are saying because the logic and sentence sequence are different from Chinese. If I don't know specific words, I will search for them. But if I don't understand the sentence, I won't follow the translation because it doesn't make sense."

This rejection of word-for-word translation reflects what García and Wei (2014) describe as translinguaging—accessing an integrated linguistic repertoire rather than treating languages as separate systems. Participant 6 further described her cognitive process:

"Sometimes I have difficulty expressing myself because I have many thoughts in my mind. I can express these in Mandarin, but I couldn't express them as quickly in English. I sometimes need to translate in my mind first."

These accounts reveal complex cognitive processes that enable participants to bridge linguistic systems in academic contexts. Several described creatively blending linguistic features when taking notes or preparing presentations, writing key technical terms in English while organizing their thoughts in structures natural to their native languages.

Collaborative Construction of Academic Knowledge

Perhaps most significantly, participants transformed potential linguistic barriers into opportunities for connection through collaborative meaning-making practices. This approach exemplifies both key aspects of Khubchandani's plurilingual ethos: serendipity (embracing linguistic uncertainty) and synergy (commitment to communication despite differences).

Participant 1 described finding community through shared linguistic experiences:

"There was one organization on campus... I could feel that welcoming environment in that international group because I met other people who

were from my country, other people who were from other countries with also various accents. So, I'm like, OK, I'm not alone."

These communities facilitated not just social support but enhanced academic communication. Participant 7 observed a pattern of mutual understanding among international students:

"For some reason, when you meet non-Americans, they tend to understand you right away. When you speak, they automatically get what you're saying... Everyone understands each other, and no one complains about pronunciation differences."

This collaborative stance toward communication represents the synergy component of plurilingual ethos, where speakers commit to understanding each other despite linguistic differences. Several participants described embracing serendipity—viewing miscommunications as opportunities for learning rather than barriers. They learned to use their linguistic challenges as teaching moments, transforming what might be seen as deficits into resources for cross-cultural communication. These findings suggest that international STEM students' plurilingual practices represent sophisticated communicative resources rather than compensatory strategies. Their approaches challenge monolingual assumptions in academic settings and demonstrate how plurilingual competence can enhance rather than hinder scientific communication. By drawing on their full linguistic repertoires—through metalinguistic awareness, strategic meaning-making, and collaborative approaches—these students navigate complex academic discourse more effectively than approaches focused solely on linguistic accommodation.

Creating Inclusive Academic Environments: Recommendations

Our conversations with international STEM students suggest several promising directions for creating more inclusive academic environments. Universities might consider developing orientation programs specifically designed to address the academic communication needs of international STEM students, including field-specific terminology and communication norms. Departments could explore implementing mentorship initiatives that pair incoming international students with advanced students in their field. As Participant 9, an Agricultural Engineering PhD student from Nigeria, thoughtfully noted, academic staff would benefit from approaching international students with genuine human connection: "treat us as humans, not as science, not as an inanimate object. If they see us as humans, the way they treat us will differ."

Instructors may also find value in embracing linguistic diversity rather than enforcing rigid norms. Alternative participation options and the distribution of written materials before class could give international students time to process technical vocabulary. Support services might be enhanced with culturally sensitive counseling resources and specialized STEM writing support. Cultural policies could be reviewed to ensure they support authentic expression. For instance, Participant 1's experience with food policies illustrates how seemingly minor regulations can affect international students' sense of belonging and cultural identity. These recommendations emerge directly from our participants' experiences and represent potential steps toward creating academic environments that not only accommodate linguistic diversity but actively value the rich perspectives international students bring to STEM fields.

DISCUSSION

This study contributes to the growing literature on multilingual international students in English-speaking academic environments, particularly within STEM fields. By examining the challenges these students face, their strategies for navigating linguistic norms, and their plurilingual practices, we provide a nuanced understanding of the complex linguistic and cultural dynamics at play in multilingual academic settings. Our findings align with prior research suggesting that language comprehension and expression barriers, limited support systems, and integration difficulties are key challenges for international students (Bordini et al., 2021; Girmay & Singh, 2019; Palmer, 2015). However, this study extends existing scholarship by focusing specifically on the STEM context, where technical language and disciplinary norms introduce additional layers of complexity to linguistic adaptation. The strategies employed by international STEM students to navigate linguistic norms offer valuable insights into Communication Accommodation Theory in academic contexts. While previous studies have examined convergence and divergence strategies in intercultural communication (Gallois & Giles, 2015), our analysis reveals a more nuanced picture, with students employing hybrid strategies that balance adaptation and identity preservation. These findings suggest that binary conceptualizations of communication adaptation may not fully capture the complex realities of multilingual academic environments.

This study also contributes to research on translanguaging and plurilingual practices in academic settings (García & Wei, 2014; Marshall & Moore, 2018). Our findings highlight how international STEM students leverage their full linguistic repertoires through metalinguistic awareness, strategic meaning-making, and collaborative approaches to navigate complex academic discourse. Rather than treating their multilingualism as a deficit, these students demonstrate sophisticated cognitive and communicative competencies that enhance their academic engagement and knowledge construction. The plurilingual ethos demonstrated by participants in our study—particularly their embrace of serendipity and synergy in communication—offers insights into how educational institutions might better support international students. Rather than focusing solely on English language proficiency, institutions might consider creating spaces that value and leverage the diverse linguistic resources that international students bring to academic contexts.

Despite its contributions, this study is not without limitations. The sample was relatively small and regionally skewed, with participants predominantly from Africa and Asia, which may have limited the generalizability of the findings. Additionally, the focus was restricted to the United States, leaving the experiences of international STEM students in other English-speaking countries underexplored. Future research might consider expanding both the geographical scope and disciplinary focus to encompass a broader range of STEM fields and international contexts. As institutions of higher education continue to welcome an increasing number of international students, addressing the linguistic and cultural needs of all students is essential. By considering the challenges, strategies, and practices identified in this research, institutions can create more equitable academic environments that not only support international STEM students but also contribute to the development of globally engaged academic communities.

REFERENCES

- Bordini, R. A., Münscher, J.-C., Baumgartner, K. A., Hagos, S., Hornig, J., Gampe, S., Yaman, B., Korn, O., & Herzberg, P. Y. (2021). Strangers in a strange land: Designing a mobile application to combat loneliness and isolation among foreign university students. *Journal of Technology in Behavioral Science*, 6(1), 81–87. <https://doi.org/10.1007/s41347-020-00171-6>
- Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*, 26, 120–123.
- Dragojevic, M., Gasiorek, J., & Giles, H. (2015). *Communication accommodation theory* (pp. 1–21). <https://doi.org/10.1002/9781118540190.wbeic006>
- Gallois, C., & Giles, H. (2015). Communication accommodation theory. In *The International Encyclopedia of Language and Social Interaction* (pp. 1–18). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118611463.wbielsi066>
- García, O., & Wei, L. (2014). *Translanguaging*. Palgrave Macmillan UK. <https://doi.org/10.1057/9781137385765>
- Giles, H. (Ed.). (2016). *Communication accommodation theory: Negotiating personal relationships and social identities across contexts*. Cambridge University Press. <https://doi.org/10.1017/CBO9781316226537>
- Girmay, M., & Singh, G. K. (2019). Social isolation, loneliness, and mental and emotional well-being among international students in the united states. *International Journal of Translational Medical Research and Public Health*, 3(2), 1–8. <https://doi.org/10.21106/ijtmrph.82>
- Institute of International Education. (2023). *The open doors report on international educational exchange*. <https://opendoorsdata.org/data/international-students/leading-places-of-origin/>
- Jeong, N., Sefik, E., Shiu, F., & Arzua, T. (2021). Investing in international graduate students for the scientific endeavour keeps the United States competitive. *Journal of Science Policy & Governance*, 18. <https://doi.org/10.38126/JSPG180304>
- Johnson, K. (2020). 21st Century international higher education hotspots: International student mobility growth in non-traditional destination countries. *Journal of International Students*, 10(1), Article 1. <https://doi.org/10.32674/jis.v10i1.1851>
- Khubchandani, L. M. (1997). *Revisualizing boundaries: A plurilingual ethos / Lachman M. Khubchandani*. Sage Publications.
- Korhonen, V. (2023a). *International students in the U.S. 2023*. Statista. <https://www.statista.com/statistics/237681/international-students-in-the-us/>
- Korhonen, V. (2023b). *International students in the U.S., by country of origin 2022/23*. Statista. <https://www.statista.com/statistics/233880/international-students-in-the-us-by-country-of-origin/>
- Leimgruber, J. R. E. (2022). Analysis of communication accommodation. In *Analysis of the Societal Treatment of Language* (pp. 66–78). Cambridge University Press. <https://doi.org/10.1017/9781108867788.007>
- Leong, P. (2015). Coming to America: Assessing the patterns of acculturation, friendship formation, and the academic experiences of international students at a U.S college. *Journal of International Students*, 5(4), Article 4. <https://doi.org/10.32674/jis.v5i4.408>

- Long, E. R., Poppi, F., & Radighieri, S. (2019). English as a lingua franca in the academic context: The role of university language centres. *Linguae & - Rivista Di Lingue e Culture Moderne*, 18(1), Article 1. <https://doi.org/10.7358/ling-2019-001-long>
- Marshall, S., & Moore, D. (2018). Plurilingualism amid the panoply of lingualisms: Addressing critiques and misconceptions in education. *International Journal of Multilingualism*, 15(1), 19–34. <https://doi.org/10.1080/14790718.2016.1253699>
- Mason, L., Martel, M., & Baer, J. (2023). Student global mobility during disruption: The resilience and redefinition of us international educational exchange during the covid-19 pandemic. In A. W. Wiseman, C. Matherly, & M. Crumley-Effinger (Eds.), *Internationalization and Imprints of the Pandemic on Higher Education Worldwide* (Vol. 44, pp. 73–91). Emerald Publishing Limited. <https://doi.org/10.1108/S1479-367920230000044005>
- Mazak, C. M., & Carroll, K. S. (2016). Translanguaging in Higher Education: Beyond Monolingual Ideologies. In *Multilingual Matters*. Multilingual Matters.
- Naka, L., & Spahija, D. (2022). Impact of English language as a human capital in the higher education institutions' development strategy. *Corporate and Business Strategy Review*, 3(2, special issue), 262. <https://virtusinterpress.org/Impact-of-English-language-as-a-human-capital-in-the-higher-education-institutions-development-strategy.html>
- Navarro, F., Lillis, T., Donahue, T., Curry, M. J., Reyes, N. Á., Gustafsson, M., Zavala, V., Lauría, D., Lukin, A., McKinney, C., Feng, H., & Motta-Roth, D. (2022). Rethinking English as a lingua franca in scientific-academic contexts: A position statement. *Journal of English for Research Publication Purposes*, 3(1), 143–153. <https://doi.org/10.1075/jerpp.21012.nav>
- Palmer, Y. (2015). The not-so-easy road of overseas study: Life like an outsider. *Journal of International Students*, 5(4), Article 4. <https://doi.org/10.32674/jis.v5i4.414>
- Rodriguez, Y. (2018). Influences on international students' selection of a regional U.S. institution: A descriptive study. *Masters Theses*. <https://thekeep.eiu.edu/theses/3599>
- Roshid, M. M., & Ibna Seraj, P. M. (2023). Interrogating higher education's responses to international student mobility in the context of the COVID-19 pandemic. *Heliyon*, 9(3), e13921. <https://doi.org/10.1016/j.heliyon.2023.e13921>
- Saha, N. (2014). International students and scholars in the United States: Coming from abroad. *Journal of International Students*, 4(3), Article 3. <https://doi.org/10.32674/jis.v4i3.469>
- Scharp, K. M., & Sanders, M. L. (2019). What is a theme? Teaching thematic analysis in qualitative communication research methods. *Communication Teacher*, 33(2), 117–121. <https://doi.org/10.1080/17404622.2018.1536794>
- Shadowen, N. L., Williamson, A. A., Guerra, N. G., Ammigan, R., & Drexler, M. L. (2019). Prevalence and Correlates of Depressive Symptoms Among International Students: Implications for University Support Offices. *Journal of International Students*, 9(1), Article 1. <https://doi.org/10.32674/jis.v9i1.277>
- Suzina, A. C. (2021). English as lingua franca. Or the sterilisation of scientific work. *Media, Culture & Society*, 43(1), 171–179. <https://doi.org/10.1177/0163443720957906>
- Urban, E., & Palmer, L. B. (2016). International students' perceptions of the value of U.S. higher education. *Journal of International Students*, 6(1), Article 1. <https://doi.org/10.32674/jis.v6i1.486>

- Wei, L. (2018). Translanguaging as a Practical Theory of Language. *Applied Linguistics*, 39(1), 9–30. <https://doi.org/10.1093/applin/amx039>
- Williams, C. (1994). *An evaluation of teaching and learning methods in the context of bilingual secondary education* [Bangor University]. [https://research.bangor.ac.uk/portal/en/theses/arfarniad-o-ddulliau-dysgu-ac-addysgu-yng-nghyddestun-addysg-uwchradd-ddwyieithog\(fc2ad869-3609-4a10-afc4-08180793fd70\).html](https://research.bangor.ac.uk/portal/en/theses/arfarniad-o-ddulliau-dysgu-ac-addysgu-yng-nghyddestun-addysg-uwchradd-ddwyieithog(fc2ad869-3609-4a10-afc4-08180793fd70).html)
- Woodend, J., Fedoruk, L., Beek, A., Roy, S., Xu, X., Groen, J., & Li, X. (2019). The privileging of English language use in academia: Critical reflections from an international doctoral seminar. *Emerging Trends in Education*, 2. <https://doi.org/10.19136/etie.a2n3.3058>
- Yomtov, D., Plunkett, S. W., Efrat, R., & Marin, A. G. (2017). Can peer mentors improve first-year experiences of university students? *Journal of College Student Retention: Research, Theory and Practice*, 19(1), 25–44. <https://doi.org/10.1177/1521025115611398>

Bio

WILHELMINA ANTWI is a PhD student at the Bellisario College of Communications, Penn State. Her research interests include STEM communication within developing countries and science communication, particularly public understanding and engagement with science. Email: wpa5095@psu.edu