

Cultural Backgrounds and Classroom Dynamics: Adjusting to U.S. Teaching as an International Graduate Teaching Assistant

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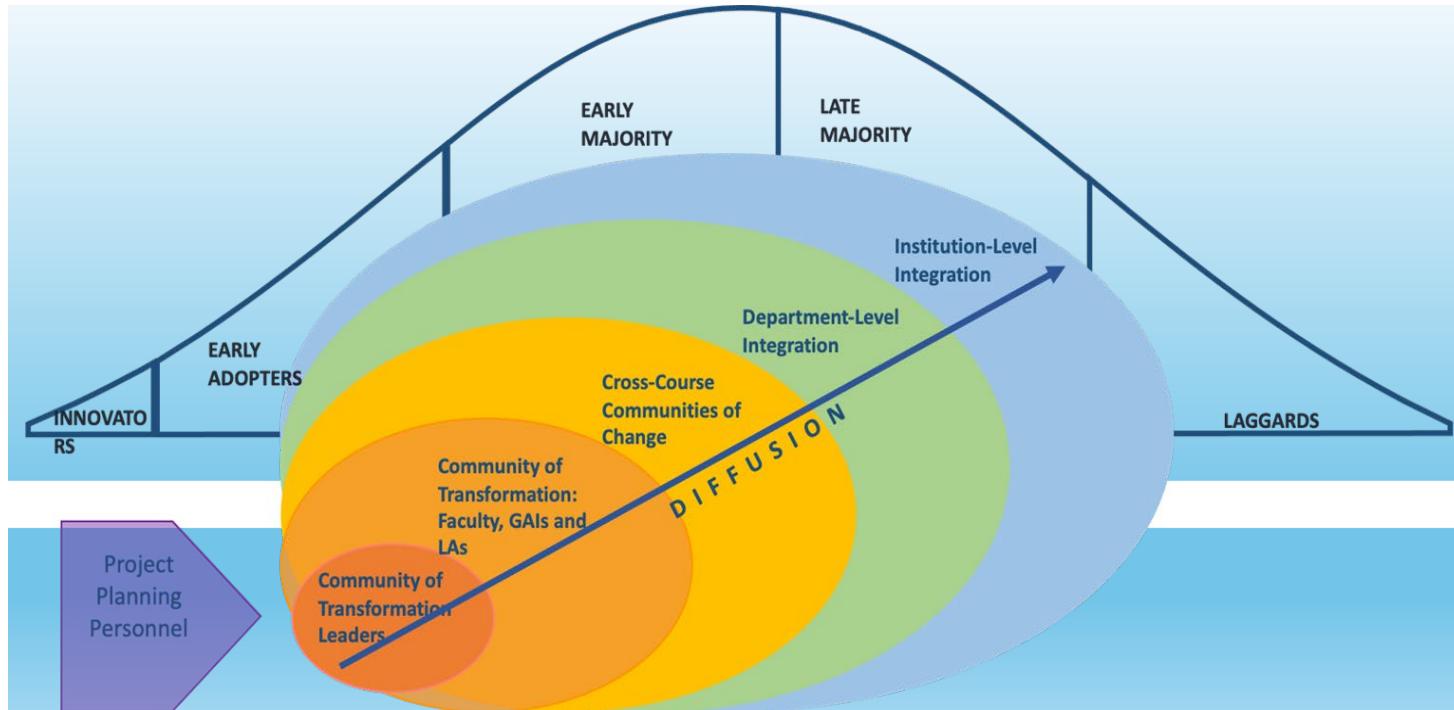
What is Gateway2STEM?

- Gateway2STEM is an NSF-funded project
- The goal is to establish active and collaborative learning
- Project supports faculty, GTAs, and learning assistants in actively engaging students



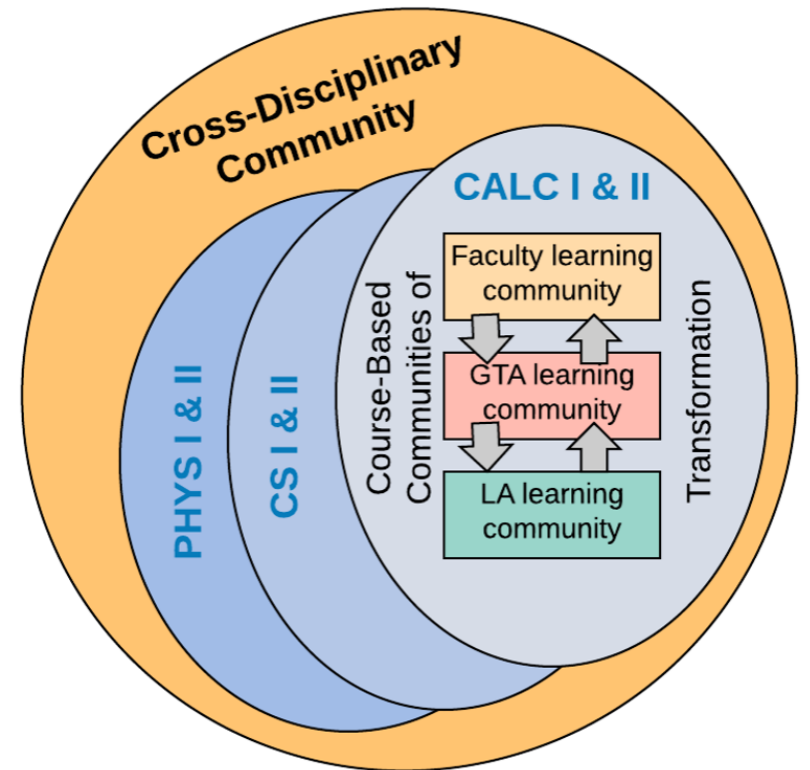
The Gateway2STEM

Goal: Make large undergraduate courses more active



The Idea

Implementation:
Active learning across
Math, Physics, and CS



Introduction

- International Graduate Teaching Assistants (IGTAs) have lived and been educated in another country
- The diverse cultures of these countries, both generally and in terms of education systems, can influence experiences of IGTAs
- People raised in a particular country/culture are socialized by the culture (Hofstede, G. 2011)
- IGTA's cultural background can impact their approach teaching

Hofstede's Cultural Dimensions

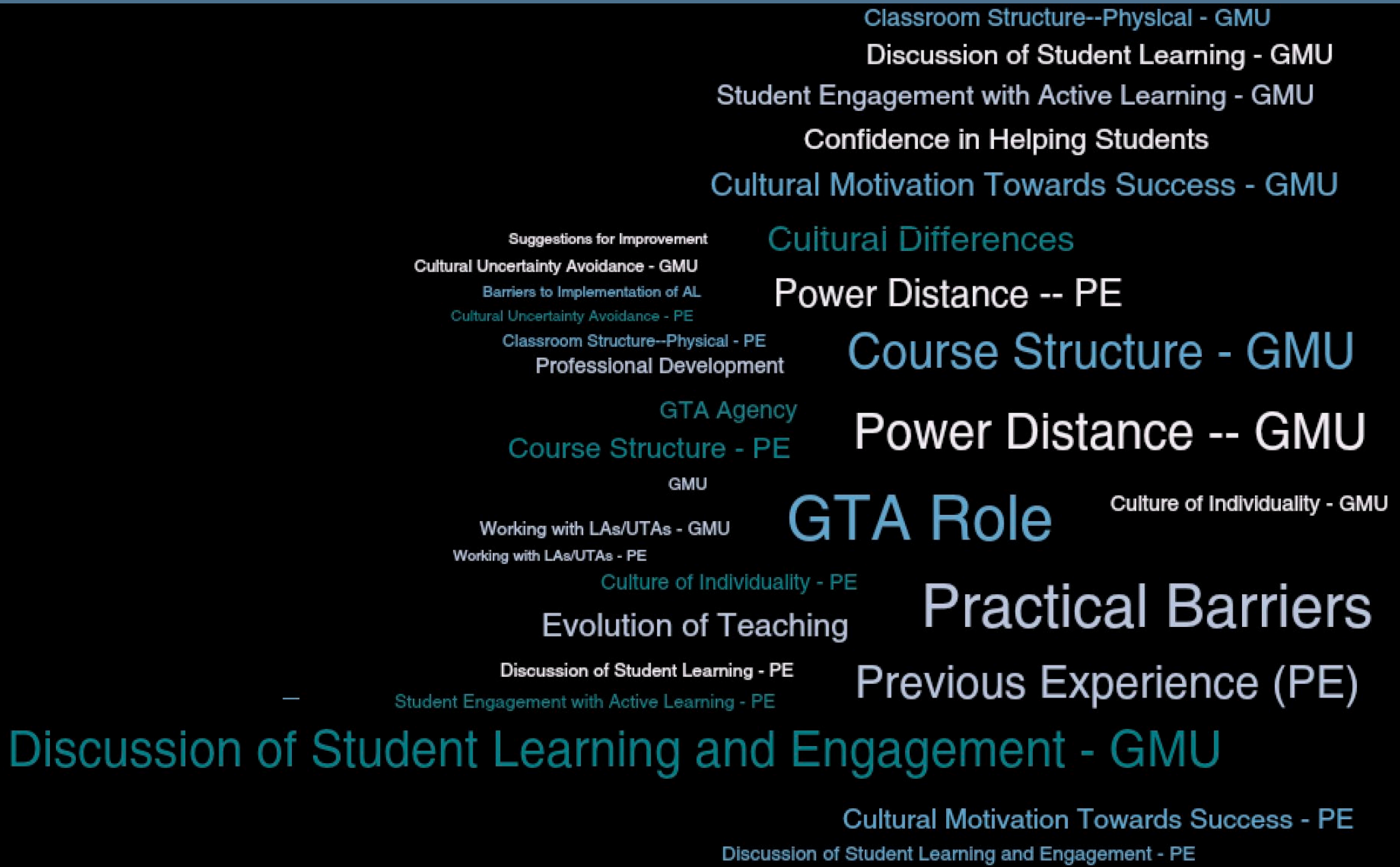
- Six dimensions of Hofstede's framework:
 1. Power Distance
 2. Individualism versus Collectivism
 3. Motivation towards Achievement and Success
 4. Uncertainty Avoidance
 5. Long Term versus Short Term Orientation
 6. Indulgence versus Restraint
- Initially intended for business contexts, but also holds significant implications for education

Data Sources and Analysis Methods

- IGTAs who are teaching recitations/labs and had attended the Gateway2STEM workshop were selected for interviews

Country	China	Bangladesh	India	Iran	Uzbekistan	Canada	US
IGTAs	4	4	1	1	1	1	8 GTAs

- Majority of IGTAs were male from various parts of Asia, with one female, and one Canadian



Frequency of code usage (Dedoose)

Power Distance

- Large Power Distance
(East Asia and Indian Subcontinent)
 - Teacher-centered education
 - Older people are both respected and feared
 - Subordinates expect to be told what to do

- Small Power Distance
(German and English-speaking Western Countries)
 - Student-centered education
 - Older people are neither respected nor feared
 - Subordinates expect to be consulted

Power Distance in Classroom

- Large Power Distance

- Teachers may be an authority figure
- Teachers may be respected and feared
- Teachers may expect students to do what they say without explanation

- Small Power Distance

- Teacher may be more approachable
- Teacher may be challenged
- Students may be expected to ask questions

Power Distance

- In IGTA's home country, teachers are viewed with high authority
 - Teachers are like parental figures
 - Students are hesitant to question them
 - Students cannot challenge grades

“From a cultural perspective this might be the most challenging aspect for me. In my home country, students are afraid of their teachers. So, I think it's somewhat different here. They are not afraid and keep asking questions.”- IGTA

“We have the saying that your teacher is on the same level as of respect as your Dad, like in traditional Uzbekistan.”- IGTA

Power Distance

- In some IGTAs' home countries, like China, there is more adaptation to Western-style education
 - Foreign teachers are heired
 - Students are taught American history
 - Students can earn U.S. university degrees through collaborative cross-education programs

“I attended a private high school with an American-style education. We took the SAT instead of the Chinese university exam and could choose AP courses. Students had more opportunities to interact, especially in STEM classes.” - IGTA

Power Distance

- In the US classroom,
 - Teachers are approachable
 - Students are questioning and challenging
 - Open, informal communication between students and teachers
 - Professors are willing to offer assistance when needed

“Most professors were available to talk and help. When they were on campus, they often kept their doors open, and you could knock and ask questions. They were usually very open to offering assistance.” – GTA

Individualism versus Collectivism

- Individualism

- (German and English-speaking Western Countries)

- “I” – consciousness
 - Task prevails over relationship
 - Purpose of education is learning how to learn

- Collectivism

- (East Asia and Indian Subcontinent)

- “We” – consciousness
 - Relationship prevails over task
 - Purpose of education is learning how to do

Individualism versus Collectivism in Classroom

- Individualism

- Teacher maybe “I” – consciousness
- Teaching style might promote inquiry, reflection, and critical thinking through engaging and interactive methods

- Collectivism

- Teacher maybe “We” – consciousness
- Teaching style might emphasize rote memorization and group harmony over individual understanding

Individualism versus Collectivism

- IGTAs, “We” - consciousness
- GTAs, “I” - consciousness

“Actually, in my culture, family is trying to control students' future career, they are trying to make the students choose their career , what the family wants them to choose.” - IGTA

“I'm a first-generation student and my family. The only influence they had on my education is that they weren't economically able to send me to school, I had to find my own way from undergrad to now. So, they didn't have much influence.” - GTA

Individualism versus Collectivism

- Purpose of education
 - IGTAs, “Learning how to do”
 - GTAs, “Learning how to learn”

“Their schoolteachers used to give them a problem sheet and they used to give them solutions. And all they would do was just go through the solutions, so they never really developed the art of thinking.” – Foreign Classroom

“In my recitation, students come and do not ask for solutions, they come and work in group to solve problems.” – U.S. Classroom

Preliminary Conclusions

- Power distance reflects the significant differences in teacher-student relationships between cultures
 - ✓ Understanding power distance can help tailor PD for IGTAs, focusing on adapting to open, student-centered teaching in U.S. classrooms
- IGTAs focus on “learning how to do” with teacher guidance, while U.S. GTAs emphasize “learning how to learn” with independence
 - ✓ Adapting PD for IGTAs can help them navigate student-centered and independent learning environments effectively

Thank you!
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Gateway2STEM website:
<https://gstem.research.gmu.edu>

Video about the Gateway2STEM project:

<https://www.youtube.com/watch?v=n4gBld5GFhk>

