Running head: TITLE 1

The title

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Abstract 14

One or two sentences providing a basic introduction to the field, comprehensible to a

scientist in any discipline. 16

Two to three sentences of more detailed background, comprehensible to scientists 17

in related disciplines.

One sentence clearly stating the **general problem** being addressed by this particular 19

study. 20

One sentence summarizing the main result (with the words "here we show" or their 21

equivalent). 22

Two or three sentences explaining what the **main result** reveals in direct comparison 23

to what was thought to be the case previously, or how the main result adds to previous

knowledge.

One or two sentences to put the results into a more **general context**. 26

Two or three sentences to provide a **broader perspective**, readily comprehensible to 27

a scientist in any discipline.

Keywords: keywords 29

Word count: X 30

The title

32 Introduction

The development of online education has been evolving over the past few decades,
offering an alternative to delivering learning in a more convenient manner to individuals.

Of particular interest is the research and development of online language education along
with technological advances that made possible an evolution in the quality and accessibility
of the materials. For example, implementing online tools such as Zoom, VoiceThread,
FlipGrid, etc, allowed students to hold conversations, share ideas and provide their
opinions in a similar way to a traditional online setting.

According to the (Education Statistics, 2022), during the fall of 2020 over 75 percent
of undergraduate students (11.8 million) were enrolled in at least one online course,
whereas 44 percent (7.0 million) of all undergraduate students exclusively enrolled in online
courses (Education Statistics, 2022). Compared to Fall 2019, these numbers represent a 97
percent increase in undergraduates taking at least one online course (11.8 million vs. 6.0
million) and a 186 percent increase in undergraduate students enrolled exclusively in online
courses (7.0 million vs. 2.4 million).

Even though many programs already had online versions of their courses, the
Covid-19 pandemic postulated a challenge to many educators, as they were not prepared
and, in some cases, lacked of experience teaching the online modality Tomasik, Helbling,
and Moser (2021)

With a global decrease in Covid-19 cases, most US universities are slowly beginning
to switch to a pre-pandemic educational setting or blend hybrid classes. The goal of this
paper is twofold, first to identify attitudes towards online language education it in a context
where online education is no longer mandatory and, second to better understand how our
new post-pandemic reality modulates tendencies in university language class enrollment.

Previous literature and theoretical framework

The goal of the current paper is to gather information from our current students who
are in an educational environment that has been in continuous change for the past few
years. The effects of this ever-changing learning environment have affected students and
continue to affect the way they interact with and view their education. Post-pandemic
effects, along with world socio-economic changes such as inflation and the need to work,
have brought a new educational reality that affects tendencies toward language enrollment.

63 Online learning

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In several decades of existence and development, online learning has never gained
more attention than it did over the national pandemic, as 75 percent of undergraduate
students were enrolled in at least one online course (Education Statistics, 2022). Previous
pre-pandemic research has proven that distance students can archive similar learning goals
as those students that were physically present on the educational environment Sun & Chen
(2016). While online learning comes with a set of challenges that are not found in a
traditional classroom, such as the ability to self-regulate, and the lack of interaction, it can
improve the effectiveness and efficiency of education as it eliminates geographical barriers,
improving accessibility, and the ability to learn at the student's pace (Kebritchi,
Lipschuetz, & Santiague, 2017).

During the pandemic, one of the most cited difficulties with the quick transition to online education was the lack of preparation and families with educational tools. Being forced to switch moralities had consequences, both from the teachers' and students' perspectives, as they were either not ready for the change or lacked many materials. (Mahyoob, 2020) describes how both students and educators found technical problems concerning the use of technology, affecting the adequate distribution of teaching materials and communications among the students. These difficulties faded as the teaching force

became more familiar with the learning tools. In addition, the stress levels of
undergraduates diminished from the beginning to the end of the academic term as they
became more familiar with the instructional materials and therefore gained more
experience with their newfound educational setting. (Ruiz-Alonso-Bartol, Querrien,
Dykstra, Fernández-Mira, & Sánchez-Gutiérrez, 2022) Likewise, the attitudes toward the
online setting evolved throughout the pandemic. Increased autonomy and self-paced
learning opportunities offered by the new online format were overall the most liked
attributes of the change.

Effectiveness and attitudes toward online education. #Intro online learning
history

Language attitudes are essential in the language learning environment, as they play
an important role in determining the student's final success in the language course.

Similarly, a learner with a positive attitude toward a learning environment will more likely
succeed than a learner who finds the environment difficult or disengaged.(eg Thompson,
2021) Not surprisingly, the attitudes in online learning have been shown to play a
fundamental role as students are physically detached from the learning environment, and
rely more on self-regulation abilities (Alqurashi et al., 2016; Horvat, Dobrota, Krsmanovic,
& Cudanov, 2015; Ke & Kwak, 2013; Lan & Sie, 2010). Within this line of research,
anxiety has been linked in several research studies (e.g., Teimouri, Goetze, & Plonsky,
2019) as an indicator of poor linguistic development.

Hat (2021) did a major survey on undergraduate students' and teachers' perceptions at the beginning of the online emergency switch in US universities. Their findings within students taking a language class were that overall, the quality of instruction received was worse in comparison to the in-person learning setting. In the same way, a vast majority of students felt that the class experience was unengaging as they missed spending time with faculty and fellow students. Within this swift change to online settings, many students also found that their academic load was not only reduced but also experienced problems with

using online tools.

With the decrease in covid cases, most major US universities are 109 looking to transition into face-to-face settings, creating a new reality within language 110 education. A global survey (Widenhorn, Hardy, Manuel, Botha, & Robinson, 2023) of more 111 than 5.000 university students revealed that more than four in five students (82%) would 112 still want to have at least some of their courses online after having passed two years of the 113 global pandemic. Similarly, two in five university students (41%) would still prefer to continue online without physical interaction with the educational classroom. When asked 115 what factors other than the pandemic had an impact, students replied with the economy 116 (73%), location or transportation (44%), and lack of access to technology (35%) This is the most extensive study that tackles the shift toward face-to-face education after the online 118 pandemic to date. However, this study is broad as it covers several countries with different 119 economic needs and transportation necessities. Therefore, our study aims to provide more 120 fine-grained detail about the post-pandemic tendencies in a North Eastern US university 121 122

23 Grounded theory

In order to study and understand tendencies in online learning, we turned to 124 Grounded Theory, as it allows for a cyclical observation of a changing world, where the 125 researcher is a constant observer of the changes produced (Hernandez Carrera, 2014). This 126 theoretical approach allows the research team to explain the relationships among categories 127 within the same reality. It is a constant comparison methodology of data of the reality being studied, where the hypothesis are formulated throughout the research process. This was performed via student evaluations, which allowed to test the thematic coding 130 structuration and check for unanticipated topics. In this step, the most noteworthy 131 categories were selected (axial coding) with the intention of making a posterior analysis 132 (selected coding). A Qualtrics Survey followed this initial observation, which allowed us to 133

employ a mixed models questionnaire that included qualitative, quantitative, and
open-ended questions aimed at gaining information about the participant's experience,
attitudes, and motivations for taking online vs. in-person language classes. We then tested
each category in... (add statisct analysis used).

Due to the geographical limitations, we adopt a substantive Grounded Theory that helps explain the tendencies seen within a specific area, along with the factors that affect them (Corbin & Strauss, 2014). Thus we understand that the results we obtain might be limited to the area from where the information is being extracted.

Social factors such as distance from campus, commuting time, working hours, or access to the internet might be geographically dependent and not extrapolable to other areas or countries.

Current Study

146 Methods

 \mathbf{RQs}

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The current study aims to answer the following research questions:

- How effective are online classes according to self-reported measures of language abilities?
- How does our new post-pandemic reality modulate tendencies in language enrollment (in person vs online)?
- We predict X based on Y.

In order to answer the research questions, a total of X students completed an anonymous survey. The following is a description of the participants that took part in the study and the task that they completed.

Participants

Students who were taking in person and online Spanish language classes at a Big 10 158 northeastern university were asked to complete the survey. A total number of 87 people 159 responded (update this with final count from Qualtrics). The data from 6 surveys were 160 removed due to incomplete responses. The participants were compensated with extra 161 credit towards their homework grades in their Spanish courses for completing the survey. 162 They were all typical university aged students (ages from 18-25) except one student, who 163 belongs to the 25-35 age range. If don't know if this will be relevant, probably not, but we 164 could include: 35 of the students were first years, 27 were second years, 11 were third years, 165 and 9 were fourth years.] Of the # participants who completed the survey, 23 were taking 166 a fully asynchronous online Spanish class, 51 were taking an in person class, and 7 were 167 taking a hybrid course. 168

We also collected information about their linguistic backgrounds. Of the # of
participants, 37 of the students speak another language besides English and Spanish. The
participants reported learning Spanish between the ages of X and X. They had reported
learning Spanish in X setting. X number of participants had taken X number of years of
Spanish in a high school setting. X students have never taken Spanish courses prior to this
course. (look up this information in the survey)

Additionally, we collected information about their work and commuting lives of these participants to be able to make judgements about how these factors impact learning attitudes. The students ranged from living on campus (32 students) to living relatively close to campus 5-15 miles away (17 students), to living 15+ miles away from campus and having a long commute (33 students). As for their working schedules, 51 students reported to not be currently working while attending university while 31 students are currently studying and working at the same time. Of those 31 students who are working, five work between zero and five hours a week, ten work between five to ten hours a week, ten work

between ten to fifteen hours and week and six work more than fifteen hours a week.

184 Material and Procedure

The survey was created on Qualtrics. It was distributed via an online anonymous link 185 to undergraduate students taking Spanish courses in a large university located in the 186 northeast United States and it took an average of # minutes to complete (find this info on 187 qualtrics). In total, the participants answered 46 questions. The questions were divided 188 into 4 sections (background information, online learning tools/accessibility, attitudes, and 189 enrollment) that each aimed to gather information about different factors that might impact the responses. The background information section asked questions about their age, 191 how long they have studied Spanish, how far they live away from campus, and if they are 192 working. The online learning tools/accessibility questions asked how comfortable they felt 193 using the learning management systems that their courses are using and how readily 194 accessible stable Wifi, a computer or tablet, and the software and other technologies are 195 that are required for the courses that they are taking. The attitudes section aimed to 196 gather the participants' thoughts about learning languages in person and in online settings, 197 their motivations for taking a language course, and how they feel their language abilities 198 have progressed. The last section, enrollment, asked questions about school-work balance 190 and the reasons why they enroll in online courses. 200

The aforementioned sections of the survey followed a mixed-methods design to
examine students' perspectives through an interaction of quantitative and qualitative
questions. By using open-ended and close-ended questionnaires we were able to collect,
contrast and students' testimonies. The mixed-methods design of this study allowed us to
compare open-ended questions, with close-ended questions obtaining tendencies,
preferences, as well as attitudes toward enrollment. Close-ended quantitative questions
were presented in a scale from 5 to 1 in the questionnaire, with a 5 being valued as "very
useful" and a 1 as "not very useful".

Data analysis

We used R (Version 4.1.2; R Core Team, 2021) and the R-packages *papaja* (Version 0.1.1; Aust & Barth, 2022), and *tinylabels* (Version 0.2.3; Barth, 2022) for all our analyses.

212 Results

213 Discussion

• Tie to RQs and big picture

215 Conclusion

- Big Picture
- Limitations
- Future directions

The results of this research study can help inform the decisions that administrations at similar universities make about the courses that they offer in the future.

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