

# ***¿Habla Español? Do Financial Aid Offices Use Chatbots...and Can They Speak Spanish?***

Presented at SFARN 2021

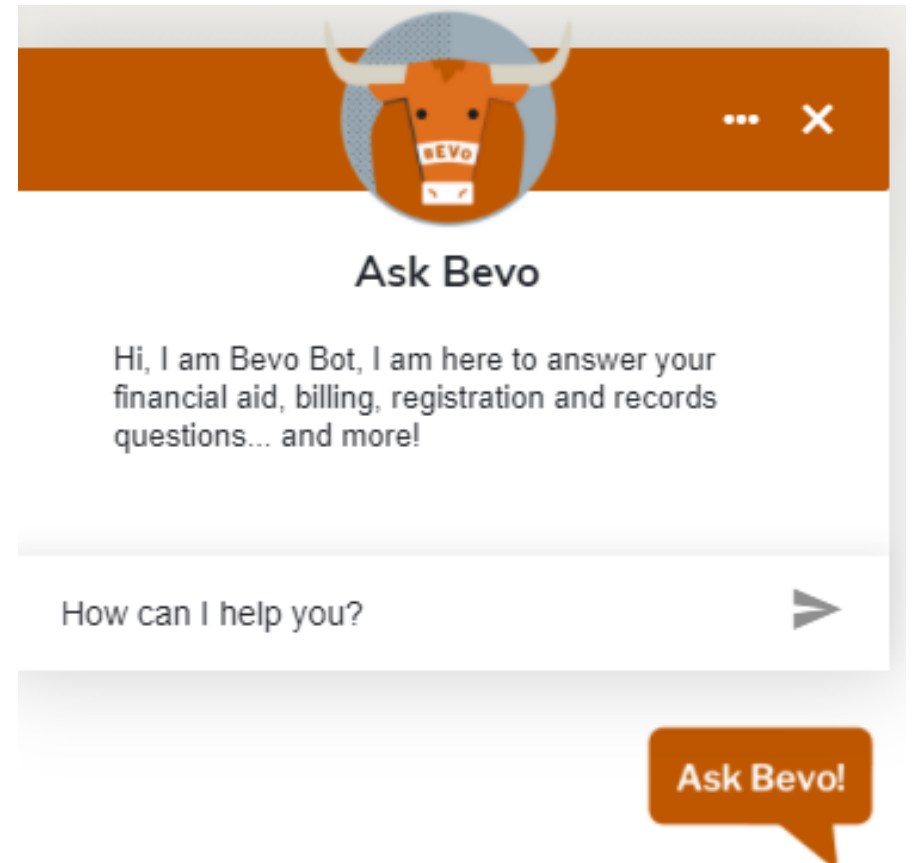
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# What are chatbots? Why are they used?

- Chatbot = a computer program that simulates human conversations using complex algorithms, word banks, and keyword tagging.
- Chatbots have been used to lower the cost of connecting Internet users to website resources.
- Georgia State significantly reduced “summer melt” by using a chatbot.



# Chatbots and Higher Education Problems

- Several studies have analyzed and reported on chatbot use in higher education ([source](#)); Primarily used to help students access admissions and financial aid information but not universal.
- Higher education (.edu) websites are primarily in English; only 3-5% of institutional websites translated beyond English ([source](#)).
- **Unanswered questions:** do financial aid offices use chatbots and can they speak Spanish? Are we supporting our Spanish-speaking students and their support networks?

# Research Questions

- R1a) How many financial aid offices integrate chatbots into their .edu websites?
- R1b) If so, are there differences among sectors?
- R2a) Are these chatbots capable of conducting conversations in Spanish?
- R2b) If so, what is the fidelity of those Spanish conversations?

# Methods

- Sampling = 341 randomly selected Title IV participating institutions of higher education per IPEDS.
- Sample breakdown:
  - 114 four-year public
  - 179 four-year private non-profit
  - 48 four-year private for-profit
  - Somewhat mirrors overall population, private non-profits over sampled.
- Data collection = review each institution's financial aid (.edu) website, code for chatbot presence (yes=1, no=0), then engage with chatbot in both English and Spanish.
- Data analysis = descriptive stats of chatbot prevalence, qualitative analysis of chatbot interactions, English and Spanish fidelity, code for themes.
- Limitations = only 341 websites, only U.S. contexts, only three researchers.

# Results

- Overall sample = 21.8% featured a chatbot on their FA website.
  - Public = 31.5% (36 of 114)
  - Private non-profit = 8.9% (16 of 179)
  - Private for-profit = 41.6% (20 of 48)
- Overall sample = <1% (3 institutions) translated FA content on their website.
  - Chatbots much more prevalent than Spanish translations of FA content.
  - **What does this result say about institutional priorities?**

# Example: Saint Elizabeth University

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## COVID-19 Vaccine Required for All Students

For fall 2021 enrollment, all students must submit medical forms by June 15. Proof of COVID-19 vaccination for incoming freshmen & transfer students by August 2; all other students by August 9, 2021. Visit [Medical Requirements and Forms](#) for more info.

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## Financial Aid Process

Main Admissions building

### Traducción

The financial aid staff at Saint Elizabeth University is committed to providing professional knowledge and personalized service to help students and their families seek and obtain the best use of all financial resources available.

Saint Elizabeth University utilizes the FAFSA (Free Application for Federal Student Aid) to determine a student's financial aid package based on the Expected Family Contribution (EFC).

- SEU school code is **002600**.
- The FAFSA must be completed **after October 1st** of each year.
- Saint Elizabeth University's Priority Deadline date for filing the FAFSA application is, **Saturday, April 1**.
- **Financial Aid Programs** include a variety of sources such as federal and state grants, scholarships, institutional funds and federal direct student loans.

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## Undergraduate - En Espanol

### En Ingles

### Proceso de solicitud para la ayuda financiera

Saint Elizabeth University utiliza el formulario FAFSA (Solicitud Gratuita de Ayuda Federal para Estudiantes) para determinar el paquete de ayuda financiera de los estudiantes sobre la base de la contribución familiar esperada (Expected Family Contribution, EFC).

- Código de la escuela es **002600**
- El FAFSA debe de estar completo después del 1<sup>er</sup> de Octubre de cada año. ([www.FAFSA.gov](http://www.FAFSA.gov) y haga clic en "Espanol".)
- **Programas de Ayuda Financiera** - incluyen recursos que lo pueden ayudar a costear una educación superior, tales como subsidios federales y estatales, becas, fondos institucionales y préstamos estudiantiles federales directos.

Si tiene alguna pregunta, por favor comuníquese con la Oficina de Ayuda Financiera al 973-290-4445, por correo electrónico a [financialaid@seu.edu](mailto:financialaid@seu.edu)



# Results


- Can chatbots speak Spanish? Yes and no, mostly no.
- Best) Chatbot was programmed with Spanish language, including correct grammar and punctuation as well as Spanish-language resources.
- Okay) Chatbot was programmed to direct user to resources in Spanish without speaking Spanish.
- Not great) Chatbot was programmed to place Spanish speaker in a queue to speak to someone in Spanish outside of the chatbot.
- Bad) Chatbot provides rudimentary information in Spanish and suggests English-language resource.




# Example: IU Bloomington

- GOOD:
- Response is accurate.
- Matches what FSA website says = communication aligns.
- Depth of response was excellent.
- Conversation not robotic.
- Grammar and punctuation accurate.

**Ask Student Central** ... X




Hi! I'm Ask Student Central. I'm a virtual assistant here to answer any questions you may have about Financial Aid, Student Accounts, and Student Records.



How can I help you?

Hola! Me podrías decir qué tipos de ayuda financiera ofrecen?



Usted (o sus padres) pueden acumular una deuda considerable pagando su educación en IU con préstamos. Antes de solicitar un préstamo para ayudar a pagar la universidad, es una buena idea explorar todas las oportunidades de subvenciones y becas disponibles para usted. ¡Cuanto menos tenga que reembolsar, más fácil será la transición a la vida después de la universidad! Los préstamos federales directos, los préstamos federales directos PLUS para graduados, los préstamos federales directos PLUS para padres y los préstamos privados son préstamos que están disponibles para los estudiantes. Algunos de los diferentes tipos de ayuda financiera que están disponibles para los estudiantes también incluyen subvenciones, becas, trabajo y estudio y AmeriCorps. Para obtener información detallada sobre estos tipos de ayuda financiera, visite nuestro sitio web.

Did I help? 😊 😞

# Example: SUNY Canton

- BAD:
- Asked for Spanish, responded with asking for contact information.
- In Spanish, replied that no one in financial aid can speak Spanish = only admissions.

Please enter your message  
Agents are online!

Business Messenger by jivochat

Hola, hablas español?

Please introduce yourself in chat

Linda E.

9565772026

lenduuh@gmail.com

Please enter your message  
Agents are online!

Business Messenger by jivochat

Buenos días, lo siento no hablo español. Nuestra Oficina de Admisiones tiene un representante de habla hispana.

Está bien, gracias!



Student Accounts


Eres bienvenido. Su número es (315) 386-7123. ¡Qué tengas un lindo día!

Enter your message

# Example: Fort Valley State


- BAD:
- Asked for Spanish, responded in English.
- Asked for Spanish again, seemingly automated response to a question that the chatbot did not recognize.
- No triaging to a person in any office.


 Ask Blue 



Hi, my name is Blue. I am a chatbot here to help with all of your financial aid questions! What would you like to know?


Hola! Hablan español?






Hi there.


Hablas español?






Sorry, I don't have the answer to that.  
*Would you like to contact the office?*

No thanks

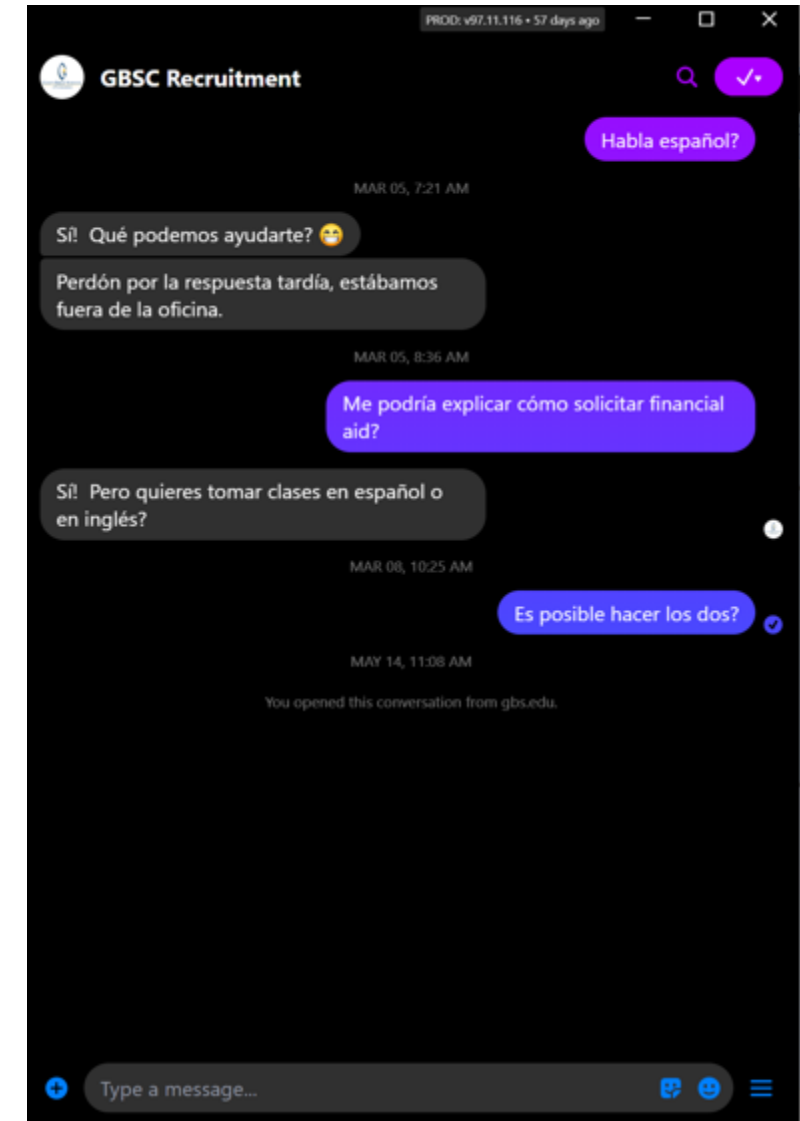




Okay, I'm sorry about that. Do you have any other questions?

# Odds and Ends:

- Simplified Chinese also present in some chatbots but very rare (2 institutions, Foothill College and Florida State College at Jacksonville).
- Several chatbots redirect to admissions offices, as admissions offices operate the chatbots for the entire institution.
- DeVry College of NY = no Spanish language information because classes are in English.
- Louisiana Tech did not allow non-students to interact with the chatbot, yet chatbot was public-facing.
- God's Bible School = chatbot was powered by Facebook and redirected user to their personal Facebook account, and then connected user to a real person on Facebook Messenger.
- University of New Hampshire = user could leave a message in what appeared to be a chatbot but was really an email system.
- A few chatbots used predictive text while a Spanish language question was being asked = much more advanced than other chatbots.



# Discussion and Future Research:

- Financial aid chatbots not prevalent, vary wildly, and largely do not speak Spanish.
- Many institutions seem more invested in technology and not people or human translations.
- Financial aid process may be unnecessarily complex for Spanish speaking students and support networks.
- Future research = how are chatbots developed for higher education industry?
  - Are Spanish speakers represented and included in that process?
  - What dialect of Spanish is used or represented?
  - How is Spanish-language content created and disseminated on higher education (.edu) websites?
  - Are Spanish speakers represented at all in the faculty and staff ranks, allowing access to Spanish-language information on institutional websites?