2020

Language Autonomy Plans And Guided Autonomous Language Learning With Technology In University Spanish-As-A-Foreign-Language Instruction In The U.S.

Erin E. Real
Indiana State University

LANGUAGE AUTONOMY PLANS AND GUIDED AUTONOMOUS LANGUAGE LEARNING WITH TECHNOLOGY IN UNIVERSITY SPANISH-AS-A-FOREIGN-LANGUAGE INSTRUCTION IN THE U.S.

A Dissertation

Presented to

The College of Graduate and Professional Studies

Department of Teaching and Learning

Indiana State University

Terre Haute, Indiana

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy in Curriculum and Instruction with

Specialization in Language Education

---

by

Erin E. Real

December 2020

Keywords: guided autonomy, language autonomy plan, out-of-class language learning, technology, foreign language skills, independent practice

COMMITTEE MEMBERS

Committee Co-Chair: Ryan Donlan, Ed.D. in Educational Leadership

Associate Professor of Educational Leadership

Chair, Department of Teaching and Learning

Indiana State University

Committee Co-Chair: Melanie D'Amico, Ph.D. in Romance Languages

Associate Professor of Spanish and Linguistics

Indiana State University

Committee Member: Scott Sterling, Ph.D. in Second Language Studies

Associate Professor of Linguistics and TESL

Indiana State University

Committee Member: Rebecca Hinshaw, Ph.D. in Special Education

Associate Professor of Special Education

Indiana State University

ABSTRACT

The study addressed learners' experiences of following plans for suggested independent foreign language practice in support of their formal training in the university foreign language classroom and also of their burgeoning learner and language autonomy. At the end of 17 weeks, descriptive statistical analysis was used for identifying and comparing independent practice times and frequency, preferences for autonomous language activities, obstacles to implementing a recommended plan for independent language practice, and the relative usefulness of autonomous activities for specific language features. The study found out-of-class Spanish practice time increased by an average of nearly 5 minutes per week over the semester for the students who implemented a personalized language autonomy plan. The study also used qualitative description to explore potential relationships between self-reported plan implementation and perceived gains in skills and autonomy among three students. Professional language educators, CALL developers, university modern foreign language programs, language learners, and marketers of language learning tools all have a stake in learning to capitalize on present-day, authentic modes of communication and cultural expression for the sake of effectively and efficiently promoting autonomous language learning and language usage.

ACKNOWLEDGMENTS

No grant or other financial aid was requested or received in specific support of this dissertation study. However, I am personally and professionally indebted to the administration, faculty, and students of Concordia University Chicago, especially the Department of Theology and Foreign Languages, all students of Spanish, and Dr. Robert Sorensen, for immense contributions in the form of collegiality, time, inspiration, and friendship. I also especially thank the members of the dissertation committee at Indiana State University, Dr. Rebecca Hinshaw, Dr. Scott Sterling, Dr. Melanie D'Amico, co-chair of the committee, and Dr. Ryan Donlan, co-chair, without whose direct guidance, professional knowledge, and superbly friendly demeanors, I could not have conducted any such work; and I thank also Dr. Noble Corey, my advisor, professor, and professional mentor who did not give up on me even in his retirement, for his longtime service as chair of the dissertation committee. I am ever in the debt of family, friends, and my little dog too, whom I burden always with chatter of language acquisition theory and statistical analysis, but of my parents, Pam and Ted, especially. Finally, I offer my ongoing work in dedicated service to Christ and to his Church.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

This study is an attempt to improve the quality of American postsecondary foreign language instruction using available resources external to the classroom to foster effective autonomous learning and assist traditional instruction simultaneously. Inadvertently or not, this study also brings to life one of Edwin H. Friedman's best-known fables, "The Bridge," in which a man purposefully bounds toward the realization of his own dreams but is interrupted: walking toward him on a bridge is another man with a rope about his waist. When they meet, this new man hands the purposeful traveler the end of his rope and, after some polite words, jumps over the edge of the bridge where he is left dangling. Every teacher likely knows the burden and weight of the other's rope:

> "Why did you do this?" the man called out. "Remember," said the other, "if you let go, I will be lost." "But I cannot pull you up," the man cried. "I am your responsibility," said the other. "Well, I did not ask for it," the man said. . . . "What do you want?" he asked the other hanging below. "Just your help," the other answered. (Friedman, 1990)

This research on autonomous language learning seeks answers for all the times I asked how much help to give as a language teacher, whether I could affect my students' acquisition path, and how to help students learn on their own. Ushioda (2011) acknowledged the role of the educator and the value of encouraging learner autonomy: "Clearly, it is not our business [as

educators] to let students simply do what they want to do. Rather, our responsibility as educators is to socialise motivation for culturally valued goals and activities—that is, to bring students to endorse and internalise curriculum goals and values including specifically the learning and use of foreign languages" (p. 224).

This study also has its origin in a question posed by learners and the general public alike: Can I learn foreign language from my smartphone app? The question remains unanswered. Studies attempting to gauge the effectiveness of identified computer-assisted language learning (CALL) products have suffered from severe rates of participant attrition and have produced almost no data. Unable to focus on the relationship between digital language learning resources and language proficiency gains, we discover an appropriate starting point for addressing the role of autonomous practice in university foreign language instruction: learners' experiences of out-of-class language practice as recommended via individualized language practice plans that are relatively aligned to learners' personal interests, academic pursuits, and technology preferences. Evidence is needed that learners can be effectively guided toward independent language practice and that autonomous practice can be effectively integrated in the foreign language curriculum.

Guided Autonomy in Foreign Language Instruction: A Guiding Study

A study by Larocque and Sterling (2019a) sought to guide university students' foreign language practice outside of class without dramatically increasing the demand for an instructor's time. While that study was voluntary and also suffered from participant attrition, it provided a significant foundation for investigating the practice of supporting student learning beyond the classroom in the form of "language autonomy plans" (Larocque & Sterling, 2019a, slide 2). The current study continued the work of Larocque and Sterling: it attempted to study on a larger scale learner efforts at implementing language autonomy plans when additionally supported by regular

guided opportunities in the classroom for reflection and assistance. Ushioda (2011) asked, "So . . . why autonomy? Not because we want to motivate our students and shape their identities in predetermined ways, but because we want them to fulfil their potential to be the persons they want to become and do the things they value in a healthy way" (p. 230).

Purpose of the Study

The study investigated learners' experiences of combining individualized plans for autonomous language learning, generally aligned to their personal interests, with traditional formal classroom instruction to facilitate language acquisition. Prior to the study, it was generally believed university students of Spanish who received autonomy plans were more likely to engage in autonomous language practice outside of the language classroom. Furthermore, it was believed learners who conscientiously adhered to a researcher-provided plan would experience both higher levels of motivation to practice the target language independently and greater gains in their perceived abilities to use the target language than students of foreign language who minimally followed a plan or did not use one at all. As Larocque and Sterling (2019a) noted, however, we lacked and continue to lack data to verify the truth of these claims.

In summary, I investigated four research questions to learn about Spanish students' implementation of a language autonomy plan, including the amount of time devoted to independent practice outside the classroom, the frequency of that practice, hindrances to autonomous practice, and preferences for some forms of autonomous practice over others. Secondarily, I sought to identify a relationship, if any, between independent practice and perceived changes in target language (TL) skill usage or ability.

Justification for and Significance of the Research

The role of instruction is traditionally questioned in second language acquisition studies: Does language acquisition follow a predetermined path? What are the roles of comprehension and production? To what degree can instruction influence the path and rate of acquisition? Meanwhile, corporate-produced technological solutions are increasingly popular and accessible tools for the sake of practicing a new language. These tout the usual benefits of e-learning, including flexible scheduling and individualized practice, and they are aggressively marketed to learners, educators, and the public alike—often with little-or-no empirical data to back up their claims. The autonomous language practice aligned by the researcher to learners' personal interests as reported were primarily digital or web-based in nature. Today's web-based language apps potentially provide learners with native language models, level-appropriate activities, corrective feedback, authentic materials, and access to TL communities, but foreign language learners and teachers are overwhelmed by the wide capabilities and variability of available media. Moreover, no conclusive evidence exists to suggest the effectiveness of any of these programs for achieving foreign language proficiency, and technology integration represents an investment of resources by students, teachers, and institutions, alike.

A goal of this research in its earliest stages was to discover a link between independent online language practice and observable language acquisition, a high-stakes relationship that has implications for both the educational and business markets. That question was the practical consequence of an instructional problem and its proposed solution: (1) how traditional foreign language instruction might provide sufficient opportunities for input and interaction in the TL and (2) the proposed integration of a sophisticated and aggressively marketed digital language laboratory in the traditional university Spanish as a foreign language curriculum. A net cast

broadly for data to support course-wide adoption came back empty, and an extensive search for literature related to the product's effectiveness proved almost fruitless. It turns out, we cannot study a product if no one uses it as intended or at all. The mere existence, downloading, or purchase of a web-based language learning application does not apparently result in its faithful implementation. As demonstrated here in an extensive review of literature about out-of-class language learning with technology, attempts to understand the role of technology for language learning must begin by addressing learners' inclination to engage in the activity in the first place.

Importantly, the relationship between technology and foreign language education is multifaceted and, as with anything, its potential usefulness requires appropriate channeling. Language instructors search tirelessly for means of providing adequate amounts of TL input required for acquisition. Digital technologies increasingly facilitate their quest and the answers to it. Technology represents opportunities to connect with communities and access cultures where the TL is spoken; resources for authentic, rich linguistic and visual input; and platforms for creating study aids and for practicing vocabulary or linguistic forms. In most ways, technology is a means for facilitating, strengthening, and improving foreign language education. How, then, might instruction support the implementation of technological means for practicing language and encourage learners to avail themselves of helpful resources?

In fewer but not insignificant ways, technology and traditional foreign language instruction have been pitted against each other in competition. Mass-marketed or -distributed online learning solutions, such as Rosetta Stone and Duolingo, have been perceived as being at odds with traditional modern foreign language instruction. Both online educational systems and universities market to learners who increasingly seek flexible scheduling and individualized practice as well as expect observable gains in language acquisition. While language teachers

intrinsically seek ways to promote language acquisition, online educational systems advertise themselves to university professors in an effort to broaden their audience. Thus, both stand to potentially gain, not lose, from cooperation. Ultimately, any investigation of the effectiveness of web-based language learning resources is relevant to the audience of language learners, the modern foreign language instructor, and the technological innovator or seller, alike.

Important questions remain, however, as to the feasibility of autonomous language practice, digital or otherwise, and its role in the American foreign language curriculum. For example, why have previous studies failed to produce data on the use of widely popular and broadly available language learning apps? To what might we attribute the severe attrition observed in nearly all of those studies? What is the role of motivation in practicing foreign language independently? What is the role of instructors, if any, in guiding or encouraging learners' autonomous practices beyond the classroom? If communicative language proficiency is the goal, what activities and resources constitute effective autonomous practice in the target language? Do computer-assisted language learning (CALL) and mobile-assisted language learning (MALL) support or undermine efforts at learner-centered language pedagogies, which universally acknowledge the roles of linguistic input, interaction, and output in language acquisition? Ultimately, how can foreign language instruction capitalize on and also foster learners' autonomous language practices?

This study represented initial efforts to explore the purpose and nature of guiding students' autonomous practice of a TL in addition to and beyond the context of the formal classroom, as well as their experiences of that practice.

Contributions to Knowledge and Practice

The attempt to study out-of-class language learning with technology requires an interdisciplinary approach that draws as much on studies of language learner autonomy as on CALL, second language acquisition (SLA), and foreign language teaching, as well as consideration of a technological reality that is under constant renovation and whose particular manifestations are continually subject to radical obsolescence. This study represented one of few such formal attempts. Even at the study's conclusion, the relationship between independent practice and traditional, often communicative, foreign language instruction remains unclear as do reasons for a possible failure to practice language consistently and autonomously. Research overall suggests the potential of CALL to contribute to SLA, yet we have little empirical evidence to support, guide, or explain the integration of autonomous learning activities into the foreign language curriculum. Regardless of both an initially small number of participants and a data collection procedure complicated by the 2020 global COVID-19 pandemic, general conclusions based on limited data produced by the study may have value for language instructors and also for future attempts to study out-of-class language learning with technology, particularly the following: (a) this study's background questionnaire and pre- self-assessment of language skills, combined in a single instrument, may be an adequate tool for garnering sufficient information to construct a reasonably individualized language autonomy plan, with regard to personal interests, learning goals, and technological preferences; (b) the language autonomy plan template used in this study may have successfully represented and organized positive alignment between learner needs and widely available, free web resources; and (c) the practice of integrating language autonomy plans in instruction, as conducted in this study, did not apparently prevent students from practicing or learning the TL.

Initial participation in the research was low despite adequate attempts to recruit students. Then, in an unforeseen turn of events, the 2020 global COVID-19 pandemic forced a university-wide move to online-only instruction, essentially marking planned data collection at the half. On Thursday, February 27, the university president shared the State Department of Health's four-page document, "COVID-19 Guidance for Colleges and Universities" and, on that same day, participants and instructors in the study received a weblink to the second of five administrations of the repeated survey of learners' use of language autonomy plans. On March 6, the state marked its first case of COVID-19; the university subsequently announced cancellation of all university-sponsored spring break travel to international locations. On March 12, the university announced its move to online-only instruction, to begin Monday, March 16, and to continue through the end of the semester; later that day, participants and instructors in the study received a link to the fourth administration of the use survey.

Globally, anxiety and confusion characterized the learning atmosphere. Teachers everywhere rushed to adapt all learning to a remote format and, generally, learners experienced increased expectations for independence, self-regulation, and autonomy. Paradoxically, the pandemic crisis may have exacerbated low participation while simultaneously highlighting the study's significance. With regard to the study's planned methodology, there may have been an immediate discontinuation of the in-class integration of survey administration, as intended, and of all related opportunity to acknowledge and share experiences of out-of-class language learning with course instructors and peers. As such, the present study may contribute minimal empirical evidence to existing knowledge of out-of-class language learning with technology, yet its intention and context may serve as a virtual illustration of the importance of language autonomy plans, of the confluence of student attitudes toward out-of-class language learning and a reality

that demands we find a way to impress upon learners the imperative of learning to practice independently, the usefulness of existing resources, and the ability to use these to simultaneously meet course objectives and personal learning goals.

Significance of the Research

Minimally, results of the study suggested autonomy plans did not hinder student motivation, participation, or success in class, and any data on learners' experiences of autonomy plans address the problematic dearth of information previously available about independent language practice. The present study hoped to provide evidence to suggest guided autonomy might be effectively integrated in the traditional foreign language curriculum; that is, it hoped students would follow autonomy plans and that the plans could provide them with opportunities for usefully or purposefully practicing the target language outside of class. Future research may be conducted to support more fully autonomy plans as a legitimate and worthwhile pedagogical tool, as means for supporting the traditional foreign language curriculum and L2 proficiency objectives. Moreover, the unique context in which this study collected data emphasized the need for additional research and autonomy plans alike. University instruction during the COVID-19 pandemic demanded broad dependence on technological tools for even the most basic and standard forms of learning and communication, and it simultaneously initiated a sudden and unbending expectation for learner autonomy.

Research Questions

This study of learners' experiences with plans for autonomous TL practice addressed the following four research questions about variables operationally defined:

(1) How much time do students independently practice the target language outside of class per the language autonomy plan and with what frequency?

(2) Relative to each other, what aspects of language autonomy plans do students feel most contribute to language learning and thus prefer, and what obstacles do students encounter while attempting to implement those aspects of the plan they deem useful?

(3) Is there a relationship between the amount or frequency of independent target language practice per the language autonomy plan and a perceived change in target language skills?

(4) Is there a significant interaction between independent target language practice, perceived alignment between language autonomy plans and learner interests, and perceived overlap between independent practice and in-class activities?

Limitations

While I intended to address issues experienced in many American foreign language programs—the integration of language practice external to the classroom and methods for encouraging learner motivation and autonomy—my results were limited in scope by the population accessible for sampling and by the use of a specific pedagogical strategy, known here as language autonomy plans. Furthermore, I was not able to observe the isolated use of any particular type or mode of activity but attempted rather to understand its integration in second-, third-, fifth, sixth-semester and higher Spanish language courses that entailed regular class meetings with an instructor and peers, active dependence on a textbook series, daily written assignments, and in-class speaking activities. The COVID-19 pandemic and the subsequent forced suspension of in-person class meetings drastically limited even the most routine aspects of traditional university language education. In Chapter 1 I addressed limitations anticipated during the study's planning phase and summarized consequences of the COVID-19 pandemic for data

collection and for the presentation and interpretation of results. The study should be considered through the lens of these limitations, and its results on the general relationship between truly autonomous language learning and language acquisition or on the general nature of language acquisition itself should be interpreted with caution.

Delimitation of the Problem

Limited participation and forced changes to the presumed, regular structure of in-class learning resulted in the qualitative, rather than quantitative, exploration of data produced by the study. That is, the sudden suspension of all in-person learning and research likely inhibited survey responses and thus the generalizability of a potentially quantifiable relationship between practice and skills. Instead, the research problem became an exploration of that relationship through descriptive statistics as well as of students' nuanced experiences of language autonomy plans through data collected on named variables as planned: autonomy, time, frequency, Spanish skill change, plan-to-interests alignment, overlap between in-class and independent, out-of-class practice, plan usefulness, obstacles or hindrances to practice, content preference, mode preference, and perceived plan contributions to learning.

Although learner interests and possibilities for aligning them to available opportunities for independent language practice vary widely, language autonomy plans sought adequately to pair them in some way and to provide avenues for individual learners to do so on their own. The study did not assume all independent language practice is the same or that it has the same effectiveness when used alone as it does when combined with formal university classroom instruction.

I focused on learners' experiences with suggested activities per researcher-provided autonomy plans. To some extent, data collected from surveys reflected the degree to which

learners implemented autonomy plans, in terms of time and frequency of practice, as well as learners' perceptions of that practice, in terms of its relationship to personal interests and also to class activities as well as with respect to both advantages and shortcomings of the plan. It is likely that participants accurately represented the general population of American students of foreign language in terms of language background, economic status, academic aptitude, and reason and motivation for learning. Data for all variables were self-reported. Importantly, I did not seek to control or observe the settings of autonomous language practice beyond the classroom or to measure the singular effects of plan implementation on language proficiency. I did not exert direct control over dependent variables in the study, and the COVID-19 crisis occasioned the sudden discontinuation of organized opportunities for support and reflection. This situation may further exacerbated low participation in the study.

The small number of survey responses did not justify a factorial ANOVA as planned and facilitated only mild comparisons of LAP implementation across different levels of Spanish enrollment. Additionally, limited data rendered impossible a comparison of personalized LAPs with the generic LAP. Although the generic LAP was available to every student enrolled in Spanish classes from which students were recruited, it is unknown whether any of them accessed or implemented the generic plan, or to what degree and how.

The present study was limited in practical ways from its onset, including realistic expectations for the amount of time I spent preparing language autonomy plans. Simultaneously, the creation of plans was limited to only those free, accessible, and relatively useable or self-instructional activities known to the researcher. These included, for example, YouTube, Netflix, and Amazon as broad resources, Mango, Hoopla, Duolingo, podcasts, blogs, television programs, and news outlets in the TL, Wikipedia, flashcard generators, social media platforms,

language partners, journaling or creative writing, and participation in university clubs. In this way, both the learners' practice beyond the classroom and my ability to guide that practice were limited in some way, a situation that was and is representative of the real world. As in any case, parameters are helpful for decision-making. Here, they reduced the amount of time learners needed for identifying and learning to wield technological tools, thereby allowing independent practice to begin immediately while, at the same time, encouraging a concept of language practice beyond the rote or mundane drills and exercises of a textbook. Suitably, then, the scale between guidance and autonomy was hemmed in at either side, and both "guidance" and "autonomy" became relative terms that, when combined, presented "guided autonomy" as the very problem to be investigated.

Generalizability and Scope

The setting and sample of participants, as well as the unevaluated effects of the spring 2020 global pandemic, posed significant threats especially to the validity of this study's results. As in many previous attempts to study independent, web-based foreign language practice, the present study experienced a low participation rate. Data collection likely suffered additional impacts of the COVID-19 global pandemic crisis, the consequences of which are yet unclear. As a result, analyses performed could not adequately account for unique threats to either the internal validity or external generalizability of findings produced here; nevertheless, the study's findings provide relevant insights for practicing educators and also for future investigations of out-of-class language learning with technology.

A sample was drawn from students of second-, third-, fifth-, sixth-semester and higher Spanish language courses within a single university in order to control somewhat for external factors related to classroom instruction, given an expected confluence of classroom language

teaching and guided autonomous practice, as well as for individual differences among participants in learning aptitude. The suspension of in-person classes because of the pandemic crisis, however, diminished even this reasonable attempt. Furthermore, some students appeared to fail at consistently implementing a language autonomy plan and one student consented to the first phase of the research but received only a generic, rather than a personalized, autonomy plan. Consequently, participants did not self-segregate according to an experimental group and a default control group for the sake of drawing conclusions based on a comparison or about the effect of plan implementation on proficiency.

Finally, some questions emerged from the investigation, from the integration of guided autonomous language practice in the university foreign language curriculum, that were beyond the reach and scope of the study; for example, (a) did assigning a plan for autonomous practice increase students' motivation to learn foreign language? and (b) did the potentially private nature of independent language practice reduce students' affective filter and thus increase both ability and willingness to speak in class or chat with a native speaker via a technological platform? Conclusions based on data obtained through this investigation of learners' experiences of implementing language autonomy plans may be applicable only to foreign language learning within the parameters specified here.

Research Assumptions

The following were assumed about the research problem: (a) language acquisition requires practice of speaking and listening skills; (b) the communicative approach to language instruction is inherently effective; and (c) technology should be integrated in the foreign language classroom.

Prior to conducting the study, I made the following assumptions about the research design: (a) an objective of intermediate foreign language coursework is attaining the intermediate language proficiency level; (b) all course texts and in-class activities contribute to developing foreign language proficiency; (c) all language instructors are basically competent; and (d) participants have relative technological know-how and unrestricted access to the internet.

Definition of Key Terms

The following key terms are defined for the purpose of the study.

Advising in language learning. A lesser known branch of applied linguistics, as advocated for and defined by Carson and Mynard (2012) as "the process and practice of helping students to direct their own paths so as to become more effective and more autonomous language learners" (p. 4).

American Council on the Teaching of Foreign Languages (ACTFL). The recognized American specialized professional and membership organization "dedicated to the improvement and expansion of the teaching and learning of all languages at all levels of instruction" and responsible for establishing standards for foreign language education and teacher preparation (ACTFL, n.d.).

Autonomy. Frequently defined as an attribute of the learner, it is the "ability to take charge of one's own learning" (Holec, 1981, as cited in Benson, 2006, p. 22).

Communicative language approach. An approach to which "mainstream language teaching" has adhered, characterized by a focus on categories of semantic meanings and communicative functions, but whose implementation varies (Richards & Rodgers, 2001, p. 151).

Computer assisted language learning (CALL). For Thomas et al. (2013), "a term which came into favour in the early 1980s, replacing the older term CALI to explore the use of digital devices in language learning and teaching" (p. 378).

Guided autonomous language learning with technology. For the purpose of this study, suggested ways for using technology to practice the target language beyond the limits of the traditional classroom but in combination with it, based on SLA and motivational factors. Per Carson (2012), the *guided autonomous learning stage* is a stage of language learning in which "the educator adopts an advising role, [and] students begin to follow their own independent learning plan . . . in the manner of their own choosing" (p. 258).

Input. "The communicative language a learner hears or reads in context and to which he or she attends from its meaning" (VanPatten, 2003, p. 117).

L2. The language being learned, which is not the native, or first, language (L1) of the adult learner (VanPatten, 2003, p. 9).

Language Autonomy Plan. An instructor- or researcher-provided plan for guided autonomous practice of the target language in accordance with the learner's personal interests as reported; the term was coined by Larocque and Sterling (2019a).

Learning Beyond the Classroom (LBC). For Reinders and Benson (2017), an emerging field of study which addresses learning as "autonomous, independent, [or] self-regulated" in nature, that occurs outside of the formal classroom (p. 562); may overlap with non-formal, informal, or distance learning, for example (p. 561).

Mobile App. "A software application designed to be used with a mobile device (especially a smartphone or tablet computer), rather than a personal computer" (Lexico, 2020).

NCSSFL-ACTFL Can-Do Statements. According to ACTFL (2014), "The NCSSFL-ACTFL Can-Do Statements are self-assessment checklists used by language learners to assess what they 'can do' with language in the Interpersonal, Interpretive, and Presentational modes of communication. These modes of communication are defined in the National Standards for 21st Century Language Learning and organized in [a] checklist . . ." (p. 1).

Output. Language the learner produces to communicate or express a meaning (VanPatten, 2003, p. 117).

Procedural Autonomy Support. For Stefanou et al. (2004), a model of autonomy-supportive pedagogical practices aimed at generally developing young learners' autonomy inside the classroom. Procedural autonomy support "encourages student ownership of form and can include teacher behaviors such as offering students choice of media to present ideas," that is, learners' freedom to "choose" and "handle" materials, elect a mode for demonstrating learning, or "discuss wants" (p. 101).

Qualtrics. An online "experience management" platform providing subscriptions to online survey software and other data collection products (Qualtrics, 2019).

Spanish as a Foreign Language (SFL). As opposed to Spanish as a second language or as a heritage language, Spanish as a foreign language assumes Spanish is not the dominant language of the social, political, or educational context in which it is being learned. Ringbom (1979) summarized:

> In a foreign-language learning situation, the language is not spoken in the learner's immediate environment, although mass media may provide opportunities for practicing receptive skills. The learner has little or no opportunity to use the language in natural communication situations. (p. 36)

Teacher Capacity Support (TCS). Drawing on previous works, Lai et al. (2017) defined teacher capacity support as "[a type] of teacher support that influence[s] . . . volitional learning behavior [i.e., capability, opportunity, and motivation]" (pp.1108-1109), ". . . whereby teachers recommend technological resources and provide cognitive and metacognitive guidance on how to select and use resources effectively (Deepwell and Malik 2008; Faguerlünd 2012; Gray et al. 2010; Lai 2013)" (p. 1109), in order to "enhance [students'] out-of-class use of technology for language learning" (p. 1123).

Summary

The study investigated learners' experiences of autonomous language practice, as aligned to personal interests and specified in the form of researcher-provided plans, called here language autonomy plans. A total of nine university students of Spanish as a foreign language (SFL) participated, and some reported amounts and frequency of practice time, preferred aspects of the plan, obstacles to plan implementation, and perceived gains in target language skills during the same semester in which the plans were implemented. Only two students consistently reported about their implementation throughout the data collection semester. Thus, it is not clear that university SFL students will conscientiously implement or even seek a personalized language autonomy plan or to what degree they might use it to engage in guided autonomous language learning beyond the limits of the classroom, with or without technology. Prior studies suggested university students lack strategies for autonomous language practice, the confidence or ability to select appropriate materials, and general willingness to sustain independent learning. The research problem investigated here was limited to the degree in which participants voluntarily implemented a researcher-assigned language autonomy plan and ways in which they engaged in and reported independent language practice beyond the limits of the classroom. The effects of

the spring 2020 COVID-19 global pandemic crisis on student engagement and on data collection are relatively unknown, but the consequent sweeping move to online-only learning highlighted the importance of the topic investigated. The study may have been limited more generally by subject attitude, the nature of self-reported data, instruments used in measurement, and the settings in which participants completed unmonitored language practice. As a result, the study's hypotheses were not confirmed. The study could not substantiate the effectiveness of a pedagogical process for developing individualized plans to motivate and guide students' autonomous language practice. Results of the study, therefore, could not provide strong support for integrating this process in the traditional university foreign language curriculum. However, the study and its very context—compounded by pandemic-related school closures—suggested the discernible importance of efforts to understand and foment language learner autonomy, and to address potential for (a) capitalizing on existing technological resources for out-of-class language learning, and (b) aligning these to in-class activities in order to meet a previously observed need for coordinating and bridging in-class and out-of-class experiences, particularly for the sake of validating independent practice.

CHAPTER 2

REVIEW OF THE LITERATURE

The effective as well as efficient study of foreign language matters to educators, corporate leaders, and consumers alike. Regardless of ideology, agenda or curriculum, the ability to communicate in more than one language is perceptibly important in a globalized society. Today, more opportunities than ever exist for accessing communities, cultures, and languages in contextualized use. As Reinders and Benson (2017) observed,

> This research agenda is a broad one, and necessarily so, not only because LBC [language learning beyond the classroom] is a relatively new area of interest in a field . . . but also because opportunities for LBC are multiple, dynamic and highly dependent on the language being learned and the context of learning. . . . We argue that this deeper understanding will lead to a reconceptualisation of the classroom as a "third space" (Kramsch & Steffensen 2008), created by learners and teachers in a dynamic and interactive manner, based on learners' individual experiences. (p. 574)

The present study sought to integrate autonomous learning in foreign language education, specifically, to incorporate learner choices among diverse modes of independent practice into communicative language teaching (CLT). As such, the literature review necessitates discussion of the relevant understandings of second language acquisition, a summary of CLT, the popularized approach to modern foreign language education in the U.S., and minimum evidence

of the potential effectiveness of autonomous practice for learning a foreign language, in an attempt to align all three in the study. Accordingly in Chapter 2, a review of existent, relevant literature (a) identifies language learner practice and engagement as the nexus among second language acquisition theory, foreign language teaching, and language learner autonomy, (b) documents a current understanding of the accessibility and affordances of technology for adult language learning, (c) summarizes contributions from the pertinent empirical studies of autonomous language learning with technology, (d) establishes grounds for proposing guided autonomous language learning with technology as a contemporary reconceptualization of language learner autonomy, (e) provides for the theoretical and practical extension of Larocque and Sterling's (2019a) language autonomy plan, and (f) borrows Reinders' (2011) materials evaluation checklist and materials implementation framework for studying the application of those plans in university Spanish classrooms in the U.S.

Language Learning: Bridging In- and Out-of-Class Contexts with Technology

Langauge education in the U.S. is generally constrained by the normal limits of time and space for acquisition, as meted by the classroom, and by economic realities affecting both self-access centers and study abroad opportunities; but these recognizable constraints coincide with the "normalization and proliferation" of technology in our everday lives, as Lai (2017) described it (p. 5). The use of technological delivery platforms has, to some degree, successfully flexed educational opportunities, satisfying demands for independent modes of learning and for nontraditional schedule options, reaching a broader market of learners and potentially furthering efforts to democratize education. Foreign language education has attempted by and far to keep pace with these efforts, and evidence supports the idea that digital resources facilitate language

learning. Lai (2017) succinctly estimated the value of pursuing research related to out-of-class language learning with technology:

> This interest in understanding language learners' technology use beyond the classroom has arisen . . . partly because technology is likely to make the most contribution to the construction of ideal language-learning environments since long-term frequent language immersion and study abroad are not realistic options for most language learners. (p. 6)

But the accessibility and affordances of technology for language learning are ever evolving, and so is our understanding of its role in an autonomous context, whether defined as self-access, CALL, or out-of-class language learning, and of the potential to integrate that role in formal language instruction. This review of the literature should not be nor is it comprehensive and, therefore, it cannot accommodate the extensive reconciliation and alignment of divergent approaches to adult language learning and teaching; regardless, the review must begin by identifying practice as an appropriate nexus of second language acquisition (SLA) theory, communicative language teaching, and language learner autonomy. This section might serve thus to situate, even if only initially, studies about the autonomous use of technology for out-of-class language learning in the broader context of the experiences of foreign language learners and teachers in the U.S.

Practice: A Nexus of SLA, Language Teaching, and Autonomy

A careful review of literature from SLA theories and pedagogy implies that (a) the adult mind makes use of cognitive structures present in biology, whether language specific or not, (b) socialized adults likely make use of their language faculties in conscious and unconscious ways, (c) use, or practice, is observed during and is essential to language development, and (d) national standards for foreign language education attempt to address (a), (b) and (c), at least some degree.

Specifically, the literature about language pedagogy establishes objectives for learning and language proficiency, instructional practices in language teaching and the roles of practice therein, as well as potential for combining classroom instruction with forms of autonomous practice for the sake of meeting educational objectives. For the purpose of reviewing literature related to language pedagogy, I propose we consider language learning in the postsecondary SFL classroom to be a positive change in the learner's implicit L2 grammar system that results in an increasing "functional ability" to use the TL to communicate, that is, to express oneself, interpret messages, and negotiate for meaning, for the sake of increasing "legitimate" participation and access to resources in a community of TL speakers (Savignon, 2002; Lave & Wenger, 1991).

In its *Standards for Foreign Language Learning in the 21st Century* (revised in 2015, now titled *World-Readiness Standards for Learning Languages*), ACTFL (1999) identified "five C 'goal areas'" for foreign language learning: Communication, Cultures, Connections, Communities, and Comparisons. These standards address listening, reading, speaking, and writing, and they leave open an interpretation of the definitive nature of acquisition. The Communication goal, as refers to the effective use of language in the four domains for a variety of purposes across the three modes—interpretive, interpersonal, and presentational (ACTFL 1999)—is particularly salient in communicative language teaching (CLT), the popularized approach to modern foreign language education in the United States. Curtain and Dahlberg (2010) summarized:

> In a classroom designed to encourage second-language acquisition, there is an emphasis on communication. The teacher provides students with an environment in which they are surrounded by messages in the target language that communicate interesting, relevant

> information in language they are able to understand—language that is comprehensible to them. (p. 3)

The literature also reveals an inextricable link between input and output in processes of language acquisition. According to Lee and VanPatten (2003), "The emphasis in a communicative class is on the learners and the information exchanged between them as well as between them and the instructor . . . [and] culture . . . is informational content that can be infused into any language course" (pp. 4–5). As a result of effective instruction, according to VanPatten (2003), "classroom learners may not only go down the acquisition path faster, they may also get further" (p. 88). Thus, ACTFL makes every effort to guide foreign language education according to sound principles related to communication and language practice.

Practice may be receptive or production based. In summary, we might (a) view *practice* as the all the processes and activities (i.e., what a learner does) for the incremental incorporation of TL features, a particularly cognitive understanding of language learning grounded in both Skill Acquisition Theory (SAT) and Gass and Mackey's (2006) "interaction approach," as well as (b) identify *practice* as fundamental to acquisition while indicating, both explicitly and implicitly, various limits to practice imposed by the language classroom. Chapelle (2009) broadly alluded to potential for uniting SAT and computer-assisted language learning (CALL), as evidently signaled by DeKeyser: "The implications for learning through technology are numerous because the theory posits an important role for practice, including systematic input, interaction, production, and feedback in learning (DeKeyser, 2007a)" (p. 747). As things stand, Chapelle (2009) described a moderate disconnect between the fields of SLA and CALL, saying, "CALL designers, users, and researchers need to be able to theorize not only the 'normal' process of acquisition but also how to modify this normal process in hopes of helping students

learn faster and better" (p. 742). Many in addition to Chapelle advocate for carefully aligning CALL and SLA to increase opportunities for language practice, that is, for input, interaction and output, and in direct appeal to the private, individualized nature of autonomous practice.

As Benson (2006) noted, interest in autonomous learning has sharply increased since its inception in the 1960s, and today the field addresses a range of definitions and applications. Lamb and Reinders (2005) observed an overall educational trend toward learner autonomy and implied an inevitable trajectory: "Education has seen and continues to see a number of profound changes, many of which are the result of major changes in global society. We have shown that a common consequence of these has been the need for, even demand for, learner independence" (p. 236). For Reinders and Benson (2017), learner autonomy is a key goal in L2 education everywhere.

Foreign language teaching and learning involve an explicit expectation for autonomy, that is, that the learner become an autonomous language user as well as pursue lifelong language learning. Advocating for autonomous language learning facilitated by tutors, Sanchez-Villalon et al. (2010) argued, "An online environment offers opportunities for authentic, communicative language activities" (p. 9):

> Under the new modes of learning based on the new e-learning paradigm, learners are the main developers of their knowledge construction and tutors should guide them in the process. To do this, learners should have the possibility to get access to all the information that they need, and tutors should provide them with strategic resources and appropriate pathways to select and experience the knowledge by interacting with information and others, thus help them later develop creative thinking in every chunk of learning in an independent way. (p. 6)

Advising in language learning is gaining ground as a field in its own right. In fact, Benson (2013) claimed, “The advent of digital literacies . . . means that autonomous language learning is more likely to be self-intiated and carried out without the intervention, or even the knowledge, of language teachers” (p. 840).

Holec (1981) defined learner autonomy as “the ability to take charge of one’s own learning” (in Benson, 2006, p. 22). Bouchard (2009) reconceptualized autonomy for “mediated learning environments” (p. 93). First he recalled two previously identified dimensions “where learner-control can be exercised”: Long’s (1994) conative dimension addresses “motivational-intentional forces,” and Hrimech and Bouchard’s (1998) algorithmic dimension addresses pedagogical aspects of autonomous learning, such as sequence, pacing, and resource selection (in Bouchard, 2009, p. 93). Then he identified two new avenues for exercising learner control: the semiotic dimension to address demands of the evolving technological mediation of content, and the economic sphere to acknowledge the expanding set of educational choices in the “e-learning paradigm” (Sanchez-Villalon et al., 2010) and subsequent expectations for education’s economic value and affordability. In the language- and technology-specific context of a self-access language center, Moore et al. (2019) shared a standard expanded definition of autonomy:

> Autonomy in the context of second and foreign language learning has been defined as ‘a capacity to take charge of one’s own learning. An autonomous learner can make informed choices which requires a level of awareness and control of learning processes which is achieved through reflection’ (SALC Handbook, 2016; cf. Mynard & Stevenson, 2017, p. 171). (p. 218)

This study broadly implicates a mainstream, conventional version of learner autonomy, characterized by a focus on “individual learner psychology and learner strategies” and sometimes

called “weak,” rather than approaching autonomy from a radical, social orientation (Benson, 2006, p. 24). In the relatively mainstream view, learner autonomy manifests in degrees, and it may be intentionally developed through pedagogical intervention. Mynard et al. (2020) recognized learner autonomy “is not a solo journey and can be fostered through teacher support (Blidi, 2017)” (p. 54). Furthermore, Shelton-Strong (2018) observed that language learners typically emphasize language gains over the development of their autonomy as language learners; he subsequently called for the reconciliation of proficiency gains with an increase in autonomy (p. 25). Grounding their investigation of the perception of teacher roles in language students’ autonomous use of technology for learning outside the classroom, Lai et al. (2015) offered the following:

> Despite the various definitions of learner autonomy, it is widely agreed that learner autonomy consists of two major dimensions: 1) the ability to self-regulate one’s learning and make use of the learning opportunities in one’s surroundings, and 2) the willingness to self-direct one’s learning processes across settings and contexts (Benson, 2008; Garrison, 1997; Stolk et al., 2010). (p. 2)

Willingness, therefore, is related to both learner autonomy and motivation.

Theories of learner autonomy and motivation overlap significantly, though they developed in different domains and from different philosophical perspectives (Ushioda, 2011). Ushioda (1996) “stated that autonomous learners are by definition motivated learners” (in Ushioda, 2011, p. 223). She reconciled ideas about a directional relationship between autonomy and motivation, that is, that one necessarily comes before the other, and she specified a relevant meaning of autonomy: “Autonomy in the . . . sense of self-regulating one’s learning clearly depends on motivation. Students need to be motivated to engage in and sustain the metacognitive

behaviours that characterise autonomous self-regulated learning" (Ushioda, 2011, p. 223). Motivation, like autonomy, is frequently viewed as a dynamic attribute of the learner. McLoughlin and Mynard (2018) observed a "diversity of motivations among learners from the same context" (p. 77). Benson et al. (2016) further surmised the potential effects of different sources of motivation: "The motivation to reach goals may not be enough to sustain long-term engagement; the motivation that comes from interest is vital" (p. 291). McLoughlin and Mynard (2018) investigated learner strategies for sustaining motivation (p. 75); they concluded motivation is not static, even while teachers may treat it as such:

> There may be merit to exploring sources of motivation with learners, encouraging them to develop an awarness of what motivates them and how interest is an important driver for sustained learning. [. . .] Teachers have a role to play in this development of awareness. (p. 80)

Overall, the literature on language learner autonomy provides for the consideration of a dynamic, reciprocal relationship between the foreign language classroom and out-of-class language learning, as particularly facilitated by technology. Benson et al. (2016) acknowledged "people do not achieve language proficiency 'in the classroom' or 'outside the classroom'; instead, they develop it in language learning environments, in which classrooms and sites outside the classroom often play complementary roles" (p. 293). For example, Blake (1997) believed web-based activities, despite the seemingly independent nature of Internet use, could be appropriately contextualized to support the communicative classroom that was already input-rich and focused on the meaningful exchange of information. It is the educator's responsibility to contextualize digital activities through the very judicial selection and employ of web-based materials (Blake, 1997, p. 3). Peña Clavel (in Benson et al., 2016) advocated for the

reconceptualization of learner training for the digital era, broadly referring to content and dynamics, and an interaction between the two, and stating, “learner training should be anywhere, anytime and always available” (p. 292).

In summary of approaches presented here, including the consideration of learner autonomy as an educational goal or imperative, as an incremental capacity for control, particularly in psychological and pedagogical dimensions of learning, and as having some relationship to language learning gains, Shelton-Strong (2018) arrived at a strong conceptualization of language learner autonomy:

> [Learner autonomy] in language learning is defined as learners exercising personal control and agency (Bandura, 2001; Ushioda, 2014), with a focus on autonomy as a capacity, enabled by willingness (Sinclair, 2008). This capacity is believed to be fostered, in part, through reflection (Cotterall, 2017; Everhard, 2015a) and driven by the desire (or motivation) to take action related to the achievement of improved competence, for example, when involved in the process of learning a second, or additional language (Cooker, 2015; Dam & Little, 1998; Oxford, 2017; Ushioda, 2014). (p. 23)

Out-of-Class Language Learning with Technology

So, then, what do we know about the relationship between language learner autonomy, independent language practice outside the classroom, technology, and the development of skills, whether inside or outside the classroom, for appropriately merging the three? Reinders and Benson (2017) summarized the state of the field:

> As Richards (2015) points out . . . there are two dimensions to successful learning: what happens inside classrooms and what happens outside them. Rapid development of online media, communications technologies and opportunities for travel has also expanded the

> world beyond the classroom for language learners. Language learning and teaching BEYOND the classroom (LBC) is, thus, emerging as a field ripe for the development of new research agendas. (p. 561)

Benson has written extensively about language learner autonomy. He explained, “Modes of autonomous learning are highly sensitive to the availability of resources (people, texts, media)” (Benson, 2013, p. 840). Furthermore, Benson et al. (2016) explained that “each individual constructs their own particular environment based on their perceptions of environmental affordances and their own agency in learning” (p. 293). Broadly, “the idea of autonomy responds to the fact that indvidual learners differ from each other and may seek to devleop their individuality through divergent learning processes” (Benson, 2006, p. 29).

For Benson (2006), out-of-class learning is a “mode” of learning beyond the classroom (p. 27); he outlined its definition, widely attributed to Hyland (2004), and indicated its pertinence:

> [Out-of-class language learning is] the efforts of learners taking classroom-based language courses to find opportunities for language learning and use outside of class (Hyland, 2004; Lamb, 2004; Pearson, 2004). [. . .] Recent studies suggest that students tend to engage in out-of-class learning activities more frequently than their teachers know, often showing considerable creativity in situations where opportunities for out-of-class learning appear to be limited” (p. 26).

Opportunities for out-of-class language learning increasingly derive from the presence and integration of technology in our everyday lives. Lai et al. (2017) provided a purposeful synthesis of language learner autonomy and technology use outside the classroom:

> Self-directed use of technology for learning beyond the classroom is particularly important for language development in that it not only constitutes important contexts for authentic language exposure and use but also serves a multitude of cognitive and non-cognitive functions for language learning (Benson 2011; Blyth and LaCroix-Dalluhn 2011; Lai 2015a; Richards 2015). (p. 1106)

Plonsky and Ziegler (2016) argued CALL has come of age. In a second-order synthesis of 14 metanalyses, incorporating 408 primary studies and more than 14,000 learners, they sought to compare face-to-face instruction and CALL on their effects on L2 learning. Plonsky and Ziegler (2016) concluded:

> "Studies have found generally positive effects for a wide variety of language learning outcomes based on an equally wide range of tools, including mobile assisted language learning (Burston, 2015), computer-mediated communication (Lin, 2012, 2014), glossing (Abraham, 2008; Taylor, 2006, 2009, 2013; Yun, 2011), and gaming (Chiu et al., 2012)" (p. 18).

Their results further suggested "L2 learning in contexts using some form of technology provides a considerable advantage over traditional, non-technology based contexts in facilitating L2 learning outcomes" (p. 21). Plonsky and Ziegler (2016) called for ongoing research about best practices for language learning with technology that is constantly changing. Likewise, Macaro et al. (2012) conducted an earlier metanalysis of studies about the effects of technology on L2 learning. Their results suggested postive effects of CALL on primary students' critical thinking and affective factors, including confidence, motivation, and anxiety. Macaro et al. (2012) called for more research about the coordination of CALL and formal instruction.

Studies of the autonomous use of technology for language learning outside the classroom may exist somewhere between the poles of CALL and language learning with technology more generally. In her recent 228-page book, *Autonomous Language Learning with Technology: Beyond the Classroom*, Lai (2017) diagrammed a "theoretical framework of autonomous language learning with technology beyond the classroom," which represents dynamic interactions between classroom and out-of-class spaces via autonomous and social practices, and in light of contributions from the learner, technology, and presumably instruction (p. 46).

Jones (2001) observed the role of metacognitive skills in a language learner's ability to use technology for autonomous learning:

> Due to the Web's lack of structure, there is real potential for disorientation: learners, especially those of lower proficiency, may not have developed the navigational skills needed to find what they want; and even if they did manage to find it they may not know how to exploit the material. (p. 363)

Studying the use of assessment descriptors for autonomy development, Shelton-Strong (2018) observed a reciprocal relationship between the "exercise of autonomy" and the development of "metacognitive awareness and vision" (p. 22). Neither is an automatic process, even amid the potential affordances of readily accessible and attractive technological tools. Benson (2006) noted a general acceptance in the autonomy scholarship that "freedom in learning is not the same thing as autonomy" (p. 22), and Reinders (2011) surmised:

> Clearly one of the key requirements is for learners to be trained in using materials independently: '. . . if learners are not trained for autonomy, no amount of surrounding them with resources will foster in them that capacity for active involvement and conscious choice, although it might appear to do so' (Hurd 1998: 72–3). (p. 186)

It seems, then, the expert has a role to play in the configuration between technology and out-of-class language language learning. Lai (2017) looked back to Benson to support girding learners' otherwise free-range use of technology for practicing and learning language outside the classroom:

> Technology provides learners with unrestricted access to language-learning materials and language-use opportunities, and thus has the potential to proffer learners the freedom and choice they need in autonomous learning (Hamilton, 2013). However, situational freedom is not just about offering alternative choices but also about providing structures that facilitate autonomous actions (Benson, 2008; Reinders and White, 2010). [. . .] Benson (2001) argued that for technology to facilitate freedom of action, two conditions need to be met: 1) it must be structured in ways that provide ample opportunities for learner chocie and control; and 2) it must contain mechanisms that help learners to take advantage of these opportunities. (p. 24)

To this point, the literature has outlined the role of practice in language acquisition, the relevance of technology to that practice, and the need to train or guide learners with respect to autonomy, that is, with respect to motivation, willingness, self-regulation, and metacognitive learning strategies, if they are to successfully engage in out-of-class language learning with technology.

Willingness and Attrition: An Initial Challenge in the "Third Space"

Tangible implementation of autonomous language practice with technology has proved problematic, even when proffered in attractive, accessible packages. Studies of some of popular, enduring CALL programs have failed to produce significant data, especially as participants rarely complete training protocols specified by the research agenda. Nielson (2011) summarized

her own findings related to the effectiveness of independent language learning with Auralog's Tell Me More software:

> The most striking finding was severe participant attrition, which was likely due to a variety of technological problems as well as the lack of sufficient support for autonomous learning in the workplace. This lack of compliance with self-study suggests that despite the logistical ease of providing language learning software, more resource-intensive types of language training are more likely to be effective. (p. 110)

At her study's conclusion, Nielson (2011) called for combining tools for independent language practice with informed goals and parameters for their use, that is, for guided autonomy in language learning:

> Research from selfaccess [sic] centers and online learners indicates that independent language learners require support, guidance, and access to a wide-range [sic] of materials and resources in order to benefit from self-study. While CALL products offer increasingly sophisticated graphics and interfaces, they are not yet able to offer an alternative to human support or interaction. . . . Managers and learners alike should consider them as supplements to instructor-mediated training rather than stand-alone solutions. Future research with self-study materials would likely have more robust results if the products were selected according to learners' needs, if the learners were given specific (and measureable) [sic] learning goals, and if the participants began the study with some proficiency in the target languages. (pp. 125–126)

On the contrary, Lai (2017) identified a short list of studies that indicated a positive association between out-of-class language learning and language gains, particularly gains in "oral proficiency, vocabulary size and knowledge, and reading and listening comprehension

abilities (Sylvén and Sundqvist, 2012; Sundqvist and Wikström, 2015)" (p. 5). The relevance of those findings to this study are mitigated by strong participant attrition observed in more relevant studies by both Nielson (2011) and Larocque and Sterling (2019a), as well as by the disparate contexts of ESL in Sweden and foreign language learning in the United States. Notably, the bulk of studies about out-of-class language learning with technology have been conducted in the context of English as a Second Language in Asia or Europe (Lai, 2017, p. 162). To date, no strong investigation of the topic speaks to the context of American foreign language education. The following discussion presents studies that explored learner attitudes and the frequency and type of activities in which learners engage.

Lai (2013) contrasted research that found "the types of technologies [students] use for language learning are limited and rather conventional" with a study that found language students' out-of-class use of technology to vary greatly in frequency, type, and nature (pp. 100–101). Orhon (2018) observed comparatively more positive attitudes toward technology-based activities, including watching films, listening to music, and reading online, and concluded Turkish learners of English as a foreign language engaged in a moderate level of technology use for out-of-class language study. In the same study, Orhon (2018) also observed the following: (a) low frequency of use for many of the identified out-of-class activities; (b) participants' general preference for receptive activities (watching and listening) over productive activities (writing and speaking) in out-of-class learning; (c) an overlap of frequency and perceptions of usefulness; and (d) that "as learners' proficiency levels increased, they conducted more OCLL [out-of-class-language learning]" (p. 12). She concluded participants displayed "moderate attitudes toward [out-of-class learning] in general" and also surmised language teachers might make important

use of learners' preferences with regard to out-of-class activities but observed they may need training in order to do so (p. 12).

Rather than study the prescribed use of a particular technology resource or focus on previously reported patterns of inconsistencies in learners' use of technology, Lai (2013) tested a "framework for developing self-directed technology use" (p. 100). She administered a survey to a large sample of foreign language students at the same university in Hong Kong in order to learn about the frequency of technology use. She identified predictor variables, including language learning motivation, perceived usefulness, and perceived compatibility between resources and learning preferences, all of which proved significant indicators of the self-directed use of technology for language learning. Lai's study is a significant contribution to the field in that she further concluded:

> In the context of self-directed use of technology for language learning, the attitudinal component is most critical in shaping learners' digital choices. More importantly, the attitudinal component mediated the effects of the other two components [perceived behavioral control and the social influence component] on the adoption of technology. (p. 113)

Lai (2013) surmised, "This finding suggests that developing a willingness to use technology should be at the core of educational interventions" (p. 114). Thus, she presented recommendations for creating educational interventions related to fomenting learners' self-directed use of technology for language learning; among these were (a) efforts to enhance learners' willingness by strengthening "language learning motivation, perceived usefulness, and educational compatibility" (p. 115); (b) incorporating explicit strategy training (p. 115); (c) "[increasing] learners' knowledge and skills of using technologies effectively" (p. 115); and (d)

"[expanding and strengthening] resources and strategies that learners can access" (p. 116). Expanding this research, Lai et al. (2015) described willingness as follows:

> The willingness dimension involves a flexible mindset to deal with the uncertainties and complexity of interacting with technology (Kop & Fournier, 2011), a proactive approach to seeking opportunities to learn and using the language (Kormos & Csizér, 2014; Wong & Loo, 2012), the perceived usefulness of technology for language learning and the perceived educational compatibility of technology with language learning needs and preferences (Lai, 2013). (p. 2)

Pedagogical Interventions for Autonomous Language Learning with Technology

If, then, technology has an appropriate role to play in the practice of language and the exercise of autonomy, yet learners demonstrate an unwillingness to engage, we might look to research on pedagogical interventions for addressing language acquisition, effective autonomous learning, and student motivation. This section of the literature review narrows to a presentation of existing studies, limited in number, about such pedagogical interventions. The studies vary in kind and specific purpose. Here, they are arranged thematically. Given the emergent state of research about autonomous language learning with technology, themes narrow as this section progresses to the point of reviewing a single study each under the last three headings, all of which are poignantly relevant to the present study.

Carson and Mynard (2012) explained, "Through a combination of non-directive and appropriately introduced directive interventions, a learner can be supported in their autonomous learning endeavours" (p. 9). Existing research about out-of-class language learning with technology suggests significant barriers to its effective implementation in the foreign language curriculum in the U.S., primarily that learners lack metacognitive skills and/or motivation to

support significant levels of sustained engagement. Reinders (2011) cited, “There are numerous examples of cases where teachers or self-access staff have made good quality materials available to students, only to see the students not using them or using them in unanticipated ways” (p. 184). Reinders (2011) concluded:

> Clearly, materials for autonomy need to be integrated into the teaching context through learner training and ongoing support and it is not sufficient simply to provide learners with access to resources, no matter how good those resources are in themselves, if learners are to have any chance of success in their out-of-class learning. (p. 176)

Benson (2013) concluded, “As we come to understand this world as one that is not simply divided between the poles of self-instruction and naturalistic learning, we may come to revise our understanding of the pedagogical processes involved in autonomous out-of-school language learning” (p.841).

Reinders’ comments speak as much to language learning as they do to the development of language learner autonomy. In light of a mainstream view of learner autonomy, manifested in degrees and vulnerable to the influence and effects of instruction (Benson, 2006), Tassinari (2016) based her study of a dynamic model of autonomy on the assumption that “the way in which language teaching and learning is approached can make a significant difference to the degree of autonomy and consequently the degree of autonomy may influence language learning” (p. 118). Mynard et al. (2020) recommended language teachers look for ways “to offer in-class support for autonomous, out-of-class learning” (p. 55). Lai et al. (2015) recalled three essential dimensions for using technology to learn—cognitive, metacognitive, and social and affective—and found language students needed teacher support in all three (p. 16). They explained:

> The multidimensional nature of the essential knowledge and skills determines that teacher roles in supporting autonomous technology use outside the classroom are multifaceted as well, where teacher encouragement, resource recommendation, strategy-sharing and in-class technology use exert differential and complementary impacts on students' autonomous use of technology for learning outside the classroom. (Lai et al., 2015, p. 16)

The literature, therefore, rotundly supports an opportunity for teachers to address students' out-of-class language learning through instructional practices, yet minimal evidence in the literature speaks to their effort or ways they do so. Jones' (2001) observation still rings true: "Many teachers remain uncommitted to computer-assisted language learning (CALL)" despite heavy institutional investment and positive student attitudes (p. 360). Simliar to eventual conclusions by Lai (2013), Tassinari (2016), and Lai et al. (2015), Jones showed occasion for a stronger teacher role in guiding CALL activities, citing the perspectives of both CALL experts and language learners:

> [CALL teachers] see that what the computer offers learners is not 'free-standing', and that the human teacher's role is undiminished. [. . .] It is possible that most learners, too, would affirm that CALL activities should be associated with a teaching program. [. . .] A good many designers of CALL programs these days show awarness of the need for dual functions, describing their product as 'for classroom or independent study', or some equivalent expression. Teacher-direction, self-direction, or both are feasible. [. . .] That said, if the computer program is undertaken as part of an institutional course (that is, with the student paying for instruction), the teacher's role will be far from minimal. He or she would have to provide assistance in a number of ways: relating units of the program to a

> taught syllabus and/or to the individual learner's special needs; identifying the right level for the learner . . . , and possibly helping to select tasks; . . . and monitoring progress. (pp. 361–362)

Jones (2001) further noted learners vary in their autonomy levels, with some needing more teacher help than others. He surmised, "Evidently CALL entails degrees of teacher intervention" (p. 363), and proposed learner training as plausible means for both transitioning learners from a guided "laboratory" setting to learning in a self-access center and for addressing the overall effectiveness of CALL:

> The entire success of CALL depends on [learner training]. Given that students will need careful preparation by the teacher so that 'they have the requisite learning strategies to use computer tools confidently and appropriately' (Levy 1997: 210), they will not move instantly into self-access CALL. Indeed, it seems very likely that for most students CALL will need more learner training and more of the teacher's presence than any of the other operations in the self-access centre. (p. 364)

This review turns now to a narrow focus on two relevant, identifiable models for supporting the autonomous use of materials for learning, procedural autonomy support (Stefanou et al., 2004) and teacher capacity support (Lai et al., 2017), and on one study of an educational intervention for encouraging students' use of technology for out-of-class language learning. These three studies point the way toward conceptualizing a scaffold for the "self-directed use of technology for language learning" (Lai et al., 2017, p. 1108) outside the classroom, that is, to the proposal of guided autonomous language learning with technology.

The Teacher's Role: Mismatched Expectations

The private nature of out-of-class learning predictably complicates autonomy research. Lai (2017) summarized the current general lack of concrete knowledge:

> Despite the increased research attention paid to out-of-class language learning, it remains a relatively unchartered terrain, in that researchers are only starting to accumulate knowledge about its nature, its functions, its quality indicators, the interaction between its various elements and constituents, and its relationship to in-class language learning. (p. 5)

Little current empirical data exists to inform language teachers about helping students use technology to practice outside of class; however, some recent research explored learner and teacher perceptions of using technology for out-of-class language learning. For example, Reinders and Benson (2017) summarized Lai's contributions about "[learner] attitudes to in-class and out-of-class learning . . . [She] found that the students valued both but allocated different functions to them, which influenced their expectations of classroom teaching" (p. 564). Here, the review focuses on studies that contribute to the current understanding of learner needs in the autonomous context, specifically about learner and teacher perceptions, learner expectations, and mismatch between them.

Tassinari (2016) found learners held different notions of autonomy including, for example, "learning without a teacher," "self-aware learning," opportunities for assessing their own learning, and the ability to choose aspects of learning, such as task or pace (p. 126). In her conclusion, Tassinari insisted self-assessment requires a comparison between learner perspectives and the perspectives of experts, such as those represented by assessment descriptors but more handily expressed in dialogue between learner and language advisor (pp. 129–130).

Not dissimilarly, Lai et al. (2015) observed mismatch between learner and teacher expectations for supporting students' autonomous use of technology for out-of-class language learning. Lai et al. compared attitudes among second-language students in Hong Kong with those of their teachers. They found both viewed out-of-class language learning with technology as positive and necessary; however, learners had specific expectations for teacher guidance, whereas teachers primarily viewed themselves as passive resource "gatekeepers" (p. 10). Lai et al. concluded teachers had significantly underestimated both students' expectations of and virtual need for expert guidance; specifically, the researchers attributed the teachers' perceptions to both an overestimation of students' abilities to select and use technology resources for effective language learning and to their own low self-confidence in technology use.

The following conclusions from Lai et al. (2015) are of special relevance to this study. First, students expected specific forms of guidance from instructors regarding their use of technology outside the classroom. For example, students wanted more interesting resources than those typically created by instructors or publishers to accompany course materials. They also wanted support on how to select resources. Students "greatly valued metacognitive tips (e.g., resource selection and planning) and cognitive strategies (e.g., effective utilization of resources)" (p. 13). They also preferred specific recommendations over general encouragement, such as in the form of "an explicit message concerning the affordances of a given technological resource, and by providing easy access to more trustworthy resources, which in turn were reported to relieve student frustration and prompt further self-directed searches based on personal interests and related to the target language" (p. 12). Significantly, "all the student participants listed teacher recommendations as the No. 1 support they needed" (p. 11). Furthermore, "[students] felt that teacher encouragement could change their beliefs about language learning, reinforce their

beliefs about the usefulness of out-of-class technology use, and thus help them persevere in using online resources for learning" (p. 11).

Importantly, the literature reviewed here empirically confirms learners' expectations for expert guidance in the technology-mediated autonomous space; further, it recommends specific kinds of potentially useful teacher guidance. As such, it points the way toward much-needed future investigations, both broader and deeper, particularly of feasible educational interventions for guiding out-of-class language learning with technology.

To this point, the review of pertinent literature culminates in an abbreviated discovery of research about adult second language learning and teaching, as typically characterized in the U.S. by (a) formal instruction aimed at "communication," (b) opportunities for out-of-class practice proffered by the routine integration of technology in our everyday lives, (c) the iterative demand for increased learner autonomy, occasioned by that very technology and its context, and likely by (d) learners' palpable need for expert guidance when attempting to use technology for effective independent language learning. The literature reviewed so far does not provide, however, demonstrable suggestions for educational interventions to assist learners in these endeavors. Furthermore, recent evidence suggests initial inventions aim at learners' "willingness" to engage in the autonomous use of technology for out-of-class language learning (Lai, 2013). From here, we must summarize three specific investigations of pedagogical processes for supporting learner autonomy, particularly learner's abilities for independently using resources recommended by the language teacher in the context of formal classroom instruction.

Procedural Autonomy Support (Stefanou et al., 2004)

Stefanou et al. (2004) proposed procedural autonomy support as a model of autonomy-supportive pedagogical practices generally aimed at developing young learners' autonomy inside

the classroom. In the context of their study, procedural autonomy support was not specific to language learning nor did it highlight the availability of technology resources. As conceptualized, procedural autonomy support did however address the relationship between learner autonomy and the teacher's organization and presentation of resources from which learners choose, and it denoted ways educational interventions exploit that relationship for learning and instruction. Thus, procedural autonomy support is a good starting point for discussing the design of educational interventions that develop learners' autonomous use of technology for out-of-class language learning, specifically interventions focused on the provision, organization, and presentation of technology resources for self-directed language learning outside the classroom.

Stefanou et al. (2004) studied autonomy-supportive approaches to classroom teaching through observational vignettes. They reported on four observed combinations of a possible three kinds of autonomy support—organizational, procedural, and cognitive, each existing along its own continuum—to learn about the effects of teacher practices on learner behavior, particularly from the perspective of Self-Determination Theory. This theoretical approach implied the attempted resolution of a power differential by means of autonomy development, particularly of motivation and confidence, which occurred within the physical space of the classroom; accordingly, the researchers noted discursive interactions between the teacher and students.

Stefanou et al. (2004) observed a straightforward advantage of combining all three types of autonomy support for promoting autonomous behaviors among classroom learners, as well as a disadvantage of altogether failing to support learner autonomy. In particular, procedural autonomy support was characterized as a set of instructional approaches that "encourages student ownership of form and can include teacher behaviors such as offering students choice of media

to present ideas," that is, learners' freedom to "choose" and "handle" materials, elect a mode for demonstrating learning, or "discuss wants" (Stefanou et al., 2004, p. 101). Stefanou et al. (2004) cautioned that "organizational and procedural autonomy support may be necessary but not sufficient conditions for deep-level student engagement in learning" (p. 100), and they cited benefits of cognitive autonomy support over the other two kinds. They aligned these observations with previous findings to suggest procedural autonomy support may "encourage initial engagement with learning activities" (p. 97) but "lead to a superficial level of motivation" (p. 105).

Notably, the researchers observed autonomous behaviors among learners in a classroom characterized by a lack of both procedural and organizational autonomy support but high cognitive autonomy support (p. 103). Stefanou et al. (2004) explained in the post-discussion:

> In fact, in some classes, there was a tremendous amount of support for autonomous student thinking despite the fact that there was very little opportunity for students to decide much about the actual instructional activity itself . . . When teachers offer choice in the areas least connected with the cognitive aspects of the learning objectives, they may inadvertently direct students' motivation to something less than an intrinsic desire to learn. [. . .] The difference between the students in the high organizational and procedural/low cognitive autonomy support and low organizational and procedural/high cognitive autonomy support classrooms might be in the amount and quality of opportunities to be independent thinkers they received. [. . .] Another difference might be in the amount of teacher modeling of the types of behaviors consistent with cognitive autonomy. (pp. 105–106)

The literature supports the idea, then, that learner autonomy may result even when choices among resources and modes of expression are primarily teacher-directed, and also that the teacher's role is not insignificant in fomenting autonomy, especially in such a situation.

Thus, Stefanou et al. called in their conclusion for teachers to "strike a balance between organizational and procedural autonomy support and responsibility" and, when limiting options, to provide "choices relevant to critical thinking," an idea generally accepted in the literature about autonomy (p. 109). They explained cognitive autonomy support in a parallel fashion:

> It may be very important for the teacher to consider the balance between allowing student independence in thinking through complex conceptualizations and providing the framework into which students can place those self-generated ideas such that they know what they know and have learned. (p. 107)

It would seem, then, that freedom in learning provides for autonomy development when appropriate boundaries exist to scaffold, direct, and guide. Stefanou et al. (2004) concluded, "Indeed, perhaps paradoxically, it may be the structure and guidance that help to foster autonomy" (p. 109).

Teacher Capacity Support (Lai et al., 2017)

If Stefanou et al. (2004) considered, in their conclusion, balancing the scale between absolute freedom in learning and true learner autonomy, then Lai et al. (2017) offered resource and strategy recommendations, or teacher capacity support (p. 1122), as a counter to the superficial provision of high procedural autonomy support, which Stefanou et al. (2004) suggested as insufficient for developing learner autonomy.

Lai et al. (2017) designed a theoretical framework to study the effect of core psychosocial factors of learners and their contexts, and also of teacher influences thought to be

antecedents of those core factors, on university language students' intention for the "self-directed use of technology for [language] learning outside the classroom" in Hong Kong and the U.S. (p. 1105). Lai et al. did not investigate learners' uses of technology, only their intention to use, as affected by three identified types of teacher support that were mediated by various combinations of four identified core factors.

Lai et al. (2017) hypothesized the positive direct influence of performance expectancy, effort expectancy, facilitating conditions, and also the positive indirect effect of three types of teacher influence—teacher affective support, teacher capacity support, and teacher behavior support—on a learner's intention to use technology. In particular, they reiterated Lai et al.'s (2015) distinction between teacher capacity support of students' implementation of technology resources for language learning and teacher behavior support of resource awareness. Lai et al. (2017) found "the three types of teacher support exhibited differential levels of influence—with teacher capacity support having the most influence" (p. 1116). Teacher capacity support (TCS) significantly and indirectly influenced intention to use technology via two of the core factors, facilitating conditions and social influence (p. 1116).

Accordingly, Lai et al. (2017) concluded teachers should recommend technology resources as well as provide students with cognitive tips for selecting and using those resources, thereby supporting learners' "capability, opportunity, and motivation" (pp. 1108–1109) for using technology for out-of-class language learning. In summary, TCS is "knowledge and skills training" and also "community discourses around the behavior" (Lai et al., 2017, p. 1109). Lai et al. (2017) explained, ". . . the more support teachers provide in locating and selecting appropriate technological resources and in using technological resources effectively for language learning, the more likely students are to adopt such behavioral intentions" (p. 1121).

Lai et al. (2017) compared the effects of the three support types on a learner's intention to use technology and found an advantage of TCS over the reported insignificant effect of teacher affective support:

> Thus, teachers could have a bigger influence on students' intention to use technology through recommending technological resources, sharing cognitive and metacognitive strategies on how to use technologies for language learning, and actively incorporating technological resources into instruction and learning activities (Carson and Mynard 2012; Deepwell and Malik 2008; Lai et al. 2016; McLoughlin and Lee 2010). (p. 1117)

Importantly, Lai et al. (2017) further found TCS to be the *only* significant predictor, among the variables studied, of intention among U.S. students:

> In contrast [to Hong Kong], for the U.S. participants, only teachers' capacity support (i.e., recommendation of resources and strategies to use) was associated with persuasive influences. This finding is consistent with the evidences from cross-cultural studies of persuasion where it is found that […] individualist cultures may rely more on systematic processing, i.e., scrutinizing and elaborating on all available attribute-relevant information, in making evaluations. (p. 1122)

They concluded:

> In the U.S. context, focusing on providing support to enhance students' capacity to locate, select, and use technologies for learning alone might be the key since it may affect different components of human behavioral intentions (attitudinal, perceived behavioral control, and social influence) simultaneously. (p. 1124)

Teacher capacity support seemingly runs parallel to procedural autonomy support but in the opposite direction. While procedural autonomy support generally aims to move children

along a continuum toward freedom, allowing more flexibility in choice and expression, TCS represents a practice of establishing boundaries for choices as well as providing expert direction, tips, instructions, and models for activities, thereby girding learner efforts while equally and appropriately striving to develop learner autonomy. Teacher capacity support, as Lai et al. (2017) found, significantly affected university language learners' intention to use technology for learning outside the classroom and, therefore, it is explicitly an autonomy-supportive pedagogical practice. For Lai et al. (2017), their study "[confirmed] the various arguments on the potential roles that teachers could play in bridging students' in-class and out-of-class learning experience" (p. 1122).

Here, a large gap opens overall. The literature demonstrates autonomy is an appropriate goal of foreign language education in the U.S. and that students desire teacher guidance in the self-directed use of technology for out-of-class language learning, although language teachers have limited understanding of how to do so. The review as presented implies an imperative to address the development of language learner autonomy starting with willingness. Moreover, the literature suggests teacher direction, or effectively limiting procedural autonomy support, does not impede autonomy development and, further, that helping students "locate, select, and use" technological resources has a significant positive effect on their intention to use those resources to practice language outside of class (Lai et al., 2015, p. 17). Finally, the literature indicates TCS is potentially "the key," that is, sufficient for addressing students' intention to use technology, particularly in the United States (p. 1124). Thus, the literature supports both (a) developing a tool according to which teachers facilitate students' identification and employ of technology resources for out-of-class language learning, and, potentially, (b) framing this tool and its

implementation as TCS, within which are necessarily implicated the affective and resource aspects of autonomy summarized by Lai et al. (2017).

The last part of this section reviews the work of Larocque and Sterling (2019a), who developed personalized language autonomy plans and studied them in the context of postsecondary foreign languge education in the U.S.

Language Autonomy Plans (Larocque & Sterling, 2019a, b)

Larocque and Sterling (2019a) created "language autonomy plans" to support and guide university foreign language students' practice outside the class but in general support of their language coursework. Their investigation fundamentally guided this study, providing an essential concept and also template (Larocque & Sterling, 2019b) for theoretical and practical expansion, as well as the methodological foundation for an investigation of their use.

Larocque and Sterling (2019a) developed language autonomy plans in direct response to challenges noted by foreign language students at a single university in the U.S., including reported lack of motivation, resources, time for practice, and strategies for independent language practice (slide 2). They described the plans as a "collection of linguistic content and resources," representing suitable options for engaging in language practice outside the classroom, "tailor made [sic] to . . . [learners'] life context," and aligned personal interests (slide 6). The researchers sought to identify useful aspects of language autonomy plans, teachers' experience of developing and implementing plans, as well as plan contributions to L2 proficiency development. In the absence of strong directly relevant empirical data, Larocque and Sterling (2019a) grounded development of a language autonomy plan template in well-known works about a range of autonomy-related constructs, including studies of motivation, learning strategies, and support for self-directed learning.

Using a methodology generally supported by literature about motivation, strategy instruction, and Can-Do assessments, Larocque and Sterling (2019a) administered all the following to a convenience sample of 17 participants of intermediate foreign language courses, including Spanish, French, and German, at the same Midwestern university: (1) a background questionnaire of motivation, interests, and habitual technology use; (2) pre- and post-assessments of Can-Do language descriptors; and (3) a repeated follow-up survey of language autonomy plan usage. All participants were female, and all were native speakers of English; only two participants completed all aspects of the study. Using information from the background questionnaire, Larocque and Sterling created a language autonomy plan for each student, relatively tailored to personal interests, that provided 15 activities divided into three categories as follows: "five-minute activities, media, [and] social interaction" (2019a, slide 13). The researchers used approximately ten minutes to create each personalized language autonomy plan; thus, they surmised plan creation required approximately one hour of teacher time per six students.

As occurred in Nielson's (2011) study of the effectiveness of the Rosetta Stone software, findings by Larocque and Sterling (2019a) were limited by low participation, with some participants failing to complete the plan usage survey. At the end of the study, however, Larocque and Sterling reported an average increase of both out-of-class language practice and participants' language proficiency, though they were unable to determine contributions of language autonomy plans, if any, to observed increases. Some participants reported language autonomy plans were useful, and some reported the particular usefulness of listening activities. These results concurred with findings by Orhon (2018) of adult Turkish ESL students' preference for independent language practice of a receptive nature. Although Larocque and

Sterling (2019a) could not confirm the effectiveness of implementing language autonomy plans, the plans did not seemingly hinder language learning, and student responses encouraged new attempts at investigating language autonomy plan implementation. The present study strives to further the theoretical grounding and practical formation of language autonomy plans, to propose their implementation as an application of guided autonomous language learning with technology, and to view that application within Reinders' (2011) framework for implementing autonomous language learning materials.

In this section, the literature review has addressed known investigations of pedagogical processes for directing students' use of technology for out-of-class language learning. Stefanou et al. (2004) paved the way for devising pedagogical practices to support autonomy development; Lai et al. (2017) bridged in- and out-of-class learning contexts by virtue of focusing on the teacher's ability to support students' capacities for the self-directed use of technology for out-of-class language learning; and Larocque and Sterling (2019a) developed and implemented a practical tool, specific to individual learners but sufficiently flexible for feasible instructor adoption, for supporting out-of-class language practice, principally with technology. In summary, I acknowledge (a) the recognized potential for a dynamic relationship between in-class and out-of-class language learning in the U.S. context, (b) the ongoing rapid development and pervasiveness of digital language learning technologies, (c) observed mismatch between students' expectations for and teachers' perceptions of supporting technology use for language learning, (d) Lai's (2013) particular insistence that we address willingness, and (e) previous attempts to develop pedagogical processes and tools to support students' willingness, access to, and implementation of technology for language learning. I further observe the insufficiency of

existing empircal knowledge about all of these and, maybe, more generally of our current concpetualization of language learner autonomy.

Guided Autonomous Language Learning with Technology

Gaps and opportunities open, then, in this review of contributions from SLA, foreign language teaching, CALL, and autonomy, especially as pertain to investigations of the features of learners, tools, and educational interventions related to using technology for out-of-class language learning. Lai (2017) summarized affective, resource, and capacity aspects of learner autonomy, and insisted all must be integrated in any pedagogical process for addressing out-of-class language learning with technology:

> These conceptualizations from different research fields, although addressing different aspects of autonomous learning beyond the classroom, all suggest that learners' out-of-class engagement with technological resources for learning is subject to their will, interest and motivation, their perceptions of the affordances of technological resources and associated activities, and their ability to make effective use of these resources. Consequently, these three elements should form the core of the support that learners need in order to engage in successful autonomous language learning with technology beyond the classroom. (p. 102)

Briefly and for the purpose of later framing results of this study, we might summarily refer to Lai's description above as guided autonomous language learning with technology. This learning, in turn, may correspond to a set of pedagogical processes that are a function of either the language teacher or language advisor, roles examined by Carson and Mynard (2012). Furthermore, Larocque and Sterling's (2019a) "language autonomy plans" may serve as an appropriate application of guided autonomous language learning with technology. Carson and

Mynard (2012) distinguished between the roles of language advisor and language teacher based on their respective "aims, practices, skills, location, and discourse" (p. 13). For example, the language teacher primarily aims to foster language mastery while the language advisor works to develop learner autonomy; the language teacher operates within the constraints of a classroom and syllabus, while the advisor's work is flexible and frequently associated with a self-access center. They "argued that a learning advisor is a professional language educator who works with language learners in order to promote learner autonomy" (p. 13), and explained further:

> Although we are making a case for advising as a profession distinct from teaching, and ideally a dedicated professional role in an institution working alongside teachers, this is, in practice, not always possible. Gardner and Miller acknowledge that "releasing teachers from teaching and administration duties to become counsellors is often considered an expensive luxury…." (p. 19)

Carson and Mynard (2012) thus cited overlap of language teaching and advising:

> Here are some of the specific ways in which learning advisors work with learners in order to promote greater autonomy (there are many more):
>
> - raising awareness of the language-learning process
> - helping learners to identify goals and make learning plans
> - motivating, supporting and encouraging learners
> - helping learners to self-evaluate and reflect on their learning
> - giving opportunities for leaners to discover how they best learn (and what does not work for them)
> - helping students to develop a metalanguage so that they can talk about their language learning

> Language teachers, depending on the context and aims of a course, may also be involved with many of these practices. (p. 16)

If, then, autonomy frequently falls under the purview of language advisors but does and should overlap with the teacher's role, and if advisors are a "luxury" such that they are not present in some language programs, then we might consider ways in which the development of language learner autonomy may become a proper function of language teaching, but without overwhelming the teacher with added sets of aims, practices, skills, location, and discourse. In the absence of language advisors, teacher-developed language autonomy plans may be suitable proxy guides to out-of-class language learning with technology. The literature review leads now to a conceptual extension of Larocque and Sterling's (2019b) original language autonomy plan, expanding both the theoretical prescription for the plan format and its alignment to criteria for selecting and organizing content.

Language Autonomy Plans as Proxy Guides to OCLL with Technology

The theoretical and practical expansion of Larocque and Sterling's (2019a) language autonomy plan follows, framed as an application of guided autonomous language learning with technology. Such work is justified by the specific call to study support of learners' application of technology for language learning, contextualized by specific needs, available resources, and diverse settings. Lai (2017) borrowed from Barron's learning ecology framework to widen the aperture:

> The current literature is inadequate to provide information on how to support language learners in constructing language-learning ecologies—that is, information concerning the kinds of resources that support successful learning across settings, and the support learners need to select appropriate technological resources that match their learning needs

> and to coordinate various technological resources in order to construct a language-learning ecology across settings (Barron, 2006). [. . .] Thus, research studies are needed not only to examine the transferability of technology use across different settings but also to evaluate different approaches to promoting learners' construction of language-learning ecologies with technology across settings. (pp. 176–177)

Here, Larocque and Sterling's (2019a) language autonomy plan is characteristically expanded to address (a) eight criteria identified in Reinders' (2011) materials evaluation framework, (b) general findings by Yamaguchi et al. (2019), (c) the explicit expectation for effective practice in adult second language acquisition, as cited by Criado (2016), as well as (d) and narrower findings by Lai (2013) about educational interventions for promoting the autonomous use of technology for language learning. Recent work by Moore et al. (2019) and by McLoughlin and Mynard (2018) also generally inform the expanded language autonomy plan template.

The theoretical expansion of language autonomy plans has practical implications. As a result, this study's language autonomy plan differs from Larocque and Sterling's (2019b) original template in three key ways. Here, language autonomy plans (a) include a greater number of activities which are more finely attuned to students' reported interests, (b) provide specific instructions intended to serve as cognitive strategy tips, and (c) organize activities principally by language domains (i.e., listening, speaking, reading, and writing). The ensuing explanation of these changes follows an outline of Reinders (2011) materials evaluation framework with intercalated references to separate studies of autonomy and technology use for out-of-class language learning as well as additional SLA research.

Reinders (2011) operationally defined autonomous language learning as follows: "'Autonomous language learning is an act of learning whereby motivated learners consciously make informed decisions about that learning' (Reinders 2000: 25)" (p. 177). He expanded Knowles (1975) generic model of self-directed learning to eight stages of self-directed language learning, applied along a continuum between strong poles of teacher-directed and learner-directed, with most steps falling somewhere in between. Reinders then aligned the eight stages of his revised model to corresponding characteristics of "successful materials for autonomy" (p. 176). These characteristics essentially serve as criteria for the design of autonomous language learning materials and, here, they theoretically ground the expanded format and implementation of language autonomy plans.

The first step in Reinders' (2011) model of autonomous language learning, that is, the first evaluation criterion for materials intended for use in the process, is needs analysis, commonly operationalized as a learner's difficulty using the TL (p. 178) and potentially captured by observation or a questionnaire. The present study generally retained Larocque and Sterling's (2019a) methodology overall, including an initial background questionnaire and pre-assessment of language skills. Both in the present study and in Larocque and Sterling's original investigation, the personalization of language autonomy plans intended to align the learner's identified essential language needs with existing resources for language practice, especially through widely available technological means, while simultaneously avoiding overwhelming the learner with the need to hunt for personally relevant resources, a process which might diminish confidence, motivation, or both.

Alignment between Reinders' (2011) second materials evaluation criterion, setting goals (p. 178), and language autonomy plans also relies on data collected through a background

questionnaire, one that particularly seeks to understand students most immediate and salient ambitions and to broadly align these to linguistic functions or thematic topics within the language autonomy plan. Larocque and Sterling (2019a) and the present study diverged to some degree in their gauging of learner goals via a background questionnaire. Larocque and Sterling (2019a) asked, “What do you want to be able to do with the language after 6 months, 1 year, and 5 years?” (Slide 12). In this study, the following questions helped address Reinders’ (2011) setting goals criterion 2 for autonomous materials evaluation:

1. Are you currently planning a trip to a Spanish-speaking country?
2. Do you expect or hope to use Spanish in your future career?
3. What is your primary reason or goal for studying Spanish?
4. Realistically, what grade do you hope to earn in this class?

Reinders (2011) third and fourth evaluation criteria, planning learning and selecting materials (p. 178), are of utmost consideration in language autonomy plan development. For Reinders, planning entails consideration of content, sequence, and learner–content interaction (p. 179), similar to steps in the “algorithmic” dimension of semiautonomous learning recalled by Bouchard (2009) (p. 94). On the self-directed end of Reinders’ (2011) model, which constitutes the very nature of this study’s efforts to support learners’ autonomous use of technology for OCLL, planning learning is “contextually determined [but] very flexible,” and materials selection is primarily learner-directed (p. 178). Reinders (2011) explained, “This may mean offering different types of exercises…It may also mean that materials do not have to be offered in a fixed order but rather, that there need to be tools to find materials easily by different characteristics” (p. 180). Furthermore, it may “require the materials themselves to be coded at

multiple levels" (p. 180), a criterion taken into special consideration in the present study's revision of Larocque and Sterling's (2019a) language autonomy plan template.

Additional studies bear on the specific nature of activities incorporated into language autonomy plans in this study. Lai's (2013) findings, reviewed in a previous section, led her to conclude that "educational interventions that aim to enhance self-directed use of technology for language learning" (p. 114) should attempt to strengthen "language learner motivation, perceived usefulness, and educational compatibility ['between the technological behavior and learning preferences and values' (p. 102)]" (p. 115). Educational interventions should also "expand and strengthen resources and strategies that learners can access" (Lai, 2013, p. 116). Accordingly, this study carefully considered participants' reported interests and learning preferences in language autonomy plan development.

Both a study by Yamaguchi et al. (2019) and Anstey and Watson's (2018) Rubric for eLearning Tool Evaluation speak directly to the qualities of materials selected for adoption in self-access centers. Yamaguchi et al. (2019) adapted Reinders and Lewis' (2006) pre-evaluation materials checklist and concluded the following were still "valued features" of autonomy materials: "clear instructions, the language level, a lot of practice as well as examples, feedback (e.g., answers), easy navigation, and visual representation of materials (e.g., color and images)" (p. 352). Yamaguchi et al. (2019) additionally cited new expectations for resource mobility and learner training. Anstey and Watson (2018) identified seven categories to represent the dimensions of eLearning tools, defined as "any digital technology, mediated through the use of a computing device, deliberately selected to support student learning" (para. 1): functionality, accessibility, technical features, mobile design, privacy, data protection and rights, social

presence, teaching presence, and cognitive presence. They further divided these categories into criteria, explaining:

> Not all rubric criteria are necessarily applicable to all eLearning tools and those using the rubric are encouraged to assess irrelevant criterion as "not applicable". The rubric does not identify a discrete threshold that an eLearning tool needs to cross before a tool should be used; the rubric is a formative tool intended to offer insight into the relative strengths and weakness of an eLearning Tool, as evaluated against a set of criteria. (Yamaguchi et al., 2019, para. 2)

The following among Anstey and Watson's (2018) identified criteria are particularly relevant to this study's selection of web resources for inclusion in language autonomy plans: ease of use, hypermediality, accessibility with respect to required equipment, compatibility with multiple browsers, mobility, and broad diffusion.

This study maintained Larocque and Sterling's (2019a) default focus on technology-mediated language practice in the selection of materials for autonomy plans. Larocque and Sterling (2019a) found participants to "have similar interests, time constraints, and access to technology [,] so many plans were [sic] included similar activities but tailored for particular students" (Slide 13). Additionally, Larocque and Sterling (2019a) restricted their language autonomy plan template to a total of 15 activities and divided these across three broad categories, 5-minute activities, media, and social interaction. Language autonomy plans in this study included a greater number of activities to achieve all the following: (a) finetune alignment of language activities to students' reported interests; (b) highlight the standard recommended duration of specific activities and simultaneously present opportunities for tailoring combinations of activities permitted by the constraints of learners' schedules; (c) highlight opportunities for

practice with various texts types across the four traditional skill domains (reading, writing, speaking, and listening); (d) integrate authentic cultural information, contexts, and communication; and (e) encourage maximum exploration among learners of existing, available resources. Reinders (2011) said, “Materials for autonomy will aim to (gradually) encourage learners to make these decisions for themselves” (p. 179). The planning learning and selecting materials criteria have direct bearing on Reinders’ (2011) sixth criterion, practice, discussed below.

Reinders (2011) proposed “selecting strategies” as the fifth autonomous materials evaluation criterion (p. 178). While Larocque and Sterling (2019a) used Oxford’s Strategy Inventory for Language Learning (1990) to develop language autonomy plans, Lai (2013) generally concluded that “educational interventions need to increase learners’ knowledge and skills of using technologies effectively” and that interventions should provide both explicit strategy training and overt expectations for using technology (p. 115). In the present study, language autonomy plans intended to guide learners by attempting to provide for metacognitive strategies in the self-directed use of technology for language learning. Expanded plan design incorporated instructions for each activity. Instructions typically included verbs, adjectives, punctuation to elicit enthusiasm, and bold text to make salient the important features of a resource, whether those features related to content or to a particular mode of learner interaction with content. Features that seemingly related to a learner’s reported personal interests, language goals, or learning preferences received special attention in language autonomy plans.

Reinders’ (2011) sixth criterion is practice and, here, the comparison of the teacher-directed and learner-directed scenarios is of special note. In the teacher-directed context, practice is “exercises and activities provided by the teacher”; at the learner-directed end of the

continuum, practice is “implementation (language use) and exploration” (p. 178). Crook’s (2008) “playful, expressive, reflective, and exploratory aspects of knowledge” may be used to expand Reinders’ description (p. 9). These categories, as identified, overlap with traditionally accepted functions of human language (i.e. ludic, expressive, phatic, etc.). Furthermore, Reinders’ practice criterion is not antithetical to principles of SLA. Criado’s (2016) work necessitated language practice provide “maximum possibilities for multiple encounters of the language features in different conditions, situations and type of activities,” and also, whether receptive or production-based, that practice be form-focused, provide for form-meaning connections, and not obstruct a progression from the declarativization of skills to their proceduralization and, eventually, to automatization (p. 125). Larocque and Sterling’s (2019a) language autonomy plan, conceptualized as a menu, is the epitome of Reinders’ (2011) expectation that successful autonomy materials address practice, as characterized for a learner-directed scenario, and thus provide ample opportunities to use language and explore. Larocque and Sterling’s (2019a) menu format was retained in the present study.

Larocque and Sterling (2019a) and the present study both minimally addressed Reinders’ (2011) seventh criterion, monitoring progress, although the guiding study directly influenced the present study’s strengthened attempt to do so. In Reinders’ learner-directed scenario, successful autonomy materials promote “self-monitoring and peer-feedback” (p. 178). In many language autonomy plans developed for both studies, only some activities selected for inclusion had the capacity to provide feedback, and that feedback potentially varied, for example, from a gamified computer application to interpersonal communication in a chat scenario. Furthermore, the availability of feedback was dependent on both the learner’s decision to engage in an activity with feedback as well as the desire for and receptiveness to feedback. In both studies, the

repeated administration of the same survey of plan usage was an intentional means of reminding learners to use their plans. The present study administered usage surveys more times. Both Tassinari (2016) and Shelton-Strong (2016) advocated for better alignment between assessment practices in instruction and dedicated efforts to develop learner autonomy.

Last, Reinders' (2011) eighth criterion of assessment and revision entails, in the learner-directed scenario, "self-assessment and reflection" (p. 178). In the present and guiding studies, the repeated administration of a usage questionnaire may or may not have prompted leaners to appraise their own learning along the way. In both, a final post- self-assessment of language skills attempted to gauge progress in terms of a change in perceived language skills. In the present investigation only, the survey of plan usage was further intended to determine learners' perception of their autonomy development over the course of the study. This method may have encouraged self-assessment and reflection in addition to self-monitoring, as discussed above.

The narrowed and careful review of literature has provided for the expansion of Larocque and Sterling's (2019a) language autonomy plan template. This chapter turns now to discussion of Reinders' (2011) implementation framework to accompany the successful autonomy materials criteria. A study of the full relationship between the physical and virtual learning contexts, including all the "activities, material resources, relationships, and the interactions that emerge from them" (Barron, 2006, p. 195) and the places where these meet, is too broad for the purpose of this study.Thus, Barron's (2006) learning ecologies framework for studying the relationship between in-school and out-of-class learning is not practical. Instead, the final paragraphs of this literature review adapt Reinders' (2011) three-phase model for the implementation of autonomy materials to the study at hand, that is, the investigation of language autonomy plans (LAPs) as a

proposed application of guided autonomous language learning with technology in the university Spanish classroom.

Adapting a Materials Implementation Framework for a Study of LAPs

Reinders (2011) proposed a three-step model for implementing autonomy materials, including phases for preparation, support, and reflection. The model focused on increasing language learner autonomy by means of "encouragement and preparation that take place in the classroom" (Reinders, 2011, p. 188) and through developing a relationship between in-class and out-of-class learning. Thus, Reinders' phases were not broadly intended for completely autonomous learning.

In the preparation phase, Reinders suggested (a) "teachers . . .first make an inventory of all the resources they employ toward this [autonomy] goal *in* class" (pp. 187–188), and also (b) explicitly promote out-of-class learning, as well as (c) provide for using student-generated materials (p. 188). Next, in the support phase, Reinders called for the distinguishable role of self-access centers and language advising, particularly to "encourage students to move on to using their new language outside the institution and to move away from relying on pedagogical materials" (p. 188). Last, Reinders intended the reflection phase as means for directly connecting in-class with out-of-class learning, particularly through the process of sharing together (p. 188). Reinders gave final consideration to difficulties in making physical resources widely available for access, an issue largely resolved today by the routine use of the Internet in our daily lives. Such an observation leads readily to this study's research problem of facilitating learners' self-directed use of materials from a wide array of technology resources, that is, of necessarily distinguishing between true autonomous language learning and absolute freedom in learning.

While essential to developing language learner autonomy, the first and third phrases of Reinders' implementation model, preparation and reflection respectively, are beyond the scope of this study. The present study focuses instead on a reconceptualization of Reinders' second phase, support, per the implications of changing technological and learning realities. While technology's affordances have increased accessibility to autonomy materials, fewer universities in the U.S. today support self-access centers or provide language-specific advising services. Garrett (2009) described a trend in the U.S. to transform language laboratories into general-purpose computer labs in order to cut costs. She further explained the insufficiency of general-purpose computer labs and SMART classrooms for meeting the specific needs of language learning and teaching—specifically, allowing teachers to roam and supporting activities that require speaking aloud. Thus, Reinders' (2011) support phase cannot be implemented as he envisioned, although (a) autonomy materials for language learning are more relevant than ever and (b) his model is still generally appropriate for today's learning context.

Summary

The literature shows an emerging pattern of opportunities for integrating guided autonomous TL practice in foreign language instruction to support language acquisition in adults, and suggests furthermore that its use is not at odds with current trends in SLA research or foreign language teaching practices. This review has attempted to draw lines between theories of SLA; the enmeshed roles of teaching and advising in language learning and autonomy development; and opportunities to use technology for satisfying needs relevant to all the above. These opportunities have been shown to exist, given previous studies about supporting the self-directed use of technology for language learning outside the classroom, though little is currently known regarding best practices for such.

If (a) the context has moved beyond the self-access language center, beyond the tutor, and beyond the classroom, (b) procedural autonomy support encourages providing opportunities to select materials and activities, and (c) TCS is an appropriate approach to supporting students' self-directed use of technology for language learning in that it defines those opportunities with boundaries as well as identifies the goals of teacher support (Lai et al., 2017), then what tools do teachers have at the ready for providing resources and supporting language practice beyond the classroom? The literature review produced few tools, but it encouraged us to consider the potential of language autonomy plans, viewed within the support phase of Reinders' (2011) implementation framework, as a proxy guide to the self-directed use of technology for out-of-class language learning, that is, to be used in tandem with in-class learning. The literature shows a strong interest in joining opportunities for autonomous practice with the communicative language classroom, which is not unaligned to theories of SLA, and also in using computer-mediated communication to reshape and broaden the traditional foreign language classroom.

It may be that expanded language autonomy plans encourage university foreign language students in the U.S., at least to some degree, to (a) increase the amount of time devoted to independent target language practice outside of class, (b) perceive new affordances of familiar technology resources for language learning and, thus, repurpose those resources for out-of-class language learning, (c) transfer, hone, or develop cognitive and metacognitive strategies for both learning language and technology use at the same time, (d) explore target language communities, increasing exposure to or interaction with authentic language use, (e) identify connections between in-class and out-of-class learning experiences, and (f) engage in self-monitoring and reflection, thereby becoming more autonomous language users and lifelong language learners.

CHAPTER 3

METHODS

The study investigated to what degree U.S. university students of Spanish as a foreign language willingly implemented language autonomy plans for out-of-class target language practice under the existing conditions of language instruction in order to facilitate language learning. Additionally, the study explored ways in which that practice contributed to participants' self-perceived target language usage and to the development of language learner autonomy. The literature about second language acquisition provides for the positive relationship between language practice and language learning. Thus, it was generally believed prior to this study that students who spent more time practicing Spanish as well as those who practiced more frequently would report a greater degree of positive change in self-perceived Spanish language abilities than students who spent less time practicing or who practiced infrequently. The study also anticipated that university students of first- through fourth-year Spanish who followed a language autonomy plan (LAP) relatively tailored to their personal interests would spend more time practicing than students who received a generic LAP. Furthermore, this study anticipated LAP implementation would contribute to students' increasing sense of language learner autonomy.

Chapter 3 describes the methodology used for addressing the central tenets above, including all the following: instruments used in data collection; relative discussion of the validity and reliability of the research design; the research setting, participants, and the role of classroom

instructors; a timeline and description of data collection; methods used in data analysis, including explicit provision of research questions with appropriate hypotheses, and detailed identification of variables in the study; and, finally, ethical considerations for the study overall.

Design

An exploratory study over a single 17-week semester, including breaks, researched the relationship between LAPs and participants' practice. Specifically, the design collected data about students' implementation of the plans, primarily in terms of practice time and frequency, obstacles, and the usefulness of activities relative to each other, but also with regard to students' language learner autonomy as well as preferences for content and language feature or mode. The design provided additional opportunities for studying the potential relationships between practice, perceived alignment between LAPs and personal interests, and potential overlap between out-of-class practice and in-class activities.

The nature of the sample available for study did not permit random assignment to experimental and control groups. Students who volunteered for the study received LAPs, all but one personalized per the background questionnaire. Participants also completed regular surveys incorporated into the ungraded participation aspect of traditional university Spanish courses.

Research Questions and Hypotheses

The research questions attempted to capture whether or not students engaged in guided autonomous language practice as a result of the LAP and, if so, to describe that practice as well to look for any correlation between identified variables. The study explored four research questions as originally posed:

(1) How much time do students independently practice the target language outside of class per the language autonomy plan and with what frequency?

(2) Relative to each other, what aspects of language autonomy plans do students feel most contribute to language learning and thus prefer, and what obstacles do students encounter while attempting to implement those aspects of the plan they deem useful?

(3) Is there a relationship between the amount or frequency of independent target language practice per the language autonomy plan and a change in perceived target language skills?

(4) Is there an interaction between independent target language practice, perceived alignment between language autonomy plans and learner interests, and perceived overlap between independent practice and in-class activities?

Instrumentation

This section describes instruments for the initial collection of learner interests as well as for LAP development and the sequential collection of data on variables studied: (1) Learner Background & Interests Questionnaire, (2) Revised Language Autonomy Plan Template, (3) Autonomy Plan Use Survey, (4) Can-Do Self-Assessment (Pre- and Post-) of Spanish Skills, adapted from the 2017 *NCSSFL–ACTFL Can-Do Statements*, and (5) a Final Use Survey that included open-ended response questions. All data was self-reported by the participants.

Table 1 aligns these instruments to appropriate variables in the study. Some variables were ancillary in nature or contributed to the operational definition of a primary variable in the study. The study primarily investigated (a) practice time, (b) practice frequency, (c) Spanish skill change, (d) autonomy change, (e) interests alignment, (f) usefulness, (g) class–plan overlap, (h) target language preferences, (i) technology preferences, and (j) obstacles; all other data collected helped explain results in terms of primary variables. The Final Use Survey evaluated confidence

in the LAP's contributions to learning and permitted qualitative extension of some variables in analysis.[1]

Table 1

Instrument–Variable Alignment

Instrument	Item	Variable
Autonomous Plan Use Survey		
	3	Autonomy and confidence
	4	Daily combined practice time
	5	Weekly LAP frequency
	6	Daily LAP implementation time
	7	Focus
	8	Level–LAP alignment
	9	Interests–LAP alignment
	10–12	LAP–class overlap
	13	Content preference
	14	Communication mode preference
	15	Media mode preference
	16	Language function preference
	17	Obstacles to LAP Implementation
	18	Media preference
	19	Activity usefulness
	20	Language domain usefulness
	21	Media rank
Final Use Survey		
	6, 10	Motivation
	8	Ability to practice independently
	12	Practice time
	13	Language skills
	14	General learning
	15	Final course grade
	16	Personal goals
	19	New tool dependence
Can-Do Self-Assessment of Spanish Skills	Difference between pre- and post-scores	Change in perceived Spanish skills

[1] Neither the Learner Background and Interests Questionnaire nor the Revised Language Autonomy Plan Template is listed in the table as they did not collect data on any variable measured in the study.

Learner Background and Interests Questionnaire

The Learner Background and Interests Questionnaire (BQ) (Appendix A) was administered to all students prior to the creation of LAPs and data collection. Rather than collecting data to be analyzed, the tool provided information about learners' personal interests for the sake of aligning widely available free opportunities for independent Spanish language practice in the form of an LAP. Interests listed for selection on the questionnaire included sports and fitness, cooking and nutrition, web development or gaming, volunteering, music or dance, nature, film or theater, celebrity gossip, and politics, among others. The questionnaire also collected information on participants' language backgrounds, language course enrollment, personal or professional language learning goals, preferred learning mode, and travel plans. This information served to further identify specific resources likely to be of interest to participants and to create instructions for directing students' level-appropriate engagement with those resources.

Revised Language Autonomy Plan Template

The Revised Language Autonomy Plan Template (Appendix E) was not used in data collection but rather was the pedagogical tool for promoting independent, out-of-class language practice, studied here. I based LAP construction directly on Larocque and Sterling's (2019a) template and retained overall the original menu concept, organization of activities by the amount of suggested practice time, division by practice mode, and some specific activity recommendations. The present study revised the original template according to findings in the literature review in order to simultaneously broaden the menu of activities, narrowly specify the kinds practice promoted by each activity, and incorporate cognitive and metacognitive tips for implementing LAP-specified activities.

The Revised Language Autonomy Plan Template arranged learning resources, primarily digital opportunities, in a grid according to language domain and time required for activity completion. Specifically, the revised LAP template arranged activities according to six practice domains, placed along the left margin, and four time ranges, placed across the top margin of the template. Completed LAPs included as many activities as fit on a single page and also provided instructions for each activity with typographical features to highlight aspects of practice predicted to be most appealing to the individual learner.

A matrix comprised of broadly available, free resources served as the base for personalizing LAPs. Every personalized LAP included opportunities in all domains as well as at least one opportunity for in-person, real-world language use, such as a trip to a local grocery, attendance at theater event, or club participation. I evaluated all resources prior to recommending, ensuring the presence of appropriate content and eTool features, and became sufficiently familiar with them in order to provide concise instructions to direct learner engagement. Student responses to the BQ determined specific selection and prioritization of activities within each LAP. For each activity, the LAP provided specific instructions to encourage level-appropriate expectations for and interaction with the identified resource; for example, “Watch a video about drones and don’t worry about understanding every word”; “Set your GPS in Spanish and listen as you ride to places you already know how to get to”; and “Visit *National Geographic en Español* and read the headlines.” Steps in the personalization of LAPs were as follows:

1. Identify a practice mode preference as expressed on the BQ; prioritize practice domains on the template from top to bottom.

2. Identify one or two dominant themes among student interests as expressed on the BQ; include and adjust activities from the matrix for content-specific practice opportunities on the LAP.
3. From identified opportunities, provide specific recommendations to students at lower levels of language study, such as titles or search terms; encourage students at higher levels to perform searches themselves.
4. Arrange activities from the matrix in the LAP according to practice domain and recommended time for completion.
5. Identify one or two weaknesses from the completed pre- self-assessment of Spanish skills; integrate at least one opportunity to address weaknesses, being careful not to make them the focus of activities presented on the LAP.
6. For each activity, provide concise instructions that integrate a verb, identify content, and provide a cognitive tip for level-appropriate engagement, paying special care to scaffold any activity that addresses an identified weakness; use bold font to highlight the most learner-relevant or attractive features of each resource.

Autonomy Plan Use Survey

The Autonomy Plan Use Survey (APUS) was a 21-item survey of students' experiences of the LAP that regularly collected data about practice time and frequency, plan–interests alignment, plan–language level alignment, perceived overlap of out-of-class and in-class activities, preferences for and the perceived usefulness of specific activities, and hindrances to plan implementation. APUS was administered repeatedly during class time, a total of five times, using the web-based software Qualtrics. Survey completion required approximately five minutes each time.

As opposed to a single final request for remembered data, the repeated administration of APUS provided some information about how learners changed over time, and may have improved reporting accuracy. Students in all classes from which the sample was drawn, regardless of participation in the study, had access to an LAP; those who joined the study at its start received personalized plans while all other students had access to a generic language autonomy plan. Survey of plan usage was incorporated into class time, although neither participant responses nor independent practice per the LAP was evaluated in any way by instructors as part of the course. Importantly, APUS administration was strategically intended to motivate all students' out-of-class language practice per an LAP while simultaneously providing them in-class opportunities for reflection or to make requests for support to their instructors, thereby fostering the development of learner autonomy.

APUS collected data on nine of the study's ten primary variables. The first and second items on the survey asked for information to identify the participant by name and language course enrollment. The third survey item asked to indicate a relative level of language practice-related confidence. Responses to the same item, administered repeatedly, provided data on the ordinal variable autonomy change. APUS Item #6 addressed the variable daily LAP implementation time, treated in the study as a continuous variable and measured as minutes per day spent by student to implement the language autonomy plan. Items #4 and 7 also addressed the variable LAP implementation time relative to time spent outside of class completing required, as opposed to extra, coursework and language practice. Item #5 of the same instrument collected data on the ordinal variable weekly LAP frequency. Item #8 addressed language level–LAP alignment, treated as an ordinal variable, while Item #9 addressed interests–LAP alignment, also treated as ordinal. Items #10, 11, and 12 collected data on the ordinal variable LAP–class

overlap. Items #13, 14, and 16 collected data on target language preferences, specifically on the categorical variables content preference, communication mode preference, and language function preference, respectively. Item #17 collected data on the categorical variable obstacles to LAP implementation, some of which corresponded to hindrances observed by Larocque and Sterling (2019a). Items #15 and 18 collected data on technology preferences, specifically the categorical variables media mode preference and media preference, respectively, while Item #21 asked student participants to rank media in order by preference. Item #19 collected data on the categorical variable, activity usefulness, while Item #20 asked students to rank activities ordinally identified by language domain according to usefulness. For specific information regarding the coding and treatment of variables, please see the Variables subsection below.

Can-Do Self-Assessment of Spanish Skills

The Can-Do Self-Assessment of Spanish Skills was developed for the sake of the research from the 2017 *NCSSFL–ACTFL Can-Do Statements for Communication*, an intended measure of the learner's own sense of using the target language. The adapted instrument was administered as a pre- and post-assessment for the sake of identifying a potential change in Spanish skill abilities, as self-reported by learners, over the course of the study. The American Council on the Teaching of Foreign Languages (2017) explained in an online preface to the Can-Do Statements, "Aligned with the *ACTFL Proficiency Guidelines 2012* and the *ACTFL Performance Descriptors for Language Learners* the Can-Do Statements reflect the continuum of growth in communication skills through the Novice, Intermediate, Advanced, Superior, and Distinguished levels" (introduction, para. 3). As adapted, the Can-Do Self-Assessment targeted only the skill range between Novice Low and Intermediate High, and it dropped all Mid-level

descriptors therein. The adapted assessment was aligned to skills called for during independent practice per the language autonomy plans.

Final Use Survey

The Final Use Survey (FUS) was a 25-item survey of participants' overall experience of the language autonomy plan, specifically about their confidence in LAP contributions to practice time and ability, language skills, the final course grade, personal learning goals, and learning in general. FUS was administered one time using the Qualtrics during Week 17 of data collection. The survey included some open-ended response items and one-time completion required approximately 10 minutes.

Data from FUS helped qualitatively extend the interpretation of the study's primary variables. The first and second items on the survey asked for information to identify the participant by name and language course enrollment. The third survey item asked to indicate a relative level of the importance of out-of-class practice for learning Spanish and Item #7 asked students to rate the effectiveness of their independent practice. Item #4 asked to identify the context of greater personal confidence, in or outside of class; Item #5 sought a rating for confidence in skill acquisition. Items #6, 10, and 11 addressed motivation-related factors, asking if the LAP encouraged a desire to learn more or the continued use of a specific activity. Items #8, 12, 13, 14, 15, and 16 assessed relative confidence in the LAP's contribution to the ability to practice independently, total practice time, language skills, learning in general, final course grade, and personal goals, respectively. Items #9, 18, and 19 were forced-choice response items to determine if the plan used new or familiar resources, or if it resulted in either communication with a previously unknown native speaker or dependence on a new tool, respectively. Items #20, 21, and 22 asked open-ended responses about which aspects of the LAP should be kept,

eliminated, or improved, respectively. Question #23 sought an overall rating of the experience of LAP implementation. Finally, Items #24 and 25 asked if the researcher might contact the student about the research in the future and for appropriate contact information.

Validity and Reliability

Recruitment did not result in a statistically valid sample size for the study: only nine students volunteered participation and only some of them consistently reported autonomy plan implementation throughout data collection. Chapters 4 and 5 of this study address the disinclination of university students of Spanish to seek a personalized LAP and thereby to join the research presented here.

The research design was generally exploratory in nature, given the existing lack of strong empirical observations of university students' out-of-class language learning in the U.S. in the literature to date, and it presented several challenges to the validity of the study's results. A summary introduces those challenges, individually explained below. First, the study adapted and used a validated instrument for measuring self-perceived language skills, the Can-Do Statements. However, it did not use a similarly vetted instrument for measuring autonomy, nor did the study properly operationalize a definition of language learner autonomy or of the autonomy-related constructs, confidence and motivation; I was more interested in studying change in perceived Spanish skills. Second, imprecise wording on the Autonomous Plan Use Survey complicated the measurement of LAP implementation time. Third, two weeks passed between each of the APUS administrations #1, 2, 3, and 4, and four weeks passed between APUS administrations #4 and 5; however, APUS items specified activity "in the last two weeks." Last, the APUS did not gather adequate data about specific instructions for activities or about implementation of the generic LAP. Despite challenges posed by the APUS instrument, the research design likely minimized a

location threat to the study by holding relatively constant the language instruction within a single university department, thereby controlling for extraneous variables such as program objectives, teaching philosophy and method, class size, in-class activities, and assignments.

The 2017 *NCSSFL–ACTFL Can-Do Statements* were used for measuring the variable perceived Spanish skills. Tigchelaar et al. (2017) assessed the construct validity of this tool for spoken proficiency. They found 35 of 50 statements conformed to the "underlying construct: language proficiency on the ACTFL subscales" (p. 584).

The study intended to treat the variable of change in language learner autonomy only as a potential source of insight about data collected on other variables or for proposing future phases of the research beyond that presented here. More practically, I intended some survey items about the autonomy variable for other purposes. For example, BQ Items #14 and 17 collected data on confidence but more fittingly informed the development of individualized language autonomy plans, while APUS Item #3, also about confidence, helped inform the interpretation of reported preferences for and the perceived usefulness of plan-prescribed activities. Similarly, responses to FUS Items #3, 4, 7, 8, 10, and 19 helped qualitatively extend the interpretation of data collected from three students on other variables. Thus, any results produced here about the variable of change in language learner autonomy are tentative at best.

Imprecise wording on APUS Items #5 and 6 inadvertently complicated the ability to interpret data on the variable Frequency, used to calculate the value of LAP implementation time. On APUS Item #5, wording in the second option, "1 to 2 days," led to ambiguity in the interpretation of LAP implementation frequency. For any occurrence of that response, LAP implementation time may have been interpreted in analysis per either a total one-and-a-half days or per three days in the two-week reporting period. To calculate LAP implementation time for

the sake of analysis, I assumed the intended interpretation of one to two days per week, or an average of three days in the two-week reporting period. Furthermore, direct interpretation of students' responses to APUS Item #6, without consideration of frequency reported on APUS Item #5, would have inflated the total amount of reported LAP practice. In the present analysis, care was taken to account for these issues, although students' exact understanding of APUS Items #5 and 6, and the combination of the two, is unknown.

Most APUS items also restricted my ability to gather data (a) about students' specific reactions to activity instructions within the LAP and (b) submitted by the single participant who potentially engaged in autonomous practice per the generic LAP.[2] Thus, available data do not provide for analysis or interpretation of the specific ability of LAP-included instructions to guide cognitive or metacognitive skills, nor do they permit a comparison between students' implementation of personalized LAP with the implementation of a generic LAP. Future research is needed to determine if the instructions served as cognitive support or if a generic autonomy plan, that is, a one-size-fits-all model rather than a plan tailored to specific student interests, is sufficient to encourage some students' out-of-class language learning with technology.

Although the study's exploratory nature presented some challenges, the research design minimized a location threat to the validity of results. All students participating in the study were enrolled in a Spanish course, Spanish 102, 201, 303, or 495, at the same Midwestern mid-range university in Spring 2020, thereby limiting external threats to the study, including internet connectivity, particular versions of web-based applications, and profound pedagogical, methodological, or philosophical differences in SFL instruction. In so doing, however, the design

[2] I provided the generic LAP, and instructors of all six Spanish classes posted it to the course Blackboard website where it was accessible to all enrolled students.

may have unintentionally restricted sample size. In sampling from a typical Midwestern mid-range university, the research design simultaneously exerted a relative amount of control over learner characteristics and minimized an implementation threat to the study. A relative degree of continuity was likely among students who studied in the same geographic region, and the sample may or may not have been representative of the larger population in terms of demographic characteristics or motivation for language learning. Furthermore, The BQ asked students to identify personal interests and hobbies, academic majors, and post-graduation language goals; it also asked them to rank personal motivation for specific language-related activities, including studying regularly, listening to music, reading or watching movies in Spanish, talking or writing to a friend in Spanish, or using language learning mobile apps. Only I knew the identity of respondents for individual sets of responses. In this way, I tailored LAPs to the students' personal interests. More sensitive data about characteristics of the students, such as GPAs, were not collected, thereby potentially failing to control for factors that may have a had significant influence on LAP implementation.

Finally, the research location uniquely posed both stability and a threat to the internal validity of this study's design. The single university setting helped control for variability in the learning objectives and language instruction; however, the LAP is intended for independent implementation outside of class. The study's design was unable to control for the independent settings in which students practiced and, thus, was unable to ensure (a) conditions of the setting favored language practice without distractions, (b) students engaged in any type of practice for a meaningful amount of time, or (c) technological inconveniences and students' subsequent frustration were systematically avoided. Based on personal preferences, LAPs guided students to opportunities for independent language practice in all four linguistic domains—reading,

listening, writing, and speaking—as well as to complete them in a range of locations or while performing other activities. Students may have chosen to practice Spanish at home in a college dormitory or university apartment, in a cafe or the library, while driving a car, walking across town, or exercising in the gymnasium. A quiet, comfortable setting with good Internet connectivity may have facilitated conscientious independent language practice, while distractions such as television, movement, or the presence of other individuals may have hindered it. This, however, is representative of language practice and homework in real life and, as such, this threat to the design's internal validity is relatively unproblematic.

The exploratory study's mixed-methods design was intended for a small- to medium-sized convenience sample. In the future, the design may be effectively adapted through a different sampling technique and different controls to achieve much higher degrees of validity, reliability, and generalizability. Potential for replication of the present research design exists, although a greater sample size would necessarily require more time for the sake of analyzing student participants' interests and creating LAPs aligned to them. If replicated and improved, a researcher might involve a much larger sample, for example, from a large research institution with multiple sections of a single foreign language at a given or given levels across which the objectives and curriculum are held constant. Replication on a larger scale would likely provide more representative sampling or opportunities for creating a control group, as well as address the attrition levels observed both here and in previous studies of autonomous language learning. In such a case, however, there is a higher degree of variability among instruction and instructors, thereby introducing an implementation threat to the validity of any such study.

Chapter 5 addresses additional factors affecting the validity and generalizability of conclusions as a result of this study.

Setting and Participants

The present study sought to recruit student participants from the total enrolled across six university Spanish courses at a Midwestern mid-range university with standardized procedures for university admission and SFL course placement. Courses eligible for recruitment included two sections of Spanish 102, and one section each of Spanish 201, 217, 303, and 495. All courses were valued at three credits, all were conducted on campus in a face-to-face format, and all but one was 17 weeks long; Spanish 217 was a seven-week course, meeting for longer periods of time than other courses from which students volunteered; however, no student from Spanish 217 volunteered participation in the study. At the end of the data-collection semester, the total combined enrollment in these courses was 93 students, from which fifteen enrolled in the study, representing 16% of the potential participant pool.

Of these 15 students, 14 received a personalized LAP and nine provided data about LAP implementation, including one with access to a generic LAP only, thus becoming participants in the study. Of the nine student participants, three were enrolled in the same section of Spanish 102, two were enrolled in Spanish 201, four in Spanish 303, and none in Spanish 217 nor Spanish 495. No student participant indicated any language other than English was spoken at home. Without a way to control for additional subject characteristics such as age, gender, ethnicity, broad language background, economic status, or personal motivation, there may or may not have been some degree of continuity of learner characteristics among participants. All five Spanish classes incorporated survey completion—but not independent language practice per autonomy plans—in class time. The resulting sample size was too small to suggest students self-segregated according to the amount or frequency of independent practice. As such, there was no control group for the sake of comparing learners' who used LAPs with those who did not.

Data Collection

Data collection spanned a single 17-week semester of foreign language instruction at a Midwestern mid-range university in Spring 2020, including Spring Break, Study Week, and Final Examination Week. For all student participants, Spanish language instruction began immediately and continued through the duration of the proposed study, although the global COVID-19 pandemic may have radically altered approaches to teaching and learning. In response to the pandemic, the university made an abrupt move to online-only learning, as did many universities, which altered traditional realizations of class attendance and participation, daily written assignments, and examinations. The timeline below describes the realities of Spring 2020 data collection for the purposes of this study.

During Week 1, the Learner Background and Interests Questionnaire gathered information about participants' personal interests for the sake of developing LAPs. Participants also completed the Pre- Can-Do Self-Assessment of Spanish skills.

During Week 2, I developed individualized plans for autonomous language practice based on each learner's personal interests as reported in Week 1. Throughout Week 2, I used email to distribute LAPs directly to individual students. At the end of Week 2, I emailed a generic LAP to instructors of all identified courses for posting to Blackboard sites where it was available to all course-enrolled students regardless of participation in the study. Afterwards, learners may or may not have initiated implementation of out-of-class language practice recommended by available LAPs.

Repeated data collection occurred throughout the semester. APUS was administered five times to all students in identified courses during class time at the end of every other week of instruction, excluding Spring Break. The day or two prior to planned APUS administration, I

emailed language professors with a link to the online survey and instructions to release that link to all students in the course for completion during the last 5 or so minutes of class time on Friday. Thus, APUS #1 was deployed on January 29 for in-class administration on January 31; APUS #2 on February 13 for February 14; APUS #3 on February 27 for February 28; APUS #4 on March 12 for March 14; and APUS #5 on April 8 for April 10. Each time, I emailed an identical link directly to all student participants. In Week 9, my instructions for releasing the survey link changed to acknowledge the pandemic-related move to online-only instruction and to offer guidance regarding autonomous language practice. Revised instructions directed professors to email the survey link to all students enrolled in classes or post it to Blackboard; instructions failed to specify the use of in-class time for administering APUS #4. The same happened during administration of both APUS #5 and FUS with the Post- Can-Do Self-Assessment of Spanish Skills. During Week 12, I emailed instructors and student participants with a link to the combined FUS and Post- Can-Do Self-Assessment of Spanish skills. It is not known if or how instructors adjusted in-class survey administration per the pandemic-related move to online-only instruction.

As planned, in-class survey administration was to be accompanied by brief, instructor-led discussion and opportunities for questions and reflection about out-of-class language practice and the autonomy plans. These opportunities, as well as repeated APUS administration, were intended as means for unobtrusively continuing to guide learners' efforts at autonomous language practice and increased language learner autonomy. I did not collect data on class-led sessions. Data for all variables was gathered and stored electronically.

The following outlines the specific relationship between this study's data collection timeline and university announcements relative to the COVID-19 pandemic. On Thursday,

February 27, 2020, the same day I emailed a weblink to APUS #3 for next-day in-class administration, the host university's president publicly shared a four-page document from the State Department of Health called, "COVID-19 Guidance for State Colleges and Universities." On Friday, March 6, the university president shared the announcement of the state's first COVID-19 case and consequently canceled all university-sponsored spring break travel to international locations. On March Thursday, March 12, the university announced its move to online-only instruction, to begin Monday, March 16, and continue through the end of the spring semester. Late Thursday, March 12, I emailed a weblink to APUS #4 for next-day in-class administration. On Friday, March 27, the university president announced a student option for choosing between letter grades and satisfactory/unsatisfactory grading for the Spring 2020 semester. On Wednesday, April 8, I emailed a weblink to APUS #5 for administration during class time on Friday, April 10, although no in-person classes were held. On Thursday, April 23, I emailed a weblink to the combined instrument, including a second letter of informed consent, FUS, and the Post- Can-Do Self-Assessment of Spanish Skills. Table 2 provides an outline of the completed data collection process, aligned to COVID-19-related university announcements.

Table 2

Spring 2020 Data Collection Aligned to University COVID-19 Announcements

Instruction Week	Data Collection Description	University Announcement
Week 1	Deployed Learner Background and Interests Questionnaire with Pre-Can-Do Self-Assessment	
Week 2	Distributed personalized LAPs to participants and generic LAP to instructors for posting to course Blackboard sites	
Week 3	Deployed and administered APUS #1	
Week 5	Deployed and administered APUS #2	
Week 7	Deployed and administered APUS #3	(Feb 27) State Department of Health's guidance document.
		(Mar 6) State's first COVID-19 case; cancellation of spring break travel to international locations.
Week 9	Deployed and administered APUS #4	(Mar 12) Move to online-only instruction, beginning Monday, March 16, through end.
Week 11	*Spring Break*	(Mar 27) Option for letter grades OR satisfactory/unsatisfactory grading.
Week 13	Deployed and administered APUS #5	
Week 15	Deployed and administered FUS with Post- Can-Do Self-Assessment	
Week 16	*Study Week*	
Week 17	*Final Examinations*	

Note. Italic font indicates weeks for which classes were not planned and did not meet.

Data Analysis

The amount of data collected in Spring 2020 limited methods and outcomes of analysis considerably. While the final study retained descriptive statistical analysis, it eliminated the planned hypothesis tests and factorial ANOVA in favor of qualitatively exploring students' implementation of language autonomy plans as described by data on (a) time, (b) frequency, (c) skill change, (d) autonomy change, (e) interests alignment, (f) usefulness, (g) class-plan overlap, (h) target language preferences, (i) technology preferences, and (j) obstacles. This section explains the analyses conducted, keeping in mind both the research questions and the importance of future investigations of the topic.

Descriptive Statistical Analysis of Research Questions 1 and 2

The amount of data collected from the resulting sample, and the number of missing scores therein, determined either the mode or the simple mean of responses only was appropriate for analysis in most cases. This subsection identifies appropriate descriptive statistical values for understanding relevant data from the set collected.

The first research question asked if and to what degree participants implemented the researcher-provided LAPs: How much time did students independently practice the target language outside of class per the language autonomy plan and with what frequency? The following proved relatively useful information about the set of data collected: the means of both daily LAP implementation time and daily combined practice time per student for (a) each of the two-week reporting periods and (b) the entire data collection period; the mode observed among each student's total responses on daily combined practice time; and the frequency distribution of each student's reported frequency values for LAP implementation for the entire data collection period. Analysis generated comparisons of students on these values.

The second research question sought to understand more about participants' experiences of independent language practice as prescribed by the plans: Relative to each other, what aspects of language autonomy plans did students feel most contributed to language learning and thus prefer, and what obstacles did students encounter while attempting to implement those aspects of the plan they deemed useful? Here, a combination of mean rank values and observed mode values was used. First, a degree of practice focus was analyzed using the observed mode among all collected responses on variables under language preferences, including (a) language function, (b) communication mode, and (c) content, as well as variables under technology preferences, including (d) media mode and (e) media. For media rank and language domain usefulness, analysis considered the mean rank score for each activity per APUS administration. The analysis of media rank also considered the frequency with which an activity appeared in the top three rankings, while analysis of language domain usefulness also considered the observed mode for the most useful activity. The analysis of activity usefulness considered the mode among all collected responses.

The third and fourth research questions sought a correlation between learners' independent practice and a change in perceived Spanish skills. For all variables involved, data analysis considered descriptive statistics. The third research question about the main effects of LAP implementation time and frequency on a change in perceived L2 skills asked if there is a relationship between the amount or frequency of independent target language practice per the LAP and a change in perceived Spanish skills. The corresponding null hypothesis assumed there were no differences among any of the population means on the time or frequency factors. The fourth research question about an interaction between LAP implementation time or frequency, successful alignment of language autonomy plans and learner interests, and overlap between in-

class and out-of-class practice asked if there is a significant interaction between independent target language practice, perceived alignment between language autonomy plans and learner interests, and perceived overlap between independent practice and in-class activities. The corresponding null hypothesis assumed there were no differences among any of the population means on the alignment or overlap factors nor any interaction between time or frequency, alignment, and overlap, and that in the population, the coefficient of determination was 0.

Qualitative Exploration: Observing Potential Patterns and Relationships

The number of variables and of data points in the study provided for an analysis of reasonable depth and for considering patterns both within and across student participants as well as for thinking about relationships between factors related to implementation. The presentation of results grouped variables strategically, attempting to portray the observed implementation of language autonomy plans as best possible, and providing for a qualitative description of results accompanied by one or two relevant measures of central tendency rather than a complete table of descriptive statistics. First, results presented the data set student by student, highlighting the amount of time and preferences for LAP implementation for each, as well as the most important or interesting observed data points, for implying potential relationships between them. Second, results presented a collective description of LAP implementation by the set of nine student participants, arranged by variable groupings, and searching for patterns among them. Specifically, results on the alignment variables preceded the presentation of other data in order to bridge descriptions of LAP development and implementation. The variables time, frequency, and obstacles represented the next group, followed by presentations of overlap, language and technology preferences, activity usefulness, and changes in skills and autonomy. Third, the analysis compared identified groups of students. Finally, a presentation of results from the Final

Use Survey provided insight about learner characteristics, an observed pattern of perceived positive contributions of the language autonomy plan, and a comparison of personal preferences framed as a response to the variety and personalization of activities within each LAP.

Variables

This subsection provides an operational definition and measurement for 18 variables studied. Given the sample size, all variables were analyzed descriptively. For most, the observed mode among the total number of collected responses proved the most valuable measure of central tendency, particularly due to the repeated administration of APUS. One item from APUS and four items from FUS, to which there were three respondents, were not operationalized. They are as follows: (a) priority, (b) motivation, (c) new tool dependence, and (d) overall experience rating. APUS Item #7 collected data on priority use of time, intended to confirm relative amounts of daily combined practice and LAP implementation time. FUS Items #6, 10, and 19 provided insight about the kinds of activities and ways in which students practiced Spanish, helpful for interpreting other variables. FUS Item #23 asked students to rate the overall experience of LAP implementation. Below, the presentation of variables follows the same order as found in Table 1. APUS was administered five times and FUS was administered one time.

Autonomy Change

The ordinal variable represented a change, if any was observed, between a participant's initial and final self-reported scores of confidence while independently accessing Spanish-language resources for autonomous learning. Data for autonomy change were collected from APUS Item #3. While not specifically incorporated into any of the research questions of the study, descriptive quantitative data about participants' autonomy and confidence were of interest at the time of interpreting the results of this study and are also potentially useful for future study.

Daily Combined Practice Time

The continuous variable of daily combined practice represented the estimated amount of time per day a participant spent independently practicing Spanish outside of class, including time spent completing required Spanish assignments and practicing per the language autonomy plan, combined. Data on the variable of daily combined practice were collected in response to APUS Item #4, which measured it in hours and minutes. Values from the total set of a student's responses were summed and converted to a decimal value to represent a total amount of combined Spanish practice during the semester. For the variable of daily combined practice, the mean and the observed mode were of strong value in interpreting results of the study.

Weekly LAP Frequency

The ordinal variable of weekly LAP frequency represented the estimated number of times per week a student engaged in autonomous language practice per the LAP. It was tracked in response to APUS Item #5 and used to calculate appropriate values of daily LAP implementation time. For data on the variable of frequency, a frequency distribution was of strong value in interpreting the results of the study.

Daily LAP Implementation Time

The continuous variable of daily LAP implementation time represented the estimated amount of time per day a participant spent independently practicing Spanish outside of class per the language autonomy plan. Data on the variable of daily LAP implementation time were collected in response to APUS Item #6, which measured it in hours and minutes; on each completed survey, the response to Item #6 was multiplied by the reported factor of the frequency variable from the same APUS administration to represent a more accurate estimate of daily time spent on LAP implementation. Also, the sum of products from all completed APUS

administrations was converted to a decimal value to represent a total amount of independent practice time per the autonomy plan during the semester. Calculated means related to the variable of daily LAP implementation time were of strong value in interpreting results of the study.

Language Level–LAP Alignment

The ordinal variable of language level–LAP alignment referred to a measurement of the perceived degree of association between learners' perceived Spanish skills and the researcher-created LAPs. Data on this variable were collected from participant responses to APUS Item #8, which asked for a numbered rank on a scale between potentially weak and strong alignment. For the variable of language level–LAP alignment, a frequency distribution and the mode were of value in interpreting results of the study.

Interests–LAP Alignment

Similarly, the ordinal variable of interests–LAP alignment referred to a measurement of the perceived degree of association between learners' personal interests and the researcher-created LAPs. Data on this variable were collected from participant responses to APUS Item #9, which asked for a numbered rank on a scale between weak and strong alignment. For the variable of interests–LAP alignment, a frequency distribution and the mode were also of value in interpreting results of the study.

LAP–Class Overlap

The ordinal variable of LAP–class overlap represented a measurement of the perceived degree of coincidence between in-class activities and plan-designated autonomous language practice. Data on the variable of overlap were collected from responses to APUS Items #10, 11, and 12, which asked for a measure of the perceived coincidence on a scale between weak and

strong overlap. For the variable of overlap, the mode of responses was of value in interpreting results of the study.

Content Preference

APUS Item #13 collected data on the categorical variable of content preference, asking students to identify the nature of SFL content in which they most often engaged while implementing the LAP. It had three levels: (1) grammar and vocabulary; (2) culture and/or geography; and (3) equal time among the two identified content categories. For the variable of content preference, the mode was of value in interpreting results of the study.

Communication Mode Preference

Similarly, APUS Item #14 collected data on the categorical variable of communication mode preference, asking students to identify the nature of communication in which they most often engaged while implementing the LAP. It also had three levels:(1) interpersonal communication; (2) private digital language practice; and (3) equal time among the two. For the variable of communication mode preference, the mode was of value in interpreting results of the study.

Media Mode Preference

APUS Item #15 collected data on the categorical variable of media mode preference, asking students to identify the LAP-included media category they liked most. It implied three broad categories, corresponding to entertainment, socializing, and academic media: (1) music, YouTube, podcast, TV, or film; (2) eBooks, chatting, or social media; and (3) language learning apps. The observed mode among responses on the variable of media mode preference was of value in interpreting results of the study.

Language Function Preference

APUS Item #16 collected data on the categorical variable of language function preference, asking students to identify the function in which they most often engaged while implementing the LAP. It had three levels: (1) comprehension; (2) language production; and (3) equal time among the two. For the variable of language function preference, the mode was of value in interpreting results of the study.

Obstacles to LAP Implementation

The categorical variable of obstacles to LAP implementation referred to hindrances to plan-prescribed independent language practice as experienced and self-reported by participants; it had three levels: (1) lack of distractions; (2) real-life distractions, including technology problems; and (3) too difficult or boring. Data for obstacles were collected using APUS Item #17 and the observed mode of responses was of some value in interpreting results of the study.

Media Preference

APUS Item #18 collected data on the categorical variable of media preference, asking students to identify the LAP-included media category, narrowed from the presentation in Item #15, they liked most. It addressed two of the three categories identified for media mode preference—entertainment and academic media— and further specified entertainment media: (1) film or TV, including sports; (2) podcasts or YouTube; and (3) language learning apps. The mode of responses on the variable of media preference was of value for interpreting the study's results.

Activity Usefulness

The categorical variable of activity usefulness referred to the most worthwhile type of activity for meeting personal learning goals; it had three levels representing broad media genres:

(1) film, TV, podcasts, YouTube, or music; (2) language learning apps or videogames; and (3) Google search and follow-up activities. APUS Item #19, which asked participants to identify the most useful category according to its perceived contribution to meeting learning goals, collected data on activity usefulness. For the variable of activity usefulness, the mode was of strong value in interpreting results of the study.

Language Domain Usefulness

The ordinal variable of language domain usefulness referred to the relative worth or effectiveness of a language domain for practicing Spanish, relative to three other identified domains. APUS Item #20 collected data for language domain usefulness, asking students to rank four practice domains—word recognition, reading, writing, and speaking—according to their perceived contribution to meeting learning goals. For the variable of language domain usefulness, the mode and a mean rank score were of value in interpreting results of the study.

Media Rank

The ordinal variable of media rank referred to the preference for specific practice activities, relative to all other activities listed. APUS Item #21 collected data for media rank, asking students to rank nine LAP activities according to personal preference. For the variable of media rank, interpretation of the study's results considered a mean rank score as well as the mode observed for any activity in the top three rankings.

Confidence in LAP Contributions

The ordinal variable of confidence in LAP contributions referred to the perceived ability of the LAP to contribute to all the following, as collected by FUS items: the amount of out-of-class Spanish practice in the semester (FUS #12); the ability to independently practice Spanish effectively outside the classroom (FUS #8); gains in Spanish language skills (FUS #13); final

course grade (#15); personal learning goals (FUS #16); and learning in general (FUS #14). All items asked students to indicate the degree to which they believed the LAP increased the identified aspect of learning. FUS Items #12 and 13 measured confidence in contributions to practice time and Spanish skills, respectively, on a five-point scale, with points corresponding to the following: (1) definitely yes; (2) probably yes; (3) might or might not; (4) probably not; and (5) definitely not. FUS Item #8 measured confidence in the LAP's contribution to independence on a four-point scale, with points representing the following: (1) definitely yes; (2) probably yes; (3) probably not; and (4) definitely not. FUS Items #14, 15, and 16 measured confidence in contributions to general learning, the final course grade, and goal achievement, respectively, on a three-point scale, with points corresponding to (1) yes, (2) maybe, and (3) no. The variable of confidence in LAP contributions was used to qualitatively extend the interpretation of results from the study.

Change in Perceived Spanish Skills

Change in perceived Spanish skills was a score representative of the difference between an initial self-reported skill level and a final self-reported skill level. It was treated as an ordinal variable and measured on a scale from zero to four, to cohere with cited alignment between the four threshold levels of the ACTFL OPIc and the 2017 *NCSSFL–ACTFL Can-Do Statements* (Tigchelaar et al., 2017). At both the start and end of data collection, I administered the same Can-Do Self-Assessment of Spanish Skills to measure initial and final skill scores. The initial score was subtracted from the final score to calculate any observable change in either direction; this calculated score represented the value of the variable, change in perceived Spanish skills.

Ethical Concerns

The research presented minimal risk as defined by the New Common Rule. Data collected from and about participants were relatively impersonal and neutral in nature; no phase of the research requested especially sensitive information. Furthermore, the study was blinded by design, that is, university language instructors solicited to administer surveys during class time via Qualtrics did not know the identity of students who chose to receive a personalized LAP or to engage in LAP-recommended independent practice or not. Qualtrics was used to provide links to instructors for releasing to students anonymously. Thus, as researcher, I did not inappropriately influence instructor attitude toward a student's motivation to learn the target language or to meet Spanish course objectives.

There was no formal incentive associated with participation in this research. All eligible recruits were competent adults, capable of assessing the potential benefits and risks posed by participation in the research and of further deciding to participate or not, based on information I provided during the study's recruitment phase. I obtained appropriate permissions for the collection of survey data. In both the recruitment and informed consent processes, I presented all necessary information in an articulate, organized manner. After recruitment, I generated a link to and electronically distributed the first of two letters of informed consent. Instructors received this link by email with instructions to forward it to all students enrolled in classes in which recruitment took place, thereby allowing time for recruits to decide to participate in the research. Recruits enrolled in the study as a result of signing the first and / or second electronic letter of informed consent. The first letter of informed consent, integrated at the start of the Learner Background and Interests Questionnaire and Can-Do Pre- Self- Assessment of Spanish Skills, requested participants (a) agree to share data with the researcher from the five Qualtrics APUS

that were a regular part of Spanish classes and administered during class time, and (b) agree to both complete and share with her data from the Learner Background and Interests Questionnaire and also from the Can-Do Pre- Self- Assessment of Spanish Skills.

At the end of the Spring 2020 semester, I generated a new link to a second letter of informed consent, integrated at the start of the combined FUS and Post- Can-Do Self-Assessment of Spanish Skills, and emailed this link to course instructors with instructions to forward the email to all students enrolled in their classes. In the second letter of informed consent, I requested participants agree to both complete and share with me data from the FUS and also the Post- Can-Do Self-Assessment of Spanish Skills.

All data were reported to, collected, and analyzed by the researcher. In-class anonymous survey completion was integrated into the ungraded participation aspect of all Spanish courses involved, and instructor-led opportunities to reflect on or seek assistance relevant to independent practice per LAPs was voluntary. I did not collect data from repeated in-class opportunities.

The use of class time to administer surveys for the purpose of collecting data was justifiable in ethical terms. All students, regardless of participation in the research, were permitted to use survey administration time to reflect on learning or consort with the instructor about learning strategies. Potentially, the study generated interest and motivation to study among students enrolled in Spanish coursework. Studies in SLA demonstrate increased practice generally has a positive effect on learning; this potentially applies to the classroom atmosphere also. Furthermore, the research design and results of the study potentially inform and improve

future attempts at studying out-of-class language learning with technology as well as foreign language instruction in the U.S.

Finally, there was no conflict between the roles of researcher and graduate student at the same institution where I and student participants attended; furthermore, Spanish classes for which the faculty PI was an instructor were ineligible for recruitment to or participation in the study.

Summary

By design, the study primarily sought to observe students' implementation of LAPs. Adequate considerations for the instruments, setting, data collection and analysis, and relevant ethical concerns permitted identification and description of some factors of independent language learning among a small sample but from which inferences may only be very generally drawn, if at all. This, in turn, may provide a starting point for future studies of the relationship between university language instruction and guided autonomous language practice, with or without technology.

CHAPTER 4

RESULTS

This study explored nine students' implementation of language autonomy plans, eight of which were personalized according to the individual's self-reported personal interests, learning goals, and learning and technology preferences. Chapter 4 presents the results of descriptive statistical analysis and qualitative exploration of the data set.

Results reported here lead to tentative conclusions about the relative effectiveness of LAPs as a pedagogical process for guiding students' autonomous language learning, particularly with technology. This chapter presents all the following in order:

- information about students' asymmetrical contributions to the data;
- a summary of the development and personalization of LAPs, including results pertaining to perceived alignment between those plans and both learner interests and language level;
- nine descriptions of individual students' Spring 2020 implementation of LAPs with relevant comments on all variables studied;
- a description of the collective implementation of LAPs, presented variable by variable;
- pertinent comparisons between student participants on their Spring 2020 implementation of LAPs; and finally,
- a summary of results from the FUS, particularly about the perceived effectiveness of implementing LAPs reported by three students in the study.

Asymmetrical Data Contributions

Of a total 93 students enrolled across Spanish 102 (Section 1), 102 (Section 2), 201, 217, 303, and 495 in the Spring 2020 semester, 15 indicated desire for a personalized LAP. Of those students, 14 received a personalized LAP, while one had access had access to a generic LAP only.[3] Nine participants reported information about LAP implementation, and two of those participants consistently reported about personalized LAP usage throughout the semester.

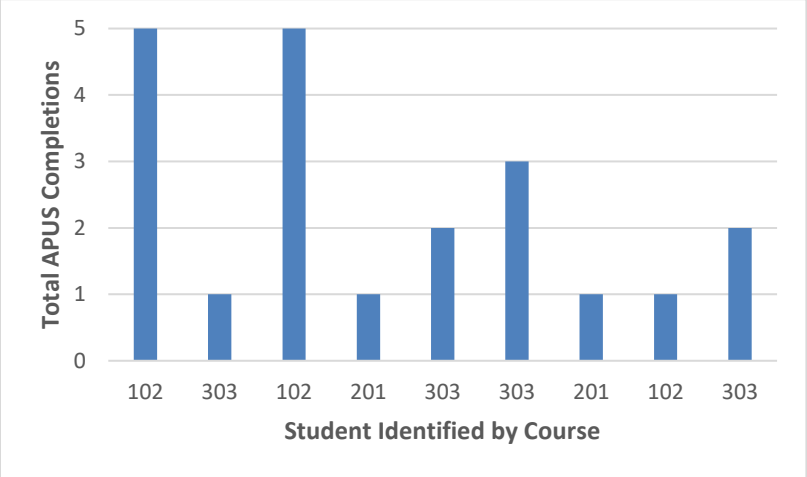
By January 26, seven students received a personalized LAP; all course instructors received the generic LAP on January 26; one student received a personalized LAP on January 29; and instructors received the link to APUS #1 on January 29, for planned in-class administration on January 31. Student 4, enrolled in Spanish 201, submitted responses to the combined BQ and Pre- Self-Assessment of Spanish Skills on February 11, more than two weeks after the last prior submission of responses that triggered the development of personalized LAPs. Once data collection began, I failed to note Student 4's request for a personalized autonomy plan and, as a result, Student 4 had access to the generic LAP only, as posted to the Spanish 201 course Blackboard website.

Of the total 15, nine students responded to at least one instance of APUS. Figure 1 displays the number of APUS completed by these nine participants, who are represented by individual blue bars labeled according to Spanish course enrollment.

[3]I failed to acknowledge Student 4's late request. Thus, Student 4 did not receive a personalized LAP.

Figure 1

Student APUS Contributions

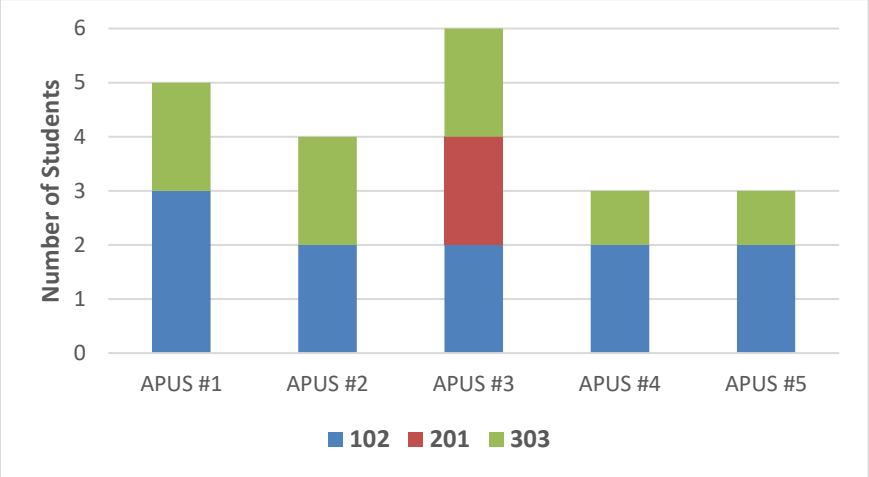


As shown, two students completed APUS five times; one completed it three times; two completed it two times; and four completed it one time, one of whom did not respond to five of the total 21 items. Students 1 and 3, both enrolled in Spanish 102, contributed more data than the others. Specifically, Students 1 and 3 contributed 47.62% or more of all APUS responses. Of the nine student participants, only Students 1, 5, and 6 also completed the combined FUS and Post-Can-Do Self-Assessment of Spanish Skills, although Student 1 completed it almost 14 complete weeks after its initial deployment.

Based on student completion, some administrations of APUS contributed more data to this study's results than others. Figure 2 shows the number of total student respondents for each instance of APUS administration, divided by course enrollment. As shown, the maximum number of respondents for a single APUS was six, to the third instance; followed by five respondents to the first; four respondents to the second; and three respondents each to the fourth and fifth instances.

Figure 2

Student Respondents by APUS and Course Enrollment



Alignment

The process of developing LAPs progressed from the initial compilation of resources in a master list, through the respective development of a matrix and revision of Larocque and Sterling's (2019b) original template, to the formulation of individualized LAPs based on responses collected from the BQ (Appendix A) and Pre- Can-Do Self-Assessment of Spanish Skills (Appendix B), to the formulation of a generic LAP (Appendix H).

Prior to initiating data collection, I compiled free web resources in a master list, broadly prioritizing those characterized by Anstey and Watson's (2018) criteria. Then I identified example resources in the master list and arranged them in a matrix according to both suggested time for engagement or completion and communicative mode or language function, including interpersonal communication and/or social media, interpretive communication, receptive language skills, language production practice, and traditional drill

practice. There were no opportunities for independent practice identified for the presentational mode.

During the first step in data collection, student participants completed the BQ and Pre-Can-Do Self-Assessment of Spanish Skills. For each learner, I used responses to formulate an individualized LAP, personalized according to the student's interests, academic major, and identified learning goal, as well as to the student's preferences for learning, technology, and content. Learning preferences, as reported to the BQ, directed the selection and prominent placement of specific kinds of resources within LAPs. The student's academic major and interests, as reported, further guided the selection of themes within tools identified for language practice. Each activity was accompanied by specific instructions intended to serve as TCS (Lai et al., 2017), that is, by the attempted provision of adequate recommendations for resources as well as avenues for using those resources in level-appropriate ways. Last, I used student responses to the Pre- Can-Do Self-Assessment of Spanish Skills, the second part of the combined instrument, to further refine selection of LAP activities.

In response to BQ Item #13, for example, Student 9 wrote "communicate with more people" as the primary reason or goal for studying Spanish. In response to BQ Item #16, Student 9 expressed a preference for talking with other people in order to learn about a topic, as opposed to reading, and also preferred reading to watching full-length movies, and watching full-length movies to listening to a podcast or watching a short YouTube. Thus, Student 9's LAP featured conversation at the top; the Tandem app was the only recommended activity therein. Student 9 further identified a high level of motivation for listening to music in Spanish in response to BQ Item #19. The LAP correspondingly featured listening in the left-most column immediately beneath conversation, with Spotify indicated as means for practicing and accompanied by

instructions intended to help Student 9 repurpose Spotify for independent Spanish practice:

> In Spotify (Pandora or YouTube), search "en español" or "Latin Rock" and choose a station, artist or playlist that suits you. **Listen to music in Spanish for 10 minutes.** Save favorites or build your own playlist if you like. Listen while you drive or clean up. **Sing along!** Need suggestions to start? Try some of my fav's listed below.

Student 9 also repeatedly identified baking, cooking, or nutrition as a personal interest on the BQ and, thus, the LAP recommended following a cooking blog in the Reading domain, directly beneath specific recommendations for Spanish-language musical artists and playlists available on Spotify. Finally, on the Pre- Can-Do Self-Assessment of Spanish Skills, Student 9 marked the score of two, "I can do this with much help," out of a possible four for the skill Tell How to Prepare Something to Eat, thereby indicating a relative lack of confidence with respect to a skill directly associated with a personally relevant and enjoyable theme. I attempted to capitalize on presumed motivation associated with baking and cooking and use it to build Student 9's motivation and confidence around a self-identified language skill weakness. Beneath reading, the LAP specified a practice activity in the writing domain as follows: "Simplify instructions to your favorite **recipe**; translate them to Spanish and use commands."

The above example illustrates the process of LAP development. The personalization process required almost two hours each on the first three attempts but took less time for each subsequent LAP. [4] Models for instructions provided by this study (Appendices F, G, and H) may reduce the amount of time required to personalize LAPs in the future. The following subsections present an overview of data collected on the variables of interests–LAP alignment and language level–LAP alignment predicted to impact students' LAP implementation during the Spring 2020

[4] I noted spending significantly more time on LAP personalization than Larocque and Sterling (2019a).

data collection, a hypothesis supported by review of previous studies by Lai (2013), Lai et al. (2015), and Shelton-Strong (2018).

Interests–LAP Alignment

Table 3 presents the mean for students' responses on interests–LAP alignment, collected from five administrations of APUS Item #9, and also demonstrates the effect of the high number of missing scores.

Table 3

Descriptive Statistics for Interests–LAP Alignment

	APUS 1	APUS 2	APUS 3	APUS 4	APUS 5
Valid	5	4	4	3	3
Missing	4	5	5	6	6
Mean	2.800	2.750	3.000	2.667	2.667
Std. Deviation	0.447	0.500	0.000	0.577	0.577
Minimum	2.000	2.000	3.000	2.000	2.000
Maximum	3.000	3.000	3.000	3.000	3.000

Note. $N = 9$.

As shown, there are more missing than available scores for APUS #2 through #5, potentially skewing interpretation of data that, in reality, suggested strong perceived alignment between interests and personalized LAPs.

To assist interpretation, Table 4 additionally summarizes responses from all students to APUS Item #9 on the variable interests–LAP alignment. Table 4 (a) shows the frequency of reported alignment scores by individual student; (b) reports the total number of responses to Item #9 per alignment score; and (c) displays the mode result among each student's responses on the

interests–LAP alignment variable, represented as a numeric value on an ordinal scale between 1 and 3.

Table 4

Frequency of Interests–LAP Alignment Scores

	Student									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	Score Tally
Very Strong (3)	5	1	5		1	1	1		1	15
Some (2)					1	2		1		4
None (1)										0
Did Not Use (0)				1					1	2
Total	5	1	5	1	2	3	1	1	2	21
Mode	3	3	3	0		2	3	2	3	

Note. $N = 9$.

As shown, five students most often reported very strong match between personal interests and the personalized LAP; two students most often reported some match; Student 5 reported very strong match and some match on two different responses, respectively; and no student reported the personalized LAP did not match their interests at all.[5]

Student evaluations of interests–LAP alignment showed some consistency, although 47.62% of responses came from only two participants combined, and both students were entirely consistent in their high rating across the five administrations of APUS. Of the total 21 responses to APUS Item #9 submitted by a total of nine students across five occasions, 15 responses indicated “very strong match” between the LAP and personal interests; four indicated “some activities match my personal plan”; two indicated failure to use the personal plan; and zero

[5] Note that Student 4 had a generic plan only and reported not using the LAP.

responses indicated the LAP and personal interests "don't match at all." After factoring out the two responses of "did not use," the simple mean of this set of responses is 2.79, representing the average student rating of interests–LAP alignment on a scale of three, with three representing the highest indicated degree of alignment, although responses from Spanish 102 Students 1 and 3 are heavily weighted in analysis.

Language Level–LAP Alignment

Table 5 presents the mean for students' responses on language level–LAP alignment, collected from five administrations of APUS Item #8, and again demonstrates the effect of a high number of missing scores.

Table 5

Descriptive Statistics for Language Level–LAP Alignment

	APUS 1	APUS 2	APUS 3	APUS 4	APUS 5
Valid	5	4	4	3	3
Missing	4	5	5	6	6
Mean	2.600	3.000	2.750	3.000	3.000
Std. Deviation	0.548	0.000	0.500	0.000	0.000
Minimum	2.000	3.000	2.000	3.000	3.000
Maximum	3.000	3.000	3.000	3.000	3.000

Note. $N = 9$.

Table 6 summarizes responses from all students to APUS Item #8 on the variable of language level–LAP alignment. The table (a) shows the frequency of reported alignment scores by individual student; (b) reports the total number of responses to Item #8 per alignment score; and (c) displays the mode result among each student's responses on the language level–LAP alignment variable, represented as a numeric value on an ordinal scale between one and three.

Table 6

Frequency of Language Level–LAP Alignment Scores

	Student									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	Score Tally
Very Strong (3)	5	1	5		1	3			1	16
Some (2)					1		1	1		3
None (1)										0
Did not use (0)				1					1	2
Total	5	1	5	1	2	3	1	1	2	21
Mode	3	3	3	0		3	2	2	3	

Note. $N = 9$.

As shown, five students most often reported very strong match between language level and the LAP; two students most often reported some match; Student 5 reported very strong match and some match on two different responses, respectively; no student reported the plan did not match their language level at all.[6]

Student evaluations of language level–LAP alignment collected by APUS Item #8 were relatively consistent, although 47.62% of those responses again came from only two participants combined, and both students were entirely consistent in their high rating across the five administrations of APUS. Of the total 21 responses to APUS Item #8, 16 responses indicated “very strong match” between the LAP and self-perceived language level; three indicated “some activities match my personal plan”; two indicated failure to use the personal plan; and zero responses indicated the LAP and language level “don’t match at all.” After

[6] Note that Student 4 had only a generic plan and reported not using the LAP.

factoring out the two responses of "did not use," the simple mean of this set of responses is 2.84, representing the average student rating of language level–LAP alignment on a scale of three, with three representing the highest indicated degree of alignment, although responses from Students 1 and 3 are heavily weighted in this analysis as well.

Student-by-Student LAP Implementation

As observed, autonomy plan and survey deployment did not guarantee survey completion. Further, neither plan deployment nor survey completion guaranteed plan-prescribed independent practice outside of class. As anticipated, some participants received personalized LAPs but failed to report a significant amount of implementation time, while one participant responded to a survey of usage based on the availability but not necessarily implementation of the generic LAP.

The following descriptions characterize nine individual students' self-reported LAP implementation, for the sake of identifying changes or development over time within a student who responded multiple times to APUS, as well as for later identifying patterns of similarity and divergence among students. Student summaries contain information about the study's variables of time, frequency, obstacles, overlap, language preferences, technology preferences, change in perceived Spanish skills, and change in learner autonomy, collected from responses to the repeated administration of APUS, where permitted.

Student 1

Student 1 was enrolled in Spanish 102, received a personalized LAP, and completed all five instances of APUS; Student 1 also completed FUS on July 30, almost 14 full weeks after the instrument's initial deployment. In five responses to APUS Item #3, Student 1 reported the highest indicated level of confidence when listening to songs, watching videos, or reading

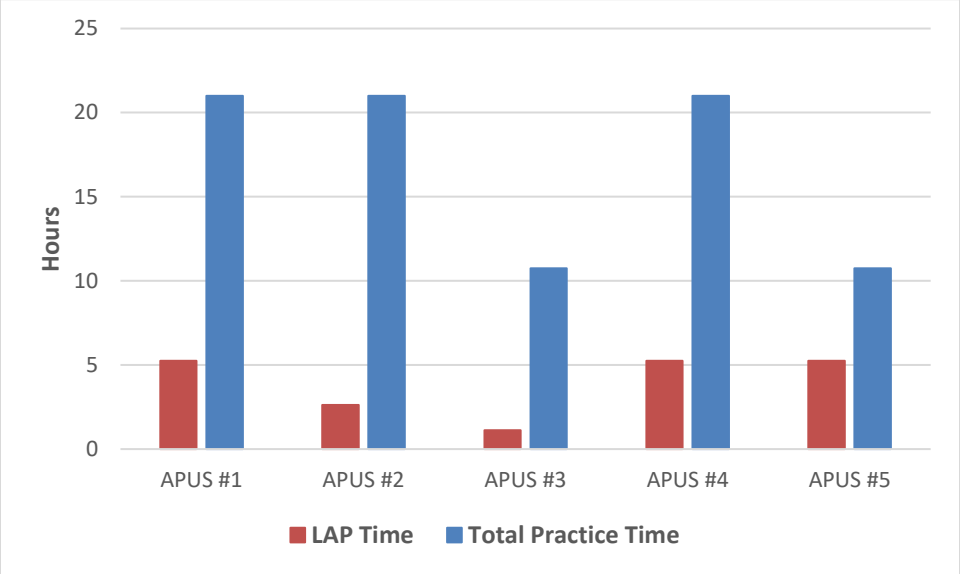
websites in Spanish, thus producing a score of zero for the variable of change in autonomy. This data helps qualitatively extend the interpretation of other variables reported in Chapter 4.

In response to Item #6 on APUS #1, 2, and 4, Student 1 reported using the personalized LAP for between 15 and 30 minutes per day across each of the indicated two-week periods. On APUS #3 and 5, Student 1 reported using the LAP for between 30 and 60 minutes per day. In response to Item #5 on APUS #1, Student 1 reported using the LAP every day during the relevant two-week reporting period; every other day on APUS #2, 4, and 5; and one to two days on APUS #3, interpreted as one to two days a week across the indicated two-week period. Factoring frequencies into plan use time, as reported, Student 1 used the LAP for the following calculated amounts of time during the two-week reporting periods indicated: 3.5 to seven hours each for APUS #1, 4, and 5; 1.75 to 3.5 hours for APUS #2; and 0.75 to 1.5 hours for APUS #3. Thus, Student 1 spent a calculated total of between 13 and 26 hours during the Spring 2020 semester practicing Spanish per the researcher-provided personalized LAP.

APUS Item #4 asked students to report the estimated total time spent practicing Spanish outside of class, including assignments and LAP practice combined. On APUS # 1, 2, and 4, Student 1 reported between one and two hours a day of total of out-of-class Spanish practice, that is, a total of between 14 and 28 hours, across each of the indicated two-week periods. On APUS #3 and 5, Student 1 reported spending 30 minutes to one hour a day, or a total of between 7.5 and 14 hours, across each of the indicated two-week periods. Further, Student 1 reported on Item #7 for APUS #1, 2, 3, and 5 spending more time on required assignments than on using the LAP; on APUS #4, Student 1 reported dividing time equally between required assignments and using the LAP. Figure 3 compares simple means for LAP time and total combined Spanish practice, calculated above, for Student 1.

Figure 3

Student 1 Semester Practice Means



As compared, Student 1 reported spending 23% of total practice time engaged in LAP-specified activities. Of note, APUS #3, which reflected Student 1's lowest overall practice time, corresponded to the first university pandemic-related announcement in Week 7 of the study. In response to the pandemic, it is possible Student 1 had less motivation or ability to study in general.

The mode of Student 1's responses to APUS Item #13 indicated Student 1 most often engaged in LAP activities related to culture and geography. All of Student 1's responses to Item #15 indicated a preference for "music, YouTube, podcasts, TV or film" over "eBooks, chatting, or social media," and language learning apps; and all of Student 1's responses to Item #19 consistently indicated "film, TV, podcasts, YouTube, or music" as most useful.

The modes of Student 1's responses to APUS Items #14 and #16, respectively, indicated Student 1 most often engaged in LAP activities of a private and digital nature as well as activities

that elicited language comprehension skills. Specifically, Student 1's response to APUS #1 Item #14 indicated equal amounts of interpersonal communication and private digital language practice; all four later responses indicated most time was spent on private digital activities. Four of Student 1's five responses to Item #16 indicated most time was spent engaged in comprehension activities, while only APUS #2 indicated equal distribution of practice across language comprehension and production.

Student 1's responses to FUS qualitatively extend data gathered on APUS #1 through 5 about personalized LAP implementation. Student 1 answered Definitely Yes on both FUS Items #8 and 13 about the independent practice plan's contributions to (a) the ability to effectively practice Spanish independently and (b) gains in language skills, respectively. On FUS Items #14 and 16, respectively, Student 1 indicated the plan contributed to learning in general and helped meet personal learning goals. On FUS Item #15, Student 1 reported that the plan contributed positively to the grade earned in Spanish 201.

On FUS Item #18, Student 1 reported communicating with a previously unknown native Spanish speaker as a result of using the independent practice plan. On FUS Item # 6, Student 1 answered Yes to the question, "Did your Independent Practice Plan make you want to visit a new place or learn more about something?" On open-ended FUS Item #17, Student 1 reported the most memorable or interesting aspect of the independent practice plan as follows: "Realizing how many resources there are for independent Spanish learning." On FUS Item #9, Student 1 reported that most LAP-prescribed activities were new, that is, unfamiliar. On open-ended FUS Item #20, Student 1 commented as follows on the aspect(s) from the independent language practice plan that should be kept: "The variety of resources provided." On FUS Item #11,

Student 1 reported the intention to continue using the following specific LAP-prescribed activities in the future: “watching movies/TV in Spanish.”

Student 1’s responses to APUS Item #18 indicated media preferences, with film or TV most often preferred over both podcasts or YouTube and language learning apps. In five responses to Item #21, Student 1 consistently ranked “music or podcasts” and “TV or film” as the top two preferences among plan activities. “Social media” and “video games” ranked near or at the bottom every time. Speaking ranked fourth three times and third one time in response to Item #21. Student 1 always included writing, speaking, and reading activities among ranks three through six, rotating their position. Student 1 ranked “field trips, service, or club activities” in seventh position in most responses to Item #21. In five responses to APUS Item #20, Student 1 consistently indicated speaking as the most useful type of activity for meeting personal learning goals; online chatting was ranked second four times; and word recognition activities always ranked last.

Student 1 consistently reported strong alignment between the personalized LAP and both language level and personal interests on APUS Items #8 and 9, respectively. On Item #12, Student 1 also most frequently indicated Some as the level of overall overlap between LAP and in-class activities, and one time rated as Strong the overall overlap. Student 1 identified the absence of obstacles to LAP implementation in the first response to Item #17 and indicated real-life or technological problems as an obstacle four subsequent times.

Student 1 scored 220 and 243 on the Pre- and Post- Can-Do Self-Assessments of Spanish Skills, respectively, representing a positive 23-point aggregate skill change during the semester. Table 7 displays observed skill changes calculated from the self-assessments, arranged by communication mode and proficiency level. All net changes were positive.

Table 7

Student 1 Skill Gains by Communication Mode and Proficiency Level

	Interpersonal	Presentational
Novice Low	0	2
Novice High	3	5
Intermediate Low	0	5
Intermediate High	1	7
Aggregate Score	4	19

Note. $N = 1$.

As shown, Student 1's observed amount of skill change generally increased as language level also increased: Student 1 reported highest gains at the Novice High and Intermediate High skill levels. Student 1 reported no net skill change at the Novice Low skill level, having self-rated the highest indicated ability level for all skills in this category on both the pre- and post-assessments. Specifically, Student 1 reported the highest overall change for presentational skills, almost five times the observed change for interpersonal communication skills.

Student 2

Student 2 was enrolled in Spanish 303, received a personalized LAP, and completed APUS #2 only. On BQ Item #13, Student 2 indicated fluent communication as a personal learning goal; on BQ Item #17, Student 2 selected, "I can [learn to pronounce Spanish well enough to have a conversation with native speakers] if I work hard"; and on BQ Item #14, Student 2 set a realistic goal obtaining the final grade of A in the course. However, in response to APUS Item #3, Student 2 reported the lowest indicated level of confidence when listening to songs, watching videos, or reading websites in Spanish, selecting "I am worried. I don't think I'm good at that." Student 2 completed only one APUS and thus did not provide a score on the variable of change in autonomy, although the contrast between responses on the BQ and APUS suggests some degree of confidence, perhaps with respect to different learning skills.

In response to APUS Item #6, Student 2 reported using the personalized LAP for between zero and 15 minutes per day across the indicated two-week period. Responses to APUS Items #5 and 13 indicated some degree of LAP implementation: Student 2 reported using the LAP one to two days, interpreted as one to two days per week, and spending most time engaged in LAP-specified activities related to grammar and vocabulary. Factoring frequency into plan use time, as reported, Student 2 used the LAP for between zero and 45 minutes during the indicated two-week period, as calculated, also representing the calculated total hours Student 2 may have spent during the Spring 2020 semester practicing Spanish per the researcher-provided personalized LAP.

For APUS Item #4, Student 2 reported spending between zero and 30 minutes a day of total of out-of-class Spanish practice, including assignments and LAP practice combined, or a total of between zero and seven hours, across the indicated two-week period. Further, Student 2 reported on APUS Item #7 spending more time on required assignments than using the LAP.

On APUS Items #8 and 9, Student 2 reported strong alignment between the LAP and both language level and personal interests, respectively.

In response to APUS Item #20, Student 2 ranked activities from most to least useful for meeting learning goals as follows: online chat; reading; speaking; and word recognition. For APUS Item #19, Student 2 selected “language learning apps or videogames” as most useful, compared with “film, TV, podcasts, YouTube, or music” and “Google search and follow-up activities.” In response to Item #15, Student 2 indicated a preference for “music, YouTube, podcasts, TV or film” over “eBooks, chatting, or social media,” and language learning apps. On Item #21, Student 2 ranked activities from most to least preferred as follows: music or podcasts; TV or film; social media; language learning apps; online chat; speaking; reading; field trips,

service, or club activities; videogames. On Item #18, Student 2 indicated a preference for podcasts or YouTube over “both film or TV” and language learning apps.

Student 2’s responses to APUS Items #14 and 16, respectively, indicated most plan-prescribed practice was private and digital in nature, and that Student 2 spent more time practicing comprehension than language production. Responses to Items #10, 11, and 12 indicated Student 2 perceived no overlap between LAP-prescribed and in-class activities.

Finally, Student 2 identified real-life distractions or technological problems as an obstacle to LAP implementation in response to APUS Item #17. Student 2 did not complete FUS and thus did not provide data on the variable of change in perceived Spanish skills.

Student 3

Student 3 was enrolled in Spanish 102, received a personalized plan, and completed APUS #1, 2, and 3 during the appropriate timeframes of their respective deployment. Student 3 repeated APUS #3 four days after submitting the first complete set of responses, then subsequently failed to complete APUS #4. Student 3 completed APUS #5 during the standard administration timeframe. I acknowledge Student 3 may have intended to complete APUS #4 but, in so doing, used the previously accessed APUS #3 weblink. Student 3’s second set of APUS 3 responses are here analyzed as responses to APUS #4, further supported by the relative proximity of those responses to APUS #4 administration.

In all five responses to APUS Item #3, Student 3 reported the highest indicated level of confidence when listening to songs, watching videos, or reading websites in Spanish, thus producing a score of zero for the variable of change in autonomy.

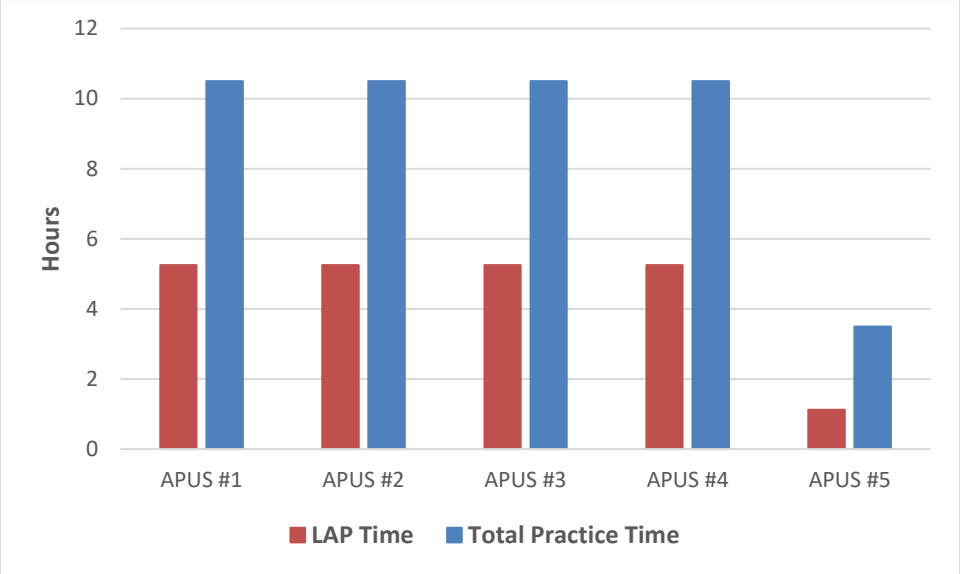
In response to Item #6 on APUS #1, 2, 3, and 4, Student 3 reported using the personalized LAP for between 30 and 60 minutes per day over each of the indicated two-week

periods. On APUS #5, Student 3 reported using the LAP for between 15 and 30 minutes per day. In response to Item #5 on APUS #1, 2, 3, and 4, Student 3 reported using the LAP every other day; and one to two days on APUS #5, interpreted as one to two days a week across the indicated two-week period. Factoring frequencies into plan use time, as reported, Student 3 used the LAP for the following calculated amounts of time during the two-week reporting periods indicated: 3.5 to seven hours each for APUS #1, 2, 3, and 4; and 0.75 to 1.5 hours for APUS #5. Thus, Student 3 spent a calculated total of between 14.75 and 29.5 hours during the Spring 2020 semester practicing Spanish per the researcher-provided personalized LAP.

For Item #4 on APUS # 1, 2, 3, and 4, Student 3 reported between 30 minutes and one hour a day of total out-of-class Spanish practice, including assignments and LAP practice combined, or a total of between seven and 14 hours, across each of the indicated two-week periods. On APUS #5, Student 3 reported between zero and 30 minutes per day spent on combined practice, or a total of between zero and seven hours, across the indicated two-week period. Further, in all five responses to APUS Item #7, Student 3 reported dividing time equally between required assignments and using the LAP. Figure 4 compares simple means calculated for LAP time and total combined Spanish practice for Student 3. As compared, Student 3 reported spending 48.63% of total practice time engaged in LAP-specified activities.

Figure 4

Student 3 Semester Practice Means



The mode of Student 3's responses to APUS Item #13 indicated Student 3 most often divided engagement in LAP activities between culture and/or geography and grammar and vocabulary. All of Student 3's responses to Item #15 indicated a preference for "music, YouTube, podcasts, TV or film" over "eBooks, chatting, or social media," and language learning apps. Three of Student 3's responses to Item #19 indicated "film, TV, podcasts, YouTube, or music" as most useful; responses to Item #19 on APUS 2 and 4 indicated as most useful "Google search and follow-up activities" and "language learning apps or videogames," respectively.

The mode of Student 3's responses to APUS Items #16 and #14, respectively, indicated Student 3 most often equally divided LAP-prescribed practice between comprehension and language production, and between private digital activities and communicating with people; only APUS #3 indicated more time spent engaged in private digital activities.

In all five responses to APUS Item #20, Student 3 consistently indicated speaking as the most useful type of activity for meeting personal learning goals; three times, reading ranked second, followed by word recognition activities; and online chatting always ranked last. In all five responses to Item #21, Student 3 consistently marked "speaking" as the third preference among plan activities. Three times, Student 3 ranked "music or podcasts" and "TV or film" as the top two preferences, rotating in position. "Field trips, service, or club activities" and "videogames" consistently ranked at the bottom. Student 3 varied the ranking of "language learning apps," twice occupying second rank at its highest, and fourth rank one time. Four times, reading activities and social media ranked fourth or fifth. Student 3 responded five times to Item #18, indicating media preferences: three responses indicated a preference for podcasts or YouTube, and two responses indicated a preference for film or TV; language learning apps was never preferred over the others.

Student 3 consistently reported strong alignment between the LAP and both language level and personal interests on APUS Items #8 and 9, respectively. In the last four of the total five responses to Item #12, Student 3 indicated a strong overall overlap between LAP-prescribed and in-class activities; the response on APUS #1 indicated some degree of overall overlap. In all responses to Items #10 and 11, Student 3 reported "many" instances of both recalling LAP-prescribed activities during Spanish class time and using them for a class activity or assignment.

Finally, Student 3 identified real-life distractions or technological problems as an obstacle to LAP implementation in all five responses to Item #17. Student 3 did not complete FUS and thus did not provide data on the variable of change in perceived Spanish skills.

Student 4

Student 4 was enrolled in Spanish 201, did not received a personalized LAP, and completed only APUS #3. It is unknown if Student 4 accessed the generic LAP on the course Blackboard site. Fourteen of 21 questions on the APUS instrument specified the use of "your personal practice plan" or "your personal plan"; two questions generally referred to "your plan" or "Spanish practice plan activities"; two made no reference to a plan; and three were not directly relevant. It is also unknown whether Student 4 based responses to APUS #3 on experience of the available generic plan or whether Student 4 interpreted the APUS instrument as irrelevant to personal practice. A concise summary of Student 4's APUS responses follows.

On APUS Item #3, Student 4 reported the lowest indicated level of confidence. Student 4 completed only one APUS and thus did not provide data on the variable of change in autonomy.

On APUS Items #8 through 19, Student 4 responded "I did not use my personal practice plan." On Item #6, Student 9 reported zero to 15 minutes of LAP-prescribed Spanish practice and, on Item #4, indicated zero to 30 minutes of total out-of-class practice over the two-week average, further indicating on Items #5 and 7, respectively, a value of zero days for LAP-implementation frequency, with more time devoted to required assignments than to practice per the LAP across those weeks. Student 4, however, ranked activities by usefulness and personal preference in Items #20 and 21, respectively. On Item #20, Student 4 ranked the following in order from most to least useful: online chat; language learning apps; music; social media; speaking; reading; videogames; TV or film; and fieldtrips, service or clubs; and also ranked last "I do not use my personal practice plan." On Item #21, Student 4 ranked the following activities in order from most to least preferred: speaking; word recognition; reading; online chat.

Student 4 did not complete FUS and thus did not provide data on the variable of change in perceived Spanish skills.

Student 5

Student 5 was enrolled in Spanish 303, received a personalized LAP, and completed APUS #1 and 5, as well as the FUS. In response to Item #3 on APUS #1, Student 5 reported the lowest indicated level of confidence: "I am worried [when I listen to songs, watch videos, or read websites in Spanish]; I don't think I'm good at that"; however, on APUS #5, the same student reported the highest indicated level of confidence in response to Item #3. Thus, the calculated score for change in autonomy of Student 5 was two, the highest value of change points possible. Student 5 was the only participant to report a change in autonomy, as operationalized for this study. This data helps qualitatively extend the interpretation of other variables reported in Chapter 4.

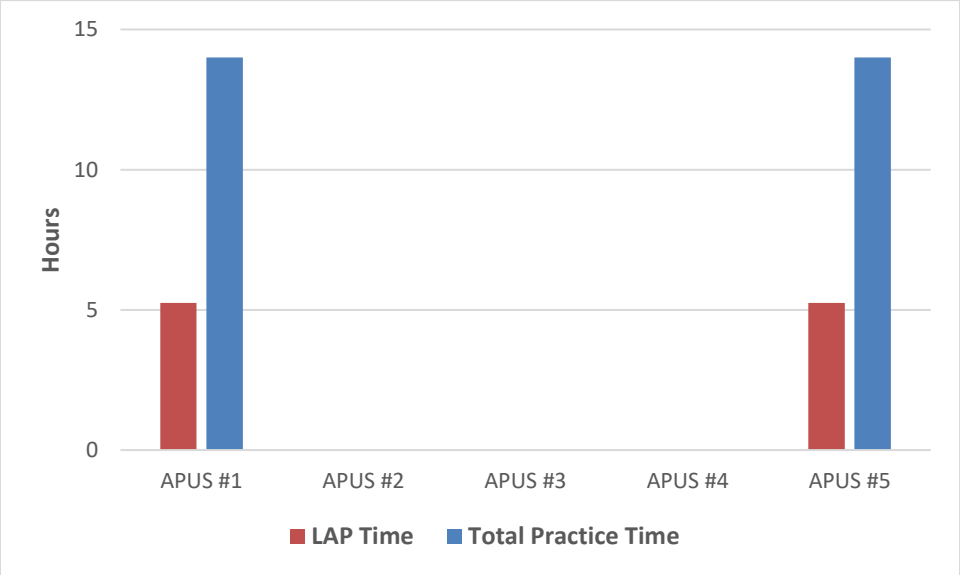
In response to Item #6 on both APUS #1 and 5, Student 5 reported using the personalized LAP for between 30 and 60 minutes per day over each of the indicated two-week periods. In response to Item #5 on both APUS #1 and 5, Student 5 reported using the LAP every other day across both indicated two-week periods. Factoring frequency into plan use time, as reported, Student 5 used the LAP for a calculated amount of between 3.5 and seven hours during both indicated two-week reporting periods. Thus, Student 5 spent a calculated total of between seven and 14 hours during the Spring 2020 semester practicing Spanish per the researcher-provided personalized LAP.

For Item #4 on both APUS #1 and 5, Student 5 reported more than two hours per day of total out-of-class Spanish practice, including assignments and LAP practice combined, or a total of more than 14 hours, across each of the indicated two-week periods. Student 5 also reported

both times on APUS Item #7 spending more time on required assignments than on using the LAP and, in response to FUS Item #12, Student 5 reported the personalized LAP Definitely Increased total time spent practicing Spanish. Figure 5 compares simple means calculated for LAP time and total combined Spanish practice for Student 5. As compared, Student 5 reported spending 37.5% of total practice time engaged in LAP-specified activities.

Figure 5

Student 5 Semester Practice Means



Responses to APUS Items #13 and 14, respectively, indicate Student 5 engaged most often in LAP activities related to grammar and vocabulary, and activities of a private digital nature. Both responses to APUS Item #16 indicate Student 5 divided time equally between language production and comprehension practice.

Student 5's responses to the FUS qualitatively extend data gathered on APUS #1 and 5 about personal plan implementation. Student 5 answered to Probably Yes on both FUS Items #8 and 13 about the LAP's contributions to (a) the ability to practice Spanish independently and (b)

gains in language skills, respectively. On FUS Items #14 and #16, respectively, Student 5 indicated the LAP contributed to learning in general and helped meet personal learning goals. On FUS Item #15, Student 5 reported that the LAP maybe contributed positively to the grade earned in Spanish 303.

On FUS Item #18, Student 5 reported communicating with a previously unknown native Spanish speaker as a result of using the independent practice plan. On FUS Item #6, Student 5 answered Yes to the question, "Did your Independent Practice Plan make you want to visit a new place or learn more about something?" On open-ended FUS Item #17, Student 5 reported the most memorable or interesting aspect of the independent practice plan as follows: "Some of the conversations that I've had with a friend from Argentina have been really interesting and fun. We talk a lot about the cultural differences between our two countries and she talks a lot about wanting to potentially come to America one day." On FUS Item #9, Student 5 reported that most LAP-prescribed activities were familiar. On open-ended FUS Item #20, Student 5 commented as follows on the aspect(s) from the independent language practice plan that should be kept: "I think that speaking with native speakers, over the text or on the phone, has been the most fun and helpful part of my independent language practice." On FUS Item #11, Student 5 reported the intention to continue using the following specific LAP-prescribed activities in the future: "Duolingo, talking to native speakers, and YouTube."

On APUS #1 Items #9 and 8, respectively, Student 5 reported strong alignment between the LAP and personal interests, and some alignment between the LAP and language level. In response to the same items on APUS #5, Student 5 again reported some alignment between the LAP and personal interests, but strong alignment between the LAP and language level near the end of the data collection semester.

On both responses to APUS Item #12, Student 5 indicated some overall overlap between LAP and Spanish class. In response to APUS Items #10 and 11, respectively, Student 5 consistently reported not using LAP-prescribed activities during class or to complete a required assignment, but did report recalling a few things from the plan during Spanish class.

In response to Item #17 on APUS #1, Student 5 indicated real-life or technological problems as an obstacle to LAP implementation and, in response to the same item on APUS #5, reported practicing without distractions.

Both responses to APUS Item #18 indicated Student 5 preferred language learning apps over both film or TV and podcasts or YouTube. Both of Student 5's responses to APUS Item #15 indicated a preference for language learning apps (Mango, Duolingo, etc.) over "music, YouTube, podcasts, TV, or film" and "eBooks, chatting, or social media"; and both of Student 5's responses to APUS Item #19 indicated language learning apps as most useful.

In both responses to APUS Item #20, Student 5 indicated reading as the most useful and word recognition as the least useful type of activity for meeting personal learning goals. Student 5 ranked speaking and online chatting in the middle. In both responses to Item #21, Student 5 ranked language learning apps as the most preferred plan activity among those listed; music and writing vied for second rank; and videogames and TV ranked fourth and fifth, respectively, both times. On APUS #1, Student 5 ranked remaining activities from most to least preferred as follows: speaking; reading; social media; and field trips, service, or clubs. On APUS #5, Student 5 ranked remaining activities from most to least preferred as follows: reading; social media; speaking; field trips, service, or clubs.

Student 5 scored 213 and 239 on the Pre- and Post- Can-Do Self-Assessments of Spanish Skills, respectively, representing a positive 26-point aggregate skill change during the semester,

the greatest change observed in the study. Table 8 displays skill changes reported by Student 5 arranged by communication mode and skill level. The net skill change was positive, although Student 5 reported a loss of presentational skills at the Novice Low level.

Table 8

Student 5 Skill Gains by Communication Mode and Proficiency Level

	Interpersonal	Presentational
Novice Low	0	-1
Novice High	7	0
Intermediate Low	4	9
Intermediate High	6	1
Aggregate Score	17	9

Note. N = 1.

As shown, Student 5 reported the greatest single increase for presentational skills at the Intermediate Low level; however, Student 5 reported greatest overall gains in interpersonal communication skills, nearly double observed gains in presentational skills. Of note, Student 5 reported conversations with a friend from Argentina as the most memorable or interesting aspect of the personalized LAP.

Student 6

Student 6 was enrolled in Spanish 303, received a personalized LAP, and completed APUS administrations #2, 3, and 4, as well as FUS.

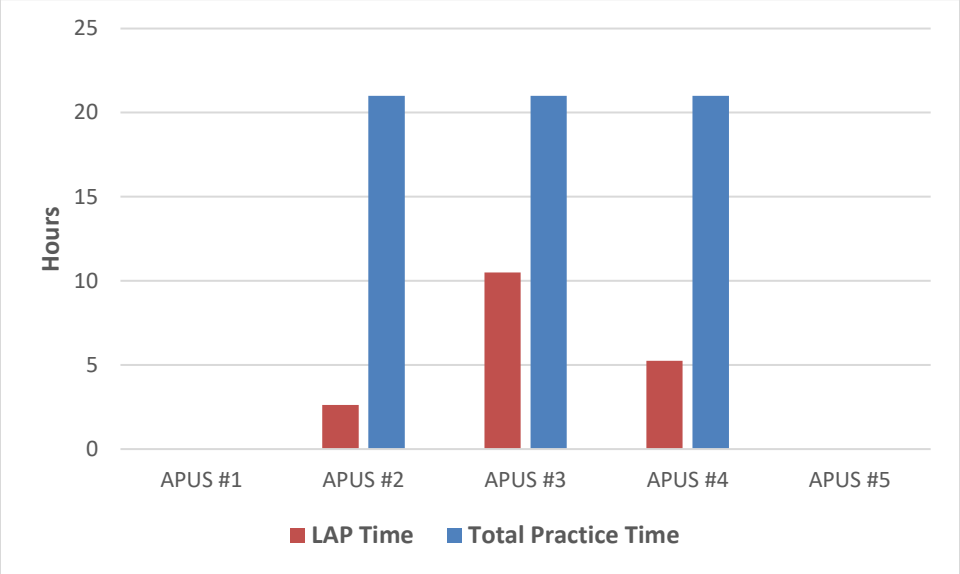
On all three responses to APUS Item #3, Student 6 reported the highest indicated level of confidence, thus producing a score of zero for the variable of change in autonomy; in response to FUS Item #3, Student 6 reported being more confident practicing Spanish in class than outside of class. FUS Item #7 asked students to rate the effectiveness of their Spanish practice on their own outside of class, to which Student 6 responded Extremely Effective.

In response to Item #6 on APUS #3 and 4, Student 6 reported using the personalized LAP for between 30 and 60 minutes per day across each of the indicated two-week periods. On APUS #2, Student 6 reported using the LAP for between 15 and 30 minutes per day. In response to Item #5 on APUS #2, 3, and 4, Student 6 reported using the LAP every other day across each of the indicated two-week periods. Factoring frequency into plan use time, as reported, Student 6 used the LAP for the following calculated amounts of time during the two-week reporting periods indicated: 1.75 to 3.5 hours for APUS #2; 7 to 14 hours for APUS #3; and 3.5 to 7 hours for APUS #4. Thus, Student 6 spent a calculated total of between 12.25 and 24.5 hours during the Spring 2020 semester practicing Spanish per the researcher-provided LAP.

For Item #4 on APUS #2, 3, and 4, Student 6 reported between one and two hours a day of total out-of-class Spanish practice, including assignments and the LAP combined, or a total of between 14 and 28 hours across each of the indicated two-week periods. On APUS #2 Item #7, Student 6 reported dividing time equally between required assignments and using the LAP; for APUS #3 and 4, Student 6 reported spending more time using the LAP than on required assignments and was the only student to do so at any point in time. In response to FUS Item #12, Student 6 further reported the LAP probably increased total time spent practicing Spanish. Figure 6 compares simple means calculated for LAP time and total combined Spanish practice for Student 6. As compared, Student 6 reported spending 29% of total practice time engaged in LAP-specified activities.

Figure 6

Student 6 Semester Practice Means



All Student 6's responses to APUS Item #15 indicated a preference for "music, YouTube, podcasts, TV or film" over "eBooks, chatting, or social media" and language learning apps (Mango, Duolingo, etc.); and all Student 6's responses to APUS Item #19 indicated film, TV, podcasts, YouTube, or music as most useful for meeting personal learning goals. For Item #13 on APUS #3 and 4, Student 6 reported engaging most often in LAP activities related to grammar and vocabulary, while the response to the same item on APUS #2 reported engaging more often in activities related to culture and/or geography. Responses to APUS Items #14 and 16 indicate that Student 6 engaged most often in LAP activities of a private and digital nature that were consistently related to language comprehension.

On all three responses to APUS Item #20, Student 6 indicated reading as the most useful type of activity for meeting personal learning goals. Speaking activities ranked second two times,

and word recognition activities ranked second one time. Online chat activities ranked last all three times.

For Item #8 on APUS #2, 3, and 4, Student 6 reported strong alignment between the LAP and language level. For Item #9, Student 6 reported strong alignment between the LAP and personal interests on APUS #3, and reported some LAP–interests alignment on APUS #2 and 4. On all responses to APUS Item #12, Student 6 indicated some overall overlap between LAP and Spanish class. In responses to APUS Item #11, Student 6 consistently reported recalling a few things from the plan during Spanish class. On both APUS #3 and 4, the same reporting periods for which Student 6 indicated spending more time on LAP activities than required assignments, Student 6 also reported using a few things for class for Item #10. On APUS #2, Student 6 reported not using LAP-prescribed activities during class or to complete a required assignment over the two-week period indicated.

For Item #17 on APUS #4, Student 6 reported LAP activities were too hard or too boring; for the same item on APUS #2 and 3, Student 6 indicated real-life or technological problems as an obstacle to LAP implementation.

Student 6's responses to FUS qualitatively extend data gathered from APUS responses about personal plan implementation. Student 6 answered Probably Yes on both FUS Items #8 and 13 about the independent practice plan's contributions to (a) the ability to effectively practice Spanish independently and (b) gains in language skills, respectively. On FUS Items #14 and 16, respectively, Student 6 indicated the LAP contributed to learning in general and helped meet personal learning goals. On FUS Item #15, Student 6 reported the LAP maybe contributed positively to the grade earned in Spanish 303.

On FUS Item #6, Student 6 answered Yes to the question, “Did your Independent Practice Plan make you want to visit a new place or learn more about something?” On open-ended FUS Item #17, Student 6 reported “the easily available short films” as the most memorable or interesting aspect of independent practice plan. On FUS Item #9, Student 6 reported most LAP-prescribed activities were familiar. On open-ended FUS Item #20, about independent language practice plan aspects that should be kept, Student 6 commented, “Most of all of it, especially the listening and reading recommendations.” On FUS Item #11, Student 6 reported the intention to continue using the following specific plan-prescribed activities in the future: “Investigating topics via Spanish sources, listening to music, reading about cultural practices and traditions, consuming media such as movies.”

In all responses to APUS Item #21, with final regard to remaining responses about activity preferences, Student 6 ranked music or podcasts as the most preferred plan activity among those listed. TV ranked second on APUS #2 and 3, and fourth on APUS #4. Speaking ranked third on APUS #2, fourth on APUS #3, and second on APUS #4. Videogames and social media always ranked in the bottom two. Reading ranked third on APUS #2 and 3, the periods during which Student 6 reported spending more time on LAP activities than on required assignments, and fourth on APUS #4. Language learning apps, writing activities, and field trips, service or clubs ranked in positions five through seven every time, although they exchanged places. On APUS Item #18, Student 6 consistently preferred podcasts or YouTube over both language learning apps and film or TV.

Student 6 scored 272 and 277 on the Pre- and Post- Can-Do Self-Assessments of Spanish Skills, respectively, representing a positive five-point aggregate skill change during the semester, the lowest change observed of the three students who completed the post-assessment. Table 9

displays skill changes reported by Student 6 arranged by communication mode and skill level. The net skill change was positive.

Table 9

Student 6 Skill Gains by Communication Mode and Proficiency Level

	Interpersonal	Presentational
Novice Low	0	1
Novice High	3	0
Intermediate Low	2	1
Intermediate High	-2	0
Aggregate Score	3	2

Note. $N = 1$.

As shown, Student 6 reported higher overall gains in interpersonal communication skills than in presentational skills, with a difference of one point only. Whereas Students 1 and 5 observed the greatest gains at higher indicated skill levels, Student 6 observed a calculated loss of interpersonal skills at the Intermediate High level while observing gains at Intermediate Low and Novice High.

Student 7

Student 7 was enrolled in Spanish 201, received a personalized LAP, and completed APUS #3 only. In response to APUS Item #3, Student 7 reported the lowest indicated level of confidence when listening to songs, watching videos, or reading websites in Spanish, selecting “I am worried. I don’t think I’m good at that.” Student 7 completed only one APUS and thus did not provide a score on the variable of change in autonomy.

On APUS Item #6, Student 7 reported using the personalized LAP for zero to 15 minutes per day over the two-week average. Student 7’s response to Item #5 indicated the LAP had been implemented zero days in the last two weeks; contrarily, the response to Item #13 indicated some

time spent engaged in activities from the LAP related to grammar and vocabulary. On Item #4, Student 7 reported a total amount out-of-class language practice, including assignments and LAP practice combined, of between 30 and 60 minutes a day, specifying in Item #7 that more time was devoted to completing course-required assignments than to practice per the personalized LAP.

On APUS Items #8 and 9, respectively, Student 7 reported strong alignment between the LAP and personal interests and some alignment between the LAP and language level.

In response to APUS Item #20, Student 7 ranked activities from most to least useful for meeting learning goals as follows: reading; speaking; word recognition; and online chat. For Item #19, Student 7 selected "language learning apps or videogames" as most useful, compared with "film, TV, podcasts, YouTube, or music" and "Google search and follow-up activities."

In response to Item #15, Student 7 indicated a preference for language learning apps over "music, YouTube, podcasts, TV or film" and "eBooks, chatting, or social media." On Item #21, Student 7 ranked activities from most to least preferred as follows: reading; language learning apps; speaking; online chat; music; tv; social media; videogames; and clubs. On Item #18, Student 7 indicated a preference for language learning apps over podcasts or YouTube and film or TV.

Student 7's responses to APUS Items #14 and 16, respectively, indicated most LAP-prescribed practice was private and digital in nature, and that Student 7 spent more time practicing comprehension than language production. In response to Item #12, Student 7 perceived some overlap between LAP-prescribed and in-class activities, although in response to Items #10 and 11 Student 7 reported "no" instance of either using or recalling a LAP-prescribed activity during Spanish class time.

Finally, Student 7 identified real-life distractions or technological problems as an obstacle to LAP implementation in response to APUS Item #17. Student 7 did not complete the FUS and thus did not provide data on the variable of change in perceived Spanish skills.

Student 8

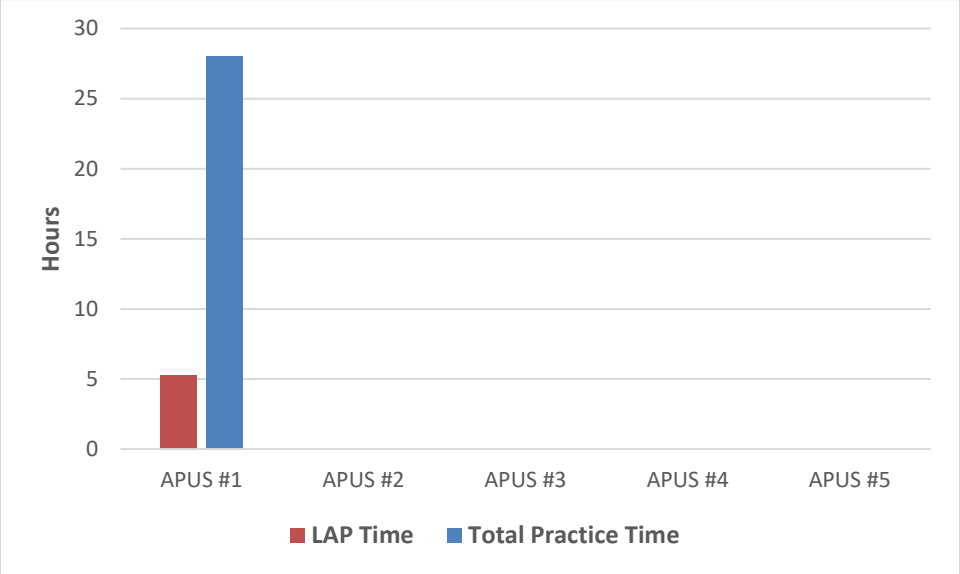
Student 8 was enrolled in Spanish 102, received a personalized LAP, and completed APUS #1 only, leaving five questions unanswered. In response to APUS Item #3, Student 8 reported the lowest indicated level of confidence when listening to songs, watching videos, or reading websites in Spanish, selecting "I am worried. I don't think I'm good at that." Student 8 completed only one APUS and thus did not provide data on the variable of change in autonomy.

In response to APUS Item #6, Student 8 reported using the personalized LAP for between 15 and 30 minutes per day over the identified two-week period. In response to Item #5, Student 8 reported using the LAP every day. Factoring frequency into plan use time, as reported, Student 8 used the LAP for between 3.5 and seven hours during the indicated two-week period, as calculated, also representing the calculated total reported hours that Student 8 spent during the Spring 2020 semester practicing Spanish per the researcher-provided personalized LAP.

For Item #4, Student 8 reported more than two hours a day of total out-of-class Spanish practice, including assignments and LAP practice combined, or a total of more than 28 hours, across the indicated two-week period. Further, Student 8 reported on Item #7 spending more time on required assignments than using the LAP. Figure 7 compares simple means calculated for LAP time and total combined Spanish practice for Student 8. As compared, Student 8 reported spending 18.75% of total practice time engaged in LAP-specified activities.

Figure 7

Student 8 Semester Practice Means



On APUS Items #8 and 9, respectively, Student 8 reported some alignment between the LAP and both personal interests and perceived language level.

On APUS Item #13, Student 8 indicated the division of LAP-prescribed activities among equal opportunities for practicing grammar and vocabulary and culture and/or geography. Student 8's responses to Items #14 and 16, respectively, indicated most LAP-prescribed practice was private and digital in nature, and that Student 8 spent more time practicing comprehension than language production. In response to Item #12, Student 8 perceived some overall overlap between LAP-prescribed and in-class activities and, in response to Item #10, reported using a few things from the LAP in Spanish class. Student 8 did not respond to APUS Item #11.

In response to APUS Item #15, Student 8 indicated a preference for "music, YouTube, podcasts, TV or film" over language learning apps and "eBooks, chatting, or social media."

Student 8 identified real-life distractions or technological problems as an obstacle to LAP implementation in the response to Item #17. Student 8 did not respond to APUS Item #21 or to Items #18, 19, 20, or 21 and thus did not rank activities according to usefulness for meeting learning goals.

Finally, Student 8 did not complete FUS and thus did not provide data on the variable of change in perceived Spanish skills.

Student 9

Student 9 was enrolled in Spanish 303, received a personalized LAP, and completed APUS #1 and 3. In both responses to Item #3, Student 9 reported the lowest indicated level of confidence when listening to songs, watching videos, or reading websites in Spanish, thus producing a score of zero for the variable of change in autonomy.

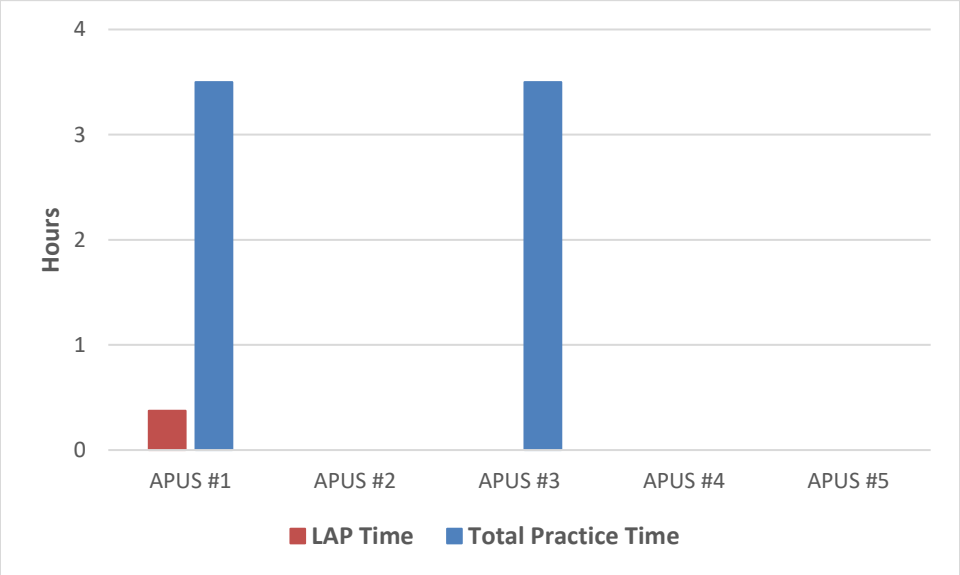
In response to Item #6 on both APUS #1 and 3, Student 9 reported using the personalized LAP for between zero and 15 minutes per day over each of the indicated two-week periods. In response to Item #5 on APUS #1, Student 9 reported using the LAP one to two days, interpreted as one to two days a week across the indicated two-week period; on APUS #3, Student 9 reported using the LAP zero days. Factoring frequency into plan use time, as reported, Student 9 used the LAP for a calculated amount during the two-week reporting periods indicated: zero to 45 minutes for APUS #1; and zero hours for APUS #3. Thus, Student 9 spent a calculated total of between zero and 45 minutes practicing Spanish per the researcher-provided personalized LAP during the Spring 2020 semester.

For Item #4 on both APUS #1 and 3, Student 9 reported between zero and 30 minutes of total out-of-class Spanish practice, including assignments and LAP practice combined, that is, a total of between zero and seven hours, across each of the indicated two-week periods. Further,

Student 9 reported on Item #7 for both APUS #1 and 3 spending more time on required assignments than using the LAP. Figure 8 compares simple means calculated for LAP time and total combined Spanish practice for Student 9. As compared, Student 9 reported spending 5.36% of total practice time, that corresponding to APUS #1 administration, engaged in LAP-specified activities.

Figure 8

Student 9 Semester Practice Means



The following characterizes Student 9's use of the personalized LAP based on responses to APUS #1 only. On Item #5, Student 9 reported using the LAP one to two days a week over the first two weeks of data collection, spending most time engaged in activities related to grammar and vocabulary as reported in Item #13. Student 9's response to Items #14 and #16, respectively, indicated most LAP-prescribed practice was private and digital in nature, and that Student 9 spent more time practicing comprehension than language production. Student 9 reported strong alignment between the LAP and both personal interests and perceived language level on Items #8

and 9, respectively. In response to Item #12, Student 9 perceived some overall overlap between LAP-prescribed and in-class activities and, in response to Item #10, reported using a few things from the plan in Spanish class or to complete a required assignment. In response to Item #11, however, Student 9 reported not recalling any LAP activity during class. In response to Item #17 on APUS #1, Student 9 reported real-life distractions and technical problems as obstacles to using the personal plan.

In response to APUS Item #15, Student 9 indicated a preference for "music, YouTube, podcasts, TV or film" over language learning apps and "eBooks, chatting, or social media." On Item #19, Student 9 indicated language learning apps or videogames as most useful for meeting personal learning goals. In response to Item #20, Student 9 indicated reading as the most useful type of activity for meeting goals, followed by speaking, word recognition activities, and online chatting. On Item #21, Student 9 ranked activities from most to least preferred as follows: reading; speaking; language learning apps; clubs; music; online chat; TV; social media; and videogames. On Item #18, Student 9 indicated a preference for podcasts or YouTube over language learning apps and film or TV.

Finally, Student 9 did not complete FUS and thus did not provide data on the variable of change in perceived Spanish skills.

Together, Students 1 through 9 provided insights about LAP implementation, although their contributions to the data set were asymmetrical and incomplete. Table 10 summarizes data contributions, LAP implementation time, and one key characteristic of reported LAP implementation for each student.

Table 10

Student-by-Student Snapshot

Student	Course	APUS	LAP Total Hrs	% LAP of Total Practice	Snapshot
1	102	all + FUS	13–25	23	Strong confidence in LAP contributions
2	303	2	0–0.75	10	Low overall practice time
3	102	1–3	14.75–29.5	48.63	Even practice distribution
4	201	3	0		Generic LAP
5	303	1, 5 + FUS	7–14	37.5	High practice time; changed skills and confidence
6	303	2–4 + FUS	12.25–24.5	29	Two reports of more time for LAP than for required assignments
7	201	3	0		Strong preference for language learning apps
8	102	1	3.5–7	18.75	High practice; low confidence; incomplete APUS #1
9	303	1 + 3	0–0.75	5.36	APUS #3: “Did not use” LAP

Note. $N = 9$.

As observed, each student uniquely provided to a growing understanding of language autonomy plans.

Collective LAP Implementation by Variable

APUS collected data on the variables of time, frequency, obstacles, overlap, usefulness, language preferences, technology preferences, and change in learner autonomy, in addition to alignment for which data was previously reported. The Pre- and Post- Can-Do Self-Assessments of Spanish Skills, together, provided data for calculating a value for change in perceived Spanish skills. FUS provided additional data on the variable of change in learner autonomy. This section reports all data collected, analyzing it essentially in terms of descriptive statistics.

Time, Frequency, and Obstacles

APUS Items #4, 6, 5, and 17 collected data from nine students on the variables of daily combined practice time, daily LAP implementation time, and weekly LAP frequency, treated as ordinal variables, and on the categorical variable of obstacles, respectively. Data from APUS Items #4 and 6 permitted comparison of the total reported time for overall daily language practice, including LAP activities and course assignments combined, with student's LAP implementation time, calculated to account for reported frequency. Data about obstacles provided insight about the variable LAP implementation time.

Table 11 displays the calculated mean and the observed mode for daily combined practice. This is based on five administrations of APUS Item #4; the calculated mean for total amount of daily combined practice in the semester; and the calculated mean for LAP implementation time in the semester, based on responses to APUS Items #5 and 6, all measured in hours, for each student.

Table 11

Students' Practice Time in Hours

Student	Daily Combined Mean	Daily Combined Mode	Total Combined Mean	LAP Time Mean
1	0.8–1.6	1–2	84.5	19.5
2	0–0.5	0–0.5	28	0.375
3	0.4–0.9	0.5–1	45.5	22.125
4	0–0.5	0–0.5	3.5	0
5	>2	>2	28	10.5
6	1–2	1–2	63	18.375
7	0.5–1	0.5–1	10.5	0
8	>2	>2	28	5.25
9	0–0.5	0–0.5	7	0.375

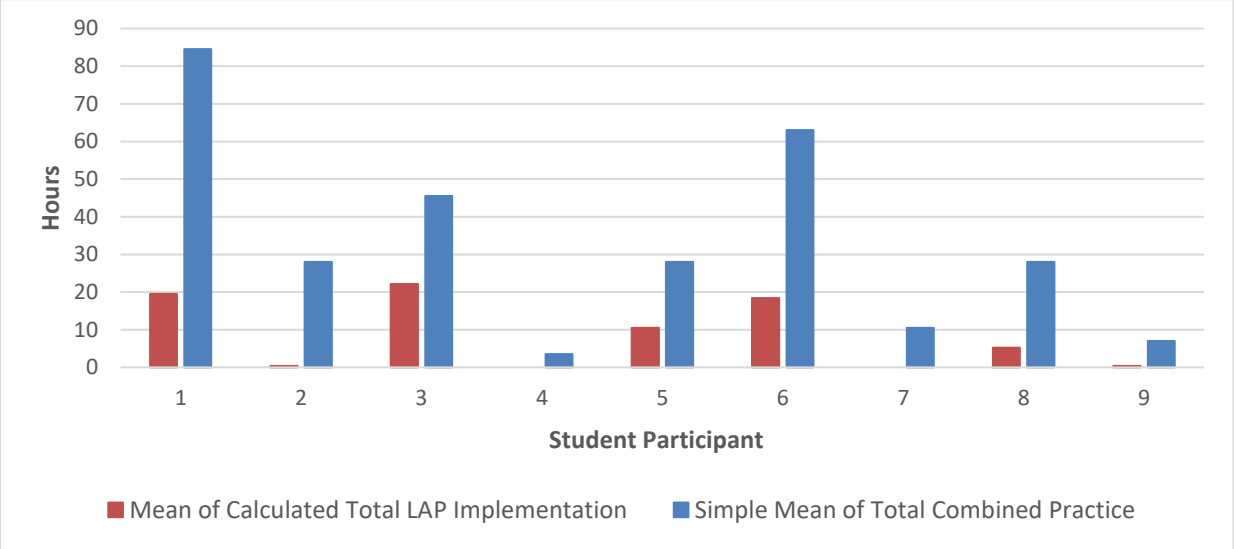
Note. $N = 9$.

The calculated daily average of combined practice time indicates an average range of between 0 and more than 120 minutes, although results showed spread across responses from students. Observing the mode for each student indicates three students most often spent zero to 30 minutes per day practicing Spanish all together, including LAP and course-required activities combined; two students spent 30 to 60 minutes a day; two students spent between one and two hours a day; and two students practiced Spanish altogether for more than two hours a day on average. Generally, Students 1, 3, 5, and 6 reported higher levels of both LAP-prescribed practice time and frequency than Students 2, 4, 7, 8, and 9.

Figure 9 shows the side-by-side comparison of calculations for each student's total LAP implementation time and total combined Spanish practice time. As shown, Students 1 and 6 practiced most overall, with Student 6's LAP implementation representing a higher percentage of total reported practice time for any single individual. Student 3 reported the highest amount of LAP implementation time overall. However, Student 3 had a smaller amount of combined practice time when compared to Students 1 and 6; thus, Student 3's LAP implementation time represented a greater percentage of total combined practice.

Figure 9

LAP Implementation and Total Practice Time for Spring 2020



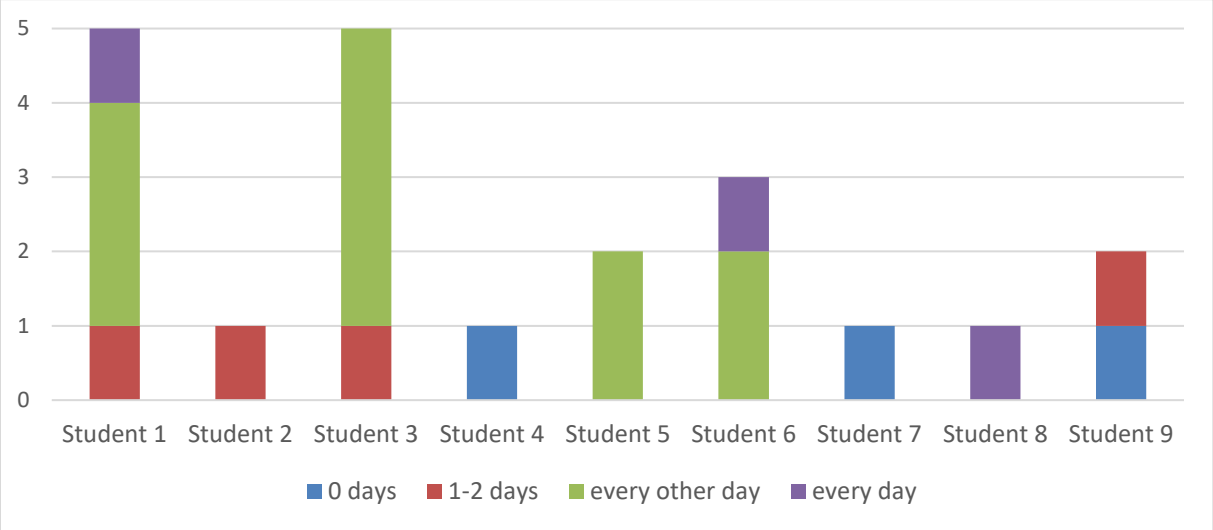
Student 4 reported the smallest total amount of practice time; however, Student 4 did not receive a personalized Spanish plan as requested and that student's responses to APUS are difficult to interpret.

Student 7's responses may suggest a focus on required assignments over LAP implementation, although Student 7 responded to a single administration of APUS while Students 1, 3, and 6 responded to two, five, and three administrations, respectively, thus complicating the comparison.

APUS Item #5 collected data on LAP implementation frequency, used to calculate LAP implementation time reported above. Figure 10 shows the distribution pattern of reported LAP implementation frequency.

Figure 10

LAP Implementation Frequency Reports by Student



Note. The *y*-axis represents the number of APUS students filled out over the course of the study. For example, Student 1 reported LAP implementation five times, once for each APUS, with one report of 1–2 days, three reports of every other day, and one report of every day.

As shown, students who completed relatively more APUS administrations also tended to report higher LAP implementation frequency, relative to other participants. The most commonly reported LAP implementation frequencies overall were every other day and every one to two days, interpreted as every one to two days per week across a two-week reporting period. Among four students, the most commonly reported frequency was every other day, for which Student 1 reported three times, Students 5 and 6 reported two times, and for which Student 3 persisted across four APUS administrations. Students 1, 6, and 8 each reported everyday LAP implementation one time. Students 4 and 7 reported an average implementation frequency of zero days. Figure 11 displays changes in reported frequency over time.

Table 12 displays means for daily combined practice, in hours, and LAP implementation frequency scores on an ordinal scale from one to four, as reported, for each student across five APUS administrations, abbreviated A-1 through A-5; the table reflects missing scores. Generally, the table indicates a decrease in practice over time, shown visually in Figure 11.

Table 12

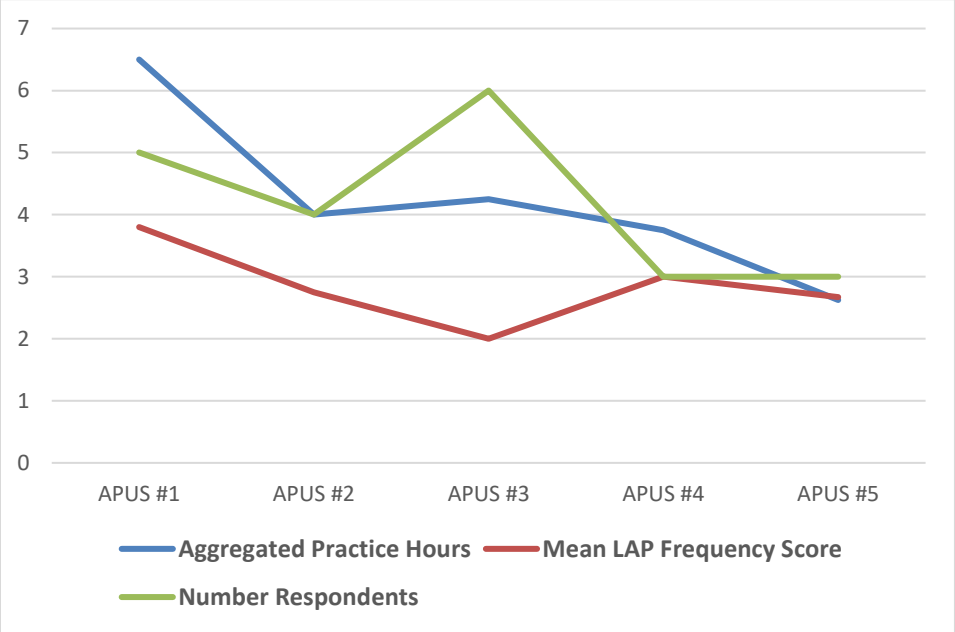
Changes in Amount and Frequency Over Time

	Mean Daily Combined Practice					LAP Frequency Score				
Student	**A-1**	**A-2**	**A-3**	**A-4**	**A-5**	**A-1**	**A-2**	**A-3**	**A-4**	**A-5**
1	1.5	1.5	0.75	1.5	0.375	4	3	2	3	3
2		0.25					3			
3	0.75	0.75	0.75	0.75	0.25	3	3	3	3	2
4			0.25					1		
5	2				2	3				3
6		1.5	1.5	1.5		3	4	3		
7			0.75				1			
8	2				4					
9	0.25		0.25		2		1			

Note. $N = 9$. Bold font indicates a specific APUS.

Figure 11

Combined Practice and LAP Implementation Frequency Over Time



The amount of weekly total Spanish practice, including LAP activities and required assignments combined, decreased over the course of data collection. Students' self-reported frequency of LAP implementation dropped at the time of APUS #3, which had the highest number of respondents of any APUS administration. Students 3, 5, and 6 were the only respondents to APUS #5.

Finally, APUS Item #17 collected data on the variable of obstacles, seeking insight about LAP implementation or lack thereof. Of the total 21 responses across five APUS administrations, 16 indicated "real-life distractions, including tech problems" as an obstacle to trying to use the LAP; one response indicated activities were too hard or too boring; one indicated no obstacles to plan implementation; and Student 4's single APUS response reported not using the LAP. For all five APUS, at least two students reported real-life distractions, including tech problems; however, Item #17 was not specific enough to really shed light on obstacles to LAP

implementation, especially important had students reported sufficient data in order to conclude a failure to implement LAPs, which they did not.

LAP and Class Overlap

APUS Item #12 collected data on the variable of overlap. From the total 21 responses to Item #12 across five administrations of APUS, five indicated strong overlap between Spanish class and activities from the personal plan; 13 indicated some overlap; one indicated no overlap; and Students 4 and 9 reported not using the personal plan on APUS #3.

APUS Items #10 and 11 provided more specific data about the variable of overlap but, perhaps more importantly, helped operationally define the variable for students at the time of survey completion. I further intended Items #10 and 11 as support for students' cognitive strategies, specifically drawing attention to the potential for bridging in-class and out-of-class learning experiences, that is, for using and recalling LAP activities during class time or to complete required assignments. From the total 21 responses to APUS Item #10, eight indicated using many things from the personalized LAP to complete an in-class activity or class assignment; six indicated using a few things; six indicated using nothing; and Student 4 reported not using the LAP. Responses on Item #11 showed relative consistency on Item #10, although Student 8 did not respond. From the total 20 responses to Item #11, six indicated recalling many things from the personalized LAP during Spanish class; nine indicated recalling a few things; three indicated no recall; and Students 4 and 9 reported on APUS #3 not using the LAP.

Language and Technology Preferences

APUS also collected data on the variables of language preferences and technology preferences. The study operationally defined language preferences three ways: content preference (APUS Item #13), communication mode preference (APUS Item #14), and language

function preference (APUS Item #16). The study also defined the variable of technology preferences three ways: media mode preference (APUS Item #15), media preference (APUS #18), and media rank (APUs Item #21).

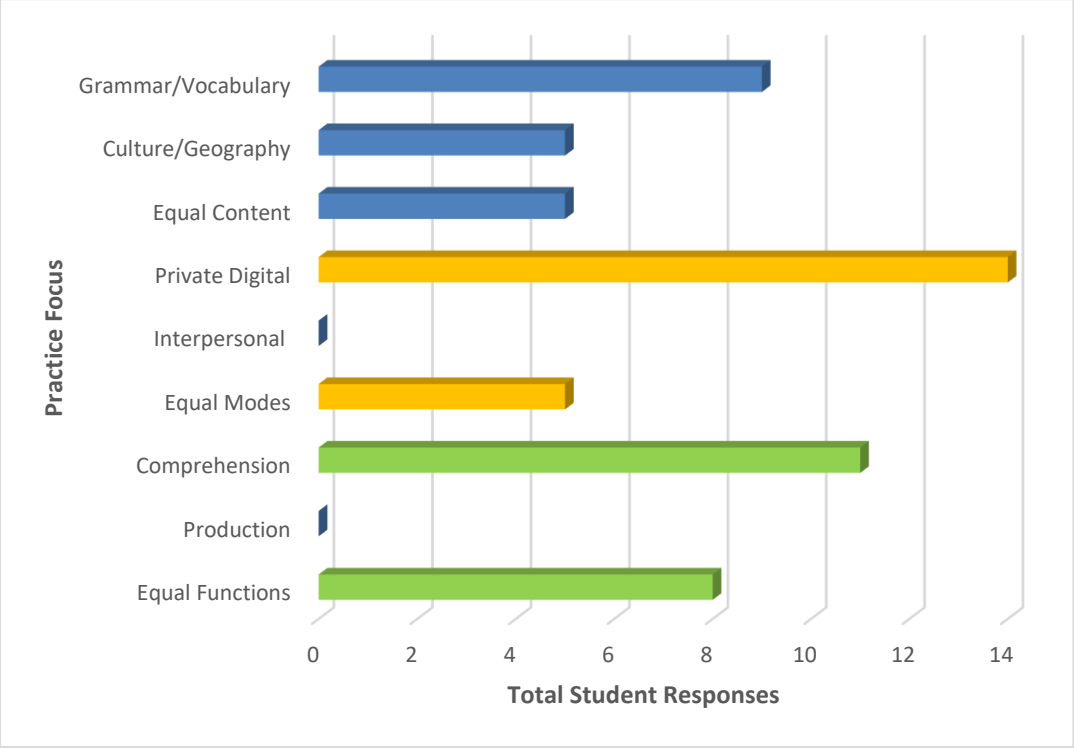
The study's nine respondents provided a total of 21 responses across five APUS administrations to Items #13, 14, and 16 each, ten of which came from Students 1 and 3 alone for each set. Students 4 and 9 reported not using the personal plan on APUS #3. Figure 12 displays a summary of all responses according to the foci of students' practice.

Of the 21 total responses to APUS Item #13, nine indicated the student spent most LAP time on activities related to grammar and vocabulary; five indicated the student spent most time on activities related to culture and geography[7]; and five indicated the student spent an equal amount of time on plan activities related to grammar/vocabulary and culture/geography.[8]

[7] Four of these five "culture and geography" responses belonged to Student 1.
[8] Four of these five "equal" responses belonged to Student 3.

Figure 12

Language Practice Foci by Number of Student Responses



Of the 21 total responses to APUS Item #14, 13 indicated the student spent most LAP-related practice time on private digital activities; zero indicated the student spent most time communicating with people; and five indicated the student spent an equal amount of time engaged in private digital activities and communicating with people.[9]

[9] Four of these five responses of "equal" belonged to Student 3.

Of the 21 total responses to APUS Item #16, 11 indicated the student spent most LAP-related practice time on language comprehension activities; none indicated the student spent most time on language production activities; and eight indicated the student spent an equal amount of time understanding and producing Spanish.

The nine students also provided a total of 21 responses to Item #15 across the five administrations of APUS, ten of which came from Students 1 and 3. Of all responses to Item #15, 16 indicated "music, YouTube, podcast, TV or film" as the most liked plan activity type[10]; three indicated "language learning apps (Mango, Duolingo, etc.)" as most liked[11]; and none indicated "eBooks, chatting, or social media" as most liked.

APUS Items #15 and 18 were unintentionally similar. Of the total 20 responses to APUS Item #18 from eight students[12] across five APUS administrations, nine indicated "podcasts or YouTube" as the most liked plan activity[13]; six indicated "film or TV, including sports" as most liked, three of which belonged to Student 1; and three indicated "language learning apps (Mango, Duolingo, etc.)" as most liked.[14]

Item #21 asked students to rank practice plan activities according to personal preference. Figure 13 shows the number of times in the total 20 responses that an activity ranked among the top three preferred activities listed. As shown, speaking or pronunciation ranked among the top three preferred activities 12 times, followed by music or podcasts nine times, and TV or film seven times.

---

[10] Ten of these 16 responses of "music, YouTube, podcast, TV or film" belonged to Students 1 and 3.

[11] Two of these three "language learning apps" responses belonged to Student 5 and represented that student's total number of responses to Item #15 across all surveys completed.

[12] Student 8 did not respond to Item #18 or #21 on APUS #1.

[13] Three of the nine "podcasts or YouTube" responses belonged to Student 6 and represented that student's total number of responses to Item #18 across all surveys completed.

[14] Two of these three "language learning apps" responses belonged to Student 5 and represented that student's total number of responses to Item #18 across all surveys completed.

Figure 13

Top Three Preferred Practice Plan Activities

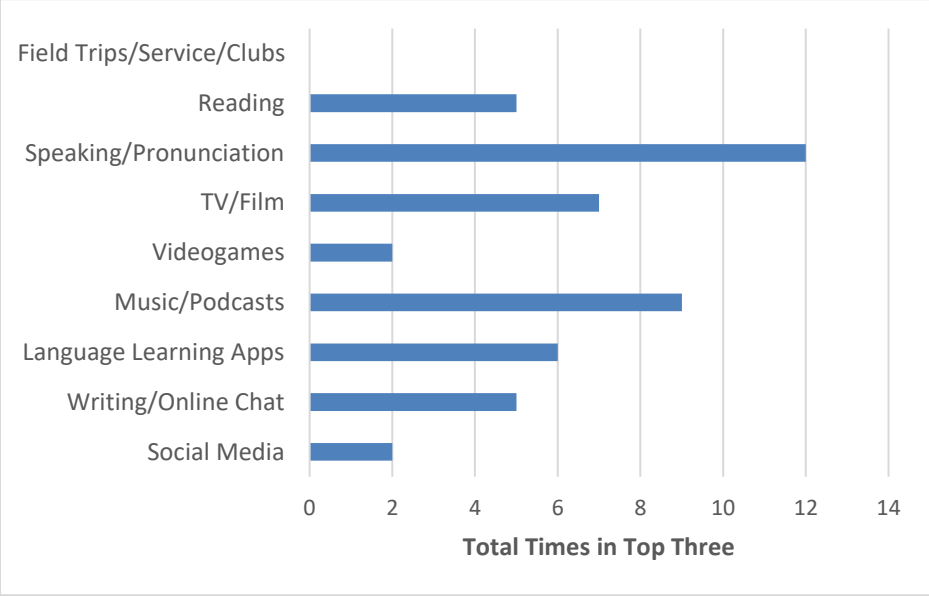
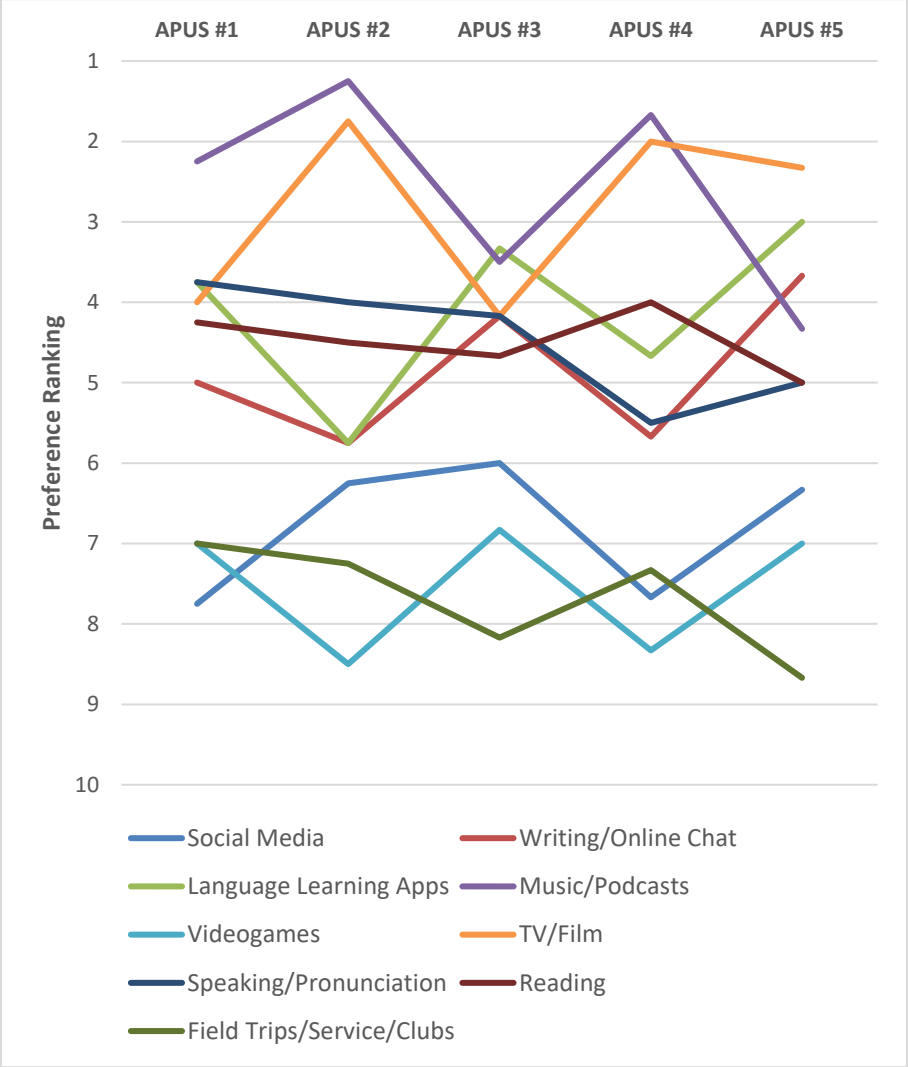


Figure 14 shows the relative preference of activities over time, as determined by comparing mean rank scores for each activity reported across five APUS administrations. As shown, students in the study consistently preferred music or podcasts and TV or film, while social media, video games, and in-person field trips, service, or club activities were consistently least preferred among all activities listed in Item #21. In-person activities were likely impossible after Week 7, during which APUS #3 was administered, due to the pandemic.

Figure 14

Activity Preferences Over Time



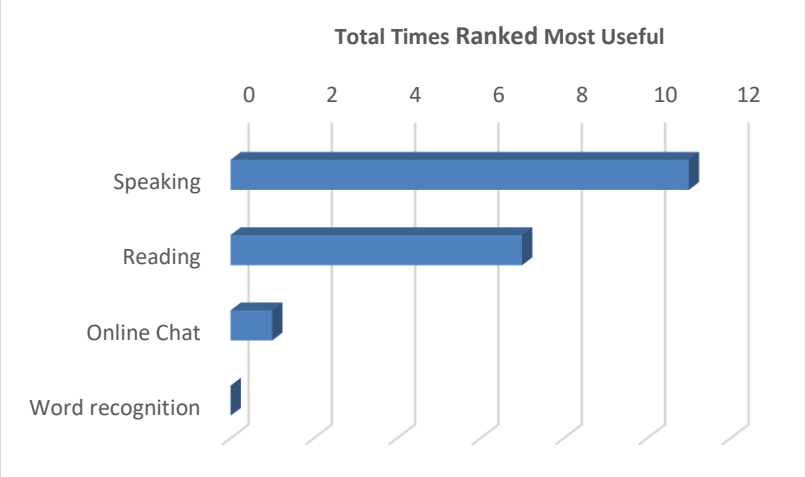
Activity Usefulness

APUS Items #19 and 20 collected data on the variable of usefulness to determine if students' perception of the usefulness of an activity was related to the amount and kind of out-of-class practice in which they engaged. Again, Students 4 and 9 reported on APUS #3 they did not

use the LAP. Of the total 20 responses[15] to Item #19, eleven identified "film, TV, podcasts, YouTube, or music" as the most useful type of activity for meeting personal learning goals[16]; six identified language learning apps or videogames as most useful; and one identified Google search and follow-up activities as most useful. Item #20 asked students to rank activities according to usefulness for meeting personal learning goals. Figure 15 shows the number of times in the total 20 responses that an activity was ranked as the most useful activity among all those listed. Of the 20 collected responses to Item #20, 11 indicated speaking activities were most useful for meeting learning goals[17]; seven indicated reading activities were most useful; one indicated online chat activities were most useful; and none indicated word recognition activities as most useful.

Figure 15

Relative Perceived Usefulness of Activity by Language Domain



[15] Student 8 did not respond to either item on the Usefulness variable.

[16] Eight of these 11 "film, TV, podcasts, YouTube, or music" responses belonged to Students 1 and 3 collectively.

[17] Ten of these 11 "speaking" responses belonged to Students 1 and 3.

Changes in Perceived Language Skills and Learner Autonomy

Overall, Students 2, 4, 7, and 8 provided only one response to APUS Item #3, and none of these students completed FUS. Therefore, these students did not provide data on the variable of change in learner autonomy.

Students 1, 3, 6, and 9 gave the same response, respectively, to every instance of APUS Item #3. Students 1, 3, and 6 each reported the highest indicated level of confidence, on a three-point Likert scale, to all responses provided: "I try my best [when I listen to songs, watch videos, or read websites in Spanish] and I love it!" On both APUS #1 and 3, Student 9 reported the lowest indicated level of confidence: "I'm worried [when I listen to songs, watch videos, or read websites in Spanish]. I don't think I'm good at that." Student 5 reported different confidence ratings in response to Item #3 on APUS #1 and 5, switching from the lowest indicated level of confidence to the highest, and was the only student to report change on this characteristic.

Students 1, 5, and 6 completed FUS in addition to at least one APUS. Later in this chapter, the section "Final Use Survey Results" compiles and compares FUS data. Here, the paragraphs below provide a student-by-student summary of the individual set of FUS data on the variables of change in perceived Spanish skills and change in learner autonomy.

Student 1 from Spanish 102 completed FUS in addition to APUS #1 through #5. In addition to consistently indicating high confidence on APUS Item #3, Student 1 responded "Definitely Yes" on FUS #8, which asked, "Did your Independent Practice Plan contribute to your ability to effectively practice Spanish on your own?" Student 1 also responded Yes on FUS #19 and 10, respectively indicating learned dependence on a new tool for language learning and a personal intention to continue using some tool from the personalized LAP. Student 1's responses to FUS Items #3, 4, and 7 provided additional insight about motivation and self-

efficacy, autonomy-related constructs. On FUS #3, Student 1 indicated practicing on one's own outside of class was Very Important to learning Spanish and, on FUS Item #4, Student 1 indicated having more confidence while practicing Spanish in class than outside of class. FUS Item #7 asked students to rate the effectiveness of Spanish practice on their own outside of class using a five-point Likert scale, with one being the highest indicated level of effectiveness. Student 1 indicated Moderately Effective, the equivalent value of three on the five-point scale.

Student 5 from Spanish 303 completed FUS in addition to APUS #1 and 5. The change in Student 5's confidence levels reported on APUS Item #3 is already noted. Student 5 also indicated Probably Yes on FUS Item #8 about LAP contributions to the ability to effectively practice Spanish independently. Student 5 indicated Yes on FUS Items #19 and 10, indicating a learned dependence on new tools for language learning as well as a personal intention to continue using some tool from the personalized LAP in the future. On FUS Item #3, Student 5 indicated out-of-class practice was Extremely Important to learning Spanish. On Item #4, Student 5 indicated having more confidence while practicing Spanish outside of class. On FUS Item #7 about perceived self-efficacy, Student 5 responded Very Effective.

Student 6 from Spanish 303 completed FUS in addition to APUS #2, 3, and 4. In addition to consistent reports of high confidence on APUS Item #3, Student 6 indicated Probably Yes on FUS Item #8 about LAP contributions to the ability to effectively practice Spanish independently. Student 6 indicated Yes on FUS Items #19 and 10, indicating a learned dependence on new tool for language learning as well as a personal intention to continue using some tool from the personalized LAP in the future. On FUS Item #3, Student 6 indicated out-of-class practice was Extremely Important to learning Spanish. On Item #4, Student 6 indicated

having more confidence while practicing Spanish in class. On FUS Item #7 about perceived self-efficacy, Student 6 responded Extremely Effective.

FUS Item #5 and the Pre- and Post- Can-Do Self-Assessments of Spanish Skills provided information on the variable of change in perceived Spanish skills. Again, only Students 1, 5 and 6 completed the combined instrument, FUS and Post- Can-Do Self-Assessment of Spanish Skills; they are they only students who provided data on the variable of change in perceived Spanish skills.

Student 1 increased 17 points between the pre- and post-self-assessments of Spanish skills. On FUS Item #5, when asked, "Do you think you can do more in Spanish now than you could at the start of the semester?", Student 1 responded Maybe; this potentially indicates Student 1's lack of confidence in the self-reported positive skill change. Student 5 increased 26 points between the pre- and post-assessment, supported by the same student's affirmative response to FUS Item #5. Student 6 increased five points, supported by that student's mid-level response to Final Use Survey Item #5. Sections below provide further discussion, including more information about the scale used to interpret these scores.

Student Comparisons

This study sought ideally to compare LAP implementation between students, particularly across different levels of Spanish course enrollment; however, the low number of student responses overall inhibited the ability to draw strong conclusions. A full comparison on variables cannot be made between all nine of the study's student participants, as only Students 1 and 3 responded to all five APUS administrations. A comparison between Students 1 and 3 represents the desired analysis, especially on the variables of alignment, time, and language and technology preferences, that was, in fact, limited by the small amount of data gathered. No single survey

administration collected data from at least one student at each level for the sake of comparing LAP implementation across the three Spanish course levels. As such, data from APUS #1 and 2, administered two weeks apart, are compiled here for the sake of exploring similarities and differences between two groups enrolled in different Spanish course levels. The data did not warrant other comparisons.

In comparing Students 1, 3, and 8 from Spanish 102 to Students 5 and 9 from Spanish 303 on APUS #1, there was a notable gap in initial confidence between the two groups, with Spanish 102 students reporting more confidence than Spanish 303 students at the beginning of the study.[18] In comparing Spanish 102 Students 1 and 3 with Spanish 303 Students 2 and 6 on APUS #2, Spanish 102 students spent more than twice as much time on LAP implementation than Spanish 303 students, or the difference between 33.75 and 14.48 minutes per day, respectively.[19] In comparing Students 1 and 3 from Spanish 102 with Students 6, 7, and 9 from higher course levels on APUS #3, Spanish 102 students implemented the LAP with more regular frequency than students at higher levels. The number of student responses to APUS #4 and 5 were too low to provide data for useful comparison within a single APUS administration.

Implementation Among Two Spanish 102 Students: Results of APUS #1–5

In summary, responses to APUS #1 through 5 indicate Students 1 and 3 started with a similar level of language skills and confidence. They reported similar ratings of language level– and interests–LAP alignment throughout. Students 1 and 3 also implemented the LAP for similar amounts of time and with similar frequency in the face of commonly identified obstacles, whereas Student 1 spent a greater amount of time practicing overall during the semester than

[18] Furthermore, Student 8 did not complete all items on APUS #1.

[19] Note that Spanish 303 Student 2 reported almost no practice time during the indicated data collection period.

Student 3. The form and type of LAP implementation did not radically differ from Student 1 to 3; however, Student 3 was observed more often to vary the kinds of LAP-recommended media, seemingly striving to balance language practice across content, domains, e-tools, and experiences. Overall, Students 1 and 3 exhibited similar media preferences and evaluations of the usefulness of identified resources. Below, the narrative directly and specifically compares Students 1 and 3 on all variables in the study.

Students 1 and 3 were enrolled in Spanish 102, received a personalized LAP, and completed APUS #1 through 5.[20] Only Student 1 completed FUS, although some months after its initial deployment.

Both students reported the strongest indicated level of confidence in all five responses to APUS #3, and both reported the highest indicated level for alignment between the LAP and language level, and between the LAP and personal interests, in all five responses to APUS Items #8 and 9, respectively.

Both students consistently reported daily combined practice and implementation of the LAP every other day on average. Students 1 and 3 reported approximately the same total amount of LAP implementation time for the data collection period, with Student 3 using the plan slightly more in the semester than Student 1. In the semester, Student 1 implemented the LAP for a calculated total of 19.5 hours, after factoring in frequency. Student 3 implemented the LAP for a calculated total of 22.125 hours in the semester, after factoring in frequency. Generally, Student 1's reported LAP implementation time increased from the semester's beginning to end, while Student 3's LAP implementation time decreased. For APUS #1, 2, and 3, Student 3 reported a time range for LAP implementation twice as high as Student 1. For APUS #4, both Students 1

[20] Student 3's second complete set of responses to APUS #3 are here analyzed as the results of APUS #4.

and 3 reported 30 to 60 minutes of LAP implementation. For APUS #5, Student 1 reported a time range twice as high as Student 3.

Students 1 and 3 also diverged in their reported amounts of overall combined practice time, including required course assignments and LAP implementation, with Student 1 reporting significantly more practice time overall. Four times, Student 1 reported on APUS Item #4 a combined practice time range twice as high as that of Student 3, three of which times Student 1 also reported on APUS Item #7 having spent more time on required course assignments than on LAP activities. On APUS #4 Item #7, Student 1 reported dividing combined practice time equally between required assignments and LAP activities. The total amount of combined out-of-class practice in the semester, including required course assignments and LAP implementation, was 83.5 hours for Student 1 and 45.5 hours for Student 3.

LAP implementation thus represented a different proportion of overall practice for Students 1 and 3. For Student 1, LAP implementation represented a calculated 23.08% of total combined practice during the semester. For Student 3, LAP implementation represented 48.63% of total combined practice. Both students reported real-life distractions, including tech problems, as obstacles to LAP implementation; Student 1 was the only participant in the study to report no distractions to LAP implementation, doing so in response to APUS #1 only.

Student 3 reported stronger overlap between LAP and in-class activities than Student 1. On a three-point Likert scale, three being highest, Student 1 reported a mean overlap score of 2.2 for the five responses; the mean overlap score for Student 3 was 2.8. Both students frequently reported using many things from the LAP during Spanish class or to complete a homework assignment. Four times out of five, Student 1 reported recalling a few things from the plan during class.

Of the eight students who reported using the LAP, Students 1 and 3 were among a total three that reported dividing time their LAP activities between language comprehension and production at least one time. All five times, Student 3 reported dividing time equally between comprehension and production; four times, Student 1 reported a focus on comprehension. Student 3 also reported dividing LAP practice equally across interpersonal communication and private digital language practice all times but one, for which private digital activities were the focus. Four of five times, Student 1 reported engaging most often in private digital activities; on APUS #1, Student 1 reported dividing LAP practice time equally between private digital activities and communicating with people. Again, Student 3 reported dividing LAP practice equally across grammar and vocabulary and culture and/or geography all times but one, for which grammar and vocabulary was the focus. On four of five APUS collections, Student 1 reported spending most time engaged in activities related to culture and/or geography; on APUS #3, Student 1 reported spending most time on grammar and vocabulary. Both students consistently indicated speaking activities were most useful for meeting learning goals, ahead of reading, online chat, and word recognition activities.

Both Students 1 and 3 most often ranked TV or film and music or podcasts as the most preferred LAP activity, although Student 3 twice ranked language learning apps in the top two. There was observed overlap between activity preferences and their perceived usefulness among APUS responses from both students. Student 1 consistently reported film, TV, podcasts, YouTube, or music as the most useful. On APUS #1, 3, and 5, Student 3 also indicated film, TV, podcasts, YouTube, or music as most useful for meeting personal learning goals; however, Google search and follow-up activities were identified as most useful on APUS #2, and language learning apps were marked most useful on APUS #3.

Student 3 did not complete FUS and, thus, no comparison between Students 1 and 3 is possible on the variables of change in perceived Spanish skills.

Comparing Spanish 102 to Higher Levels

Together, data from APUS #1 and 2, administered two weeks apart, allows limited comparison of Students 1, 3, and 8 from Spanish 102, with Students 5, 6, and 9 from Spanish 303 on a single set of responses from each identified student, from either APUS #1 or 2, for exploratory purposes only. Spanish 102 Students 1, 3, and 8, combined, and Spanish 303 Students 5, 6, and 9, combined, may or may not be representative of students in their respective levels of language study. Table 13 identifies sources of data analyzed here for the purpose of comparing LAP implementation across Spanish course levels. For the sake of comparing equal numbers of students from each group, the responses of Student 2 to APUS #2 were eliminated from group analysis, as all but three were identical to responses of Student 9 on APUS #1, with the exception of Items #10 (LAP–class overlap), 12 (LAP–class overlap), 20 (language domain usefulness), and 21 (media rank by preference).

Table 13

Student Data Sources for Comparing LAP Implementation Across Levels

	Spanish 102	Spanish 303
APUS #1	1, 3, 8	5, 9
APUS #2		6

Note. $N = 7$.

In general, students from Spanish 102 and 303 reported similar amounts of total combined practice time. Both groups also reported spending more time on required assignments than on LAP implementation. Students across the two course levels differed in (1) total amounts

and frequencies of LAP implementation, (2) the kinds of LAP-recommended activities in which they engaged, and (3) their confidence when listening to and comprehending Spanish-language media.

Table 14 compares group means for Spanish 102 and 303 during a two-week reporting period on the variables of total combined practice time and LAP implementation time, both in hours, as well as frequency, measured on an ordinal scale between one and four, with four representing maximum, or daily, LAP implementation. These variables represent the amount or degree of LAP implementation by each group. Though data is limited, the comparison of means suggests Spanish 102 students spent more time implementing the LAP than Spanish 303 students, although the two groups spent a relatively similar amount of time practicing Spanish overall, including LAP implementation and required course assignments.

Table 14

Group Means Based on Data from APUS #1 and #2

	Spanish 102	Spanish 303
Total combined practice time	>20.3 hrs	>18 hrs
LAP implementation time	5.25 hrs	2.69 hrs
Frequency	3.67	2.67

Note. $N = 6$. The table represents time in hours and represents frequency as the calculated mean of reported scores.

Table 15 further compares the two groups on appropriate measures of central tendency and displays individual scores on the variables of interests–LAP alignment, language level–LAP alignment, overlap, communication mode preference, and language function preference.

Additionally, Table 15 reports informally on confidence and focus, that is, the choice between spending time on LAP-recommended practice or on required assignments, as perceived and reported by students. These variables represent to some degree affective factors thought to influence LAP implementation, including aspects of learner autonomy and also the perceived value and contributions of an activity to learning. As shown, most students in both groups spent more time on (a) required course assignments and (b) comprehension practice. Data in the table suggest a difference between the groups with respect to the variable of communication mode preference: most Spanish 102 students reported spending equal time engaged in private digital language practice and attempts at interpersonal communication, whereas most Spanish 303 students preferred private digital language practice.

Table 15

Affect-Related Variables

	Spanish 102				Spanish 303			
	1	**3**	**8**	*Group Mean*	**5**	**6**	**9**	*Group Mean*
Confidence	3	3	1	2.33	1	3	1	1.67
Intrst Algn	3	3	2	2.67	3	2	3	2.67
Level Algn	3	3	2	2.67	2	3	3	2.67
Overlap	2	2	2	2	2	2	2	2
				Group Mode				*Group Mode*
Focus				Required				Required
Com Mode				Equal				Private digital
Lng Fxn				Comprehension				Comprehension

Note. $N = 6$. Bold font indicates a student identification number.

Groups differed notably on confidence, with Spanish 102 students expressing more overall confidence than Spanish 303 students when attempting to comprehend Spanish language media. The variable of confidence was not properly operationalized in the study and, as a result, data here may more likely represent Spanish 102 students' enthusiasm for learning Spanish or a

general sense of self-efficacy, or even tenacity at the beginning of the semester, rather than true confidence in language comprehension skills. Conversely, it may have been that Spanish 102 students overrated their abilities while Spanish 303 students had more realistic expectations for progress. Yet, the observed difference between scores on the Pre- Can-Do Self-Assessment for Students 1 and 6, from Spanish 102 and 303, respectively, suggested both students appropriately evaluated their own Spanish language skills at the start of the semester.

No other pattern emerged, either for use of or failure to implement the LAP. The minimal available data do not permit adequate comparison of Spanish 102 and 303 on the mode of variables related to preference or perceived usefulness for LAP activities, which may have provided information about students' cognitive behavior during LAP implementation. Student 8 did not complete the APUS used in the between-groups comparison, and answers varied within the Spanish 303 group.

Final Use Survey Results

Students 1, 5, and 6 were the only students to complete FUS, the last survey administered in the data collection timeline. Students 5 and 6 completed FUS during the planned timeframe; Student 1 also completed FUS but 97 days after its initial deployment. Students 1, 5, and 6 all received a personalized LAP. Responses to FUS from all three students provide data for qualitatively extending APUS responses about LAP implementation. Below, FUS data are reported in three subsections according to (1) learner characteristics, (2) perceived LAP contributions, and (3) a comparison of reported preferences. In each, a table identifies the student, respective course enrollment, and information about the variables on which data are reported.

Learner Characteristics

Table 16 summarizes responses from Students 1, 5, and 6 on FUS Items #3, 7, and 9, about limited information on the learners' characteristics and personal approach to language learning, as interpreted by the researcher. The final column reports group means for the perceived importance of out-of-class practice and the self-reported effectiveness of each student's independent practice.

Table 16

Learner Characteristics of Students 1, 5, and 6

	Student 1	Student 5	Student 6	Mean Score
Spanish course (#2)	201	303	303	
Practice importance (#3)	Very	Extremely	Extremely	1.33
Self-efficacy (#7)	Moderately	Very	Extremely	2
Familiarity (#9)	New	Familiar	Familiar	

Note. $N = 3$.

In response to FUS #3, Students 1, 5, and 6 all indicated a high degree of importance for practicing on one's own outside of class in order to learn Spanish, with two students indicating the maximum value of 1, or Extremely Important, on the five-point Likert scale, and with one student indicating the next highest score on the scale. In response to Item #7, all students also indicated a positive evaluation of their own Spanish practice outside the classroom, with Student 1, enrolled in the lowest level of Spanish coursework studied, reporting the lowest score for perceived efficacy of independent practice. For Item #9, Student 1 also indicated most plan-prescribed activities were new, whereas Students 5 and 6, enrolled in Spanish 303, indicated most plan-prescribed activities were familiar. The difference between the Spanish 102 student and the Spanish 303 students on Item #9 may generally reflect differing degrees of prior

experience with learning Spanish. More interestingly, this difference may inform the interpretation of the overall impact of the LAP on learning, as reported by the student.

Perceived Positive Contributions of the LAP

Table 17 summarizes contributions of the personalized LAP, as perceived by Students 1, 5, and 6, and reported in response to FUS Items #5, 6, 8, 12, 13, 14, 16, and 23. The final column reports group means for (a) overall experience rating, and LAP contributions to (b) the ability to practice Spanish independently, (c) learning in general, (d) meeting personal learning goals, (e) the amount of overall practice, (f) the intention to use some aspect of the LAP in the future, and (g) language skills. All three students positively evaluated LAP implementation, generally citing contributions to the amount and ways in which they practiced Spanish over the course of data collection.

Table 17

Positive LAP Contributions

	Student 1	Student 5	Student 6	Mean Score
Spanish course (#2)	201	303	303	
Experience rating (#23)	A	B	A	1.33
Autonomy (#8)	Definitely yes	Probably yes	Probably yes	1.67
Learning (#14)	Yes	Yes	Yes	
Goals (#16)	Yes	Yes	Yes	
Time (#12)	Definitely yes	Definitely yes	Probably yes	1.33
Motivation (#6)	Yes	Yes	Yes	
Language skills (#13)	Definitely yes	Probably yes	Probably yes	1.67
Skill increase (#5)	Maybe	Yes	Maybe	

Note. $N = 3$.

In response to FUS Item #23, Students 1 and 6 both assigned the grade of A to the overall experience of using an independent practice plan throughout the semester; that is, both rated the experience as a one on a five-point Likert scale, with one representing the most positive overall

experience. Student 5 assigned the experience the grade of B, or the value of two on the same scale.

Using the four-point Likert scale on FUS Item #8, with one representing the highest indicated level of confidence, Students 1, 5, and 6 gave a mean rating of 1.67 to the LAP's contribution to the ability to effectively practice Spanish on one's own.[21] Interpretations to FUS Items #14 and 16 are more precise. Students 1, 5, and 6 all indicated on a three-point Likert scale the LAP positively contributed to learning in general and to helping meet personal learning goals, respectively. Furthermore, in response to FUS Item #10, all three students indicated they planned to continue using some aspect of the personalized LAP in the future. They also all indicated on the two-point, forced-choice FUS Item #6 the LAP motivated them to visit a new place or learn something new.

In response to FUS Item #12, Students 1 and 5, enrolled in different levels of coursework and exhibiting relatively greater increases in language skills than Student 6, indicated LAP implementation definitely increased total time spent practicing Spanish. Specifically, Students 1 and 5 rated the contribution of LAP implementation to practice time as a one on a five-point Likert scale, with one, or Definitely Yes, being the maximum evaluation. Student 6 indicated a score of two, or Probably Yes, in response to Item #12 on the contribution of LAP to total practice time. Thus, the mean score of the three students for the LAP contribution to practice time was 1.33 on a five-point scale, with one representing the highest level of confidence in the LAP's ability to increase total practice time.

---

[21] The even-point scale in FUS Item #8 may have inappropriately forced students to provide an evaluation that was either positive or negative overall.

FUS Items #5 and 13, as well as the calculated difference between scores on the Pre- and Post- Can-Do Self-Assessments of Spanish Skills, are used here to interpret contributions of the personalized LAP to a change in language skills in the cases of Students 1, 5, and 6. The mean score of all three students on FUS Item #13, confidence in LAP contributions to Spanish skill gains, was 1.67 on a five-point Likert scale, with one being the highest score to indicate maximum confidence in the LAP's contributions to gains in Spanish language skills during the data collection semester. In the case of the three-point scale used in FUS Item #5, which asked if the student could do more in Spanish at the end of the semester than at the start, a calculated mean value was not helpful. Both Students 1 and 6 responded Maybe on FUS Item #5, while student 5 responded Yes. Specific interpretations are provided below in light of scores on the variable of change in Spanish skills, calculated as the difference between the pre- and post-test scores on the Can-Do Self-Assessment of Spanish Skills.

In response to Item #13, both Students 1 and 6 indicated the personalized LAP Probably helped them gain Spanish language skills during the semester; that is, they indicated a score of two on a five-point Likert scale, with one being equivalent to Definitely Yes, or the highest level of confidence in the LAP's contribution to a language skills increase. For Student 6, enrolled in Spanish 303 and exhibiting the highest self-reported levels of confidence and self-efficacy, the aggregate skill change score was positive five, relatively low on a scale of a possible 212 change points, without consideration of an average starting score for intermediate-level language students. By comparison, Student 1, in Spanish 201, produced a calculated aggregate skill change score of positive 17, and Student 5 produced a skill change score of positive 26. Student 5 also indicated Yes, or the maximum score, in response to the three-point Likert scale on FUS Item #5, thus supporting the self-reported perception of Spanish skill gains; Student 5 also

indicated Probably Yes in response to FUS Item #13 about LAP contributions to language skill gains, that is, the score of two on the five-point Likert scale.

Variety and Personalization

Finally, Table 18 summarizes a comparison of open-ended responses from Students 1, 5, and 6 to FUS Items #20–22, generally asking which aspects of the LAP might be kept or revised for future use. Students 1, 5, and 6 made specific recommendations for the additional provision of the following activities on LAPs: on-campus resources, a week-by-week activity schedule, and a greater number of authentic Spanish-language resources, respectively. Differences in their recommendations may or may not reflect the successful personalization of LAPs per responses to the BQ.

Table 18

Comparison of Personal Preferences

	Student 1	Student 5	Student 6
Course (#2)	Spanish 201	Spanish 303	Spanish 303
Retain (#20)	Variety	Native speakers	Title recommendations
Improve (#21–22)	On-campus resources	Weekly guide	Authentic resources

Note. $N = 3$.

All three students preferred variety in plan-prescribed activities. On FUS Item #20, asking which LAP aspects should be kept, Student 1 responded, “The variety of resources provided.” On FUS Item #22, asking which aspects to improve, Student 5 expressed a need for help in “branching out more, away from things I was familiar and comfortable with.” On the same item, Student 6 suggested providing additional authentic resources and personally recommended the Andalusian radio station, Cadena Sur. On FUS Item #21, asking which LAP aspects to eliminate, Student 6 also commented, “I wouldn’t say any of it should be cut, the more

possible suggestions for a student to be interested in is all the better, even if some end up ignored."

Whereas Student 6 requested more variety, and potentially freedom, among LAP activities, Student 5 preferred stronger guidance from the LAP to help vary the types of independent practice. On FUS Item #21, Student 5 commented, "I think there should be a little more structure a little less free-form to the plan. Maybe a week-by-week outline of certain activities to try. I found myself doing a lot of the same things over and over again, not wanting to try new things. I feel like a weekly plan with varied activities may help students branch out more." The difference in reactions from Students 5 and 6 to the provision of guidance on the LAP seemingly corresponds to respective levels of confidence and self-efficacy, that is, to levels of language learner autonomy, expressed by these same students on APUS surveys and previously reported in Sections 4 and 5 of this chapter.

Summary

This chapter reported the results of data collection outlined in Chapter 3 Methods, organizing the presentation according to descriptions of the participants and setting, the development of language autonomy plans, student LAP implementation, collective student implementation by variable, a minimal comparison of implementation across students, and results of the FUS. The next chapter, Summary and Discussion, reviews these results in light of the study's objectives, presents implications and relates them to literature reviewed in Chapter 2, addresses the validity and generalizability of results, summarizes the overall importance of this study's findings, makes tentative recommendations for any future attempt to implement LAPs, and provides suggestions for continued research.

CHAPTER 5

SUMMARY AND DISCUSSION

The analysis of results presented in Chapter 4 provided for limited conclusions about students' implementation of language autonomy plans and their effective integration in university SFL instruction. Nevertheless, the data set did not deny the presence of trends within and between students. While it did not conclusively demonstrate the ability of LAPs to increase Spanish practice or skills, it did not suggest LAPs were detrimental to learning in any way. Furthermore, responses from three students to the FUS provided valuable insights with regard to the LAP's positive contributions to learning overall. Generally interpreted, the results of this study may point toward the lack of willingness as an ongoing obstacle to implementing technology for out-of-class language learning. Yet, at a minimum, the study resulted in the LAP template and process for personalizing it, for either teacher or student exploration and use, which may eventually be used to successfully direct out-of-class language learning with or without technology, particularly among more highly motivated students.

Review of Results

Descriptive statistical and qualitative descriptive analyses of the data set produced results for observing (a) an unwillingness to seek personalized LAPs; (b) LAP contributions to increases in practice time, perceived Spanish skills, and language learner autonomy; (c) the LAP template's potential as a pedagogical tool; and (d) the successful LAP personalization process for

ascertaining and addressing learners' interests, goals, and needs. These observations frame the overview of the results of analysis presented below.

Unwillingness

The study sought to discover if LAP implementation promoted university students' Spanish practice outside the classroom, particularly with technology, as represented by the amount of time they devoted to implementation above and beyond course requirements. In the present study, all LAP aspects were voluntary, including the request for personalization and subsequent implementation and usage reporting. This follows Lai (2013), which found students' attitudes toward technology, including motivation, perceived usefulness, and compatibility between recommended resources and learning preferences, shaped their decisions to use technology for out-of-class language learning. Of a minimum possible 93 students in the present study, 15 sought a personalized LAP and eight reported using it. Those students who completed more surveys, relative to other student participants, also reported higher levels of LAP implementation frequency; a coincidence between willingness to complete surveys and to implement LAPs may have indicated the presence of motivational or other factors. Parallelly, low enrollment in the study may have represented characteristic disinclination among university SFL students to complete tasks not assigned as course components; and participants' failure to report LAP implementation may have suggested either similar disinclination or a reluctance to engage in out-of-class language learning with technology. Thus, this study's findings echo Lai's (2013) call to direct initial interventions at learners' willingness to adopt technology in the first place.

Importantly, implementation of personalized LAPs among eight participants was low despite data from the same students showing perception of (a) strong alignment between the

plans and both personal interests and language levels, and (b) at least some degree of overlap on average between LAPs and in-class activities. Data analysis suggested activities were not too difficult or too boring but was unable to concretely identify potential obstacles beyond those related to real-life distractions. Students' motivation may have been dynamic throughout Spring 2020, rising and falling, and may have come from different sources (McLoughlin & Mynard, 2018). All students who responded to FUS indicated the LAP motivated them to visit a new place or to learn something new. Findings also suggested students who learned to depend on a new tool for autonomous language learning intended to continue using that tool in the future. Interpreted, responses may speak more to triggering motivation than to increasing or helping to sustain it overall, although McLoughlin and Mynard (2018) indicated a relationship between the two processes. It may very well be as Benson et al. (2016) concluded: learners' interests are potentially more important than goals in sustaining motivation. In other words, from the results of the current study, learners may continue to participate in a particular language practice because they enjoy the activity rather than because they are striving to reach a specific language goal.

At a minimum, this research did not suggest LAP implementation hindered willingness, practice, or language learning. Nonetheless, it was not able to prove that combined perceptions of (a) strong alignment between widely available free resources, personal interests, and language level and (b) some amount of bridging between in- and out-of-class learning experiences was a cause of either motivation for or time spent practicing beyond course requirements.

LAP Contributions

The study specifically sought to discover if LAP implementation increased the amount of time university students spent practicing Spanish outside of class. Per the results, eight students

increased the amount of time they devoted to out-of-class Spanish practice beyond that spent completing required assignments. Data analysis for the eight students combined produced a simple mean of 9.56 hours of total LAP implementation time in the Spring 2020 semester, or the equivalent of almost five minutes a week of voluntary "extra" practice outside of class.

The study also sought to discover if LAP implementation contributed to increases in language learner autonomy and Spanish skills. Here, data and methods available for analysis were minimal. First, the study did not provide a proper operationalization of the variable confidence, intended to gauge learners' confidence while independently accessing Spanish-language resources for autonomous learning. Moreover, only five student participants completed more than one APUS for a within-subjects comparison of responses on the confidence-related item. Of those five, only Student 5 reported a change in confidence, if responses may be interpreted as such. The matter was curious, nevertheless. Student 5 completed the first and the last APUS only, and shifted from feeling unconfident and worried about listening to music and watching TV in Spanish at the beginning to "I try my best and I love it!" nearer the end of the semester. Overall, results may have thus suggested students who implemented the LAP were more highly motivated and confident in their independent practice abilities than students who did not, and that they may have sustained motivation and confidence across the study, potentially as the result of alignment between LAPs and personal interests (Benson et al., 2016). This follows Ushioda (2011), who observed interdependence, but not necessarily directionality, between motivation and autonomy:

> To put it simply, motivation and meta-cognition are highly interrelated, since the exercise of meta-cognition can occur only when the ability to control strategic thinking processes is accompanied by the motivation or will to do so (Ushioda 2007). In this respect, we

> might say that motivation has a primary role to play in the exercise of meta-cognition or autonomy. (p. 223)

The results of data analysis about LAP contributions to an increase in Spanish skills are equally tentative. Only three students completed the FUS and Post- Can-Do Self-Assessment of Spanish Skills combined in a single instrument, but their responses encouraged belief in the potential of LAPs to contribute to learning. All three students reported a positive gain in perceived Spanish language skills, although they differed with respect to the amount of perceived change and with regard to the practice confidence context, activity preferences, and personal reactions to level of LAP-provided guidance or structure. Specifically, the students with the two lowest scores on the Pre- Can-Do Self-Assessment observed the greatest calculated skill gains. This finding may support previous studies suggesting a learning plateau around the Intermediate High language proficiency level (Blake, 2015). Student 5 also exhibited the greatest overall skill increase. In particular, Student 5 increased interpersonal skills twice as much as presentational skills, potentially due to the elected focus of LAP-recommended practice, reported as conversations with a friend from Argentina. Unlike Student 5, Student 1 increased presentational skills five times more than interpersonal skills. Student 1 reported spending most LAP time engaged in private digital language practice as well as activities related to culture and geography. Potentially, Student 1 gleaned knowledge from LAP-prescribed practice and integrated it in classroom learning. However, Student 1 reported no perceived overlap between LAP implementation and class activities or assignments. Although compatibility between in- and out-of-class activities is believed to increase willingness to adopt technology for autonomous language learning (Lai, 2013), in the case of Student 1, this did not appear to be a factor in LAP use.

Of all student participants in the study, the three who completed FUS also reported the second, third, and fourth highest amounts of total LAP implementation during the semester. These values reflect (a) an average higher number of responses and (b) the highest reported rates of LAP implementation when calculated as a percentage of reported total combined practice time in the semester. More than once, these three students reported using the LAP every other day, and they provided similarly high ratings for (a) the importance of independent practice for learning Spanish, (b) the personal ability to practice Spanish independently, and (c) contributions of the LAP to increases in both the total amount of out-of-class Spanish practice time and Spanish skills over the course of data collection. All three students also reported learning to depend on a new tool or resource for learning Spanish as a direct result of LAP implementation, which should be considered in light of responses from two indicating most LAP-recommended resources were previously familiar to them. Interpreted, these findings suggest the coincidence of technology resources, learner motivation, and instructional support for language learning and follow Lai (2013):

> The stronger the interest and task value beliefs students have for learning a particular language, the greater the teacher and peer support for technology-enhanced language learning, and the closer the connection the students feel between technology use and their language learning expectations, the more likely they will perceive the usefulness of technology use for language learning. (pp. 110–111)

LAP Template as a Pedagogical Tool

The Revised Language Autonomy Plan Template assisted successful LAP personalization and helped achieve the balanced provision of practice opportunities across language domains, technology modes, and time limits, efforts supported in the literature about

SLA and autonomous language learning (Bouchard, 2009; Chapelle, 2009; Larocque and Sterling, 2019a). Template formatting—organizing, frontloading, and labeling—allowed for highlighting variability among practice types with the goal of motivating learners to explore and engage in at least one activity. The template aimed to facilitate activity selection based on the suitability of practice opportunities for personal preferences, learning needs, and real-life limitations, thereby addressing the essential role of informed choices in autonomous language learning (Moore et al., 2019).

Lai et al. (2015) observed students' desire for help selecting and using technology resources for language learning. Those students also wanted more interesting resources than textbook companion materials. In the present study, the expanded LAP template attempted to provide a variety of content across different modes of language practice, and to guide level-appropriate engagement with resources through the provision of cognitive and metacognitive tips in the form of short, activity-specific instructions.[22] The present study did not provide for the systematic evaluation of the template's layout or instructions; however, data collected on the usefulness variable may be particularly helpful to teachers and plan developers as they attempt to easily and best predict the appeal of specific eTools for students, such as apps versus film, or reading versus speaking.

Variety

Expanding work by Larocque and Sterling (2019b), the revised LAP template entailed a variety of activities across language domains, learning modes, and time required for completion, although engagement was optional. Analysis of data on perceived alignment between LAPs and

[22] The Revised Language Autonomy Plan Template also served as the basis of the generic LAP, although data collected did not permit evaluation of its use.

interests suggested personalized plans contained at least some activities that were personally relevant to the learner. Prior studies characterized students' technology implementation differently, as limited and conventional, and as varied (Lai et al., 2015). Hyland (2004) reported learners' emphasis on private, receptive activities outside the classroom. The contrast remains unreconciled. In the present study, only one of the eight students who reported LAP implementation, Student 3, appeared to make a conscientious effort at balancing the kinds of practice suggested on the LAP, regularly reporting equal amounts of time spent across SFL content and modes of communication. Based on preferences expressed in this study's data, students may have engaged more often in modes of practice or technology they found enjoyable, or they may have repeatedly engaged in the same activity, as explicitly reported by Student 5. These findings may concur with Hyland's (2004) account of English language learners in Hong Kong, who reported they did not engage in speaking practice outside the classroom because of a lack of access to conversation partners and because of social attitudes associated with speaking the TL, although the cultural context mitigates the comparison.

In the present study, all three students who completed FUS suggested a preference for variety within the LAP. The first student recommended retaining "the variety of resources provided" in future LAP implementation, and also acknowledged new awareness of the number of resources available for practicing Spanish; the second recommended LAPs do more in the future to encourage accountability for "branching out" and help avoid engaging repeatedly in the same plan-recommended activity. The last student valued a maximum number of activities, "even if some end up ignored."

Guidance

Larocque and Sterling's (2019a) original language autonomy plan template aimed to promote truly autonomous language practice and "to mimic a true classroom autonomy process as much as possible" (Slide 17). Thus, the guiding study took a "hands-off" approach and avoided requiring or reminding students to practice per the plan (Slide 17). Results by Larocque and Sterling (2019a) implied a potential need to give participants more support for autonomy plan implementation. Consequently, this study's expanded LAP template sought to provide relatively more learner guidance in the form of identifiable language domains and the provision of activity-specific instructions, encouraged by a review of the literature, specifically Lai et al.'s (2017) investigation of TCS. In response, Spanish 303 Student 5, who recommended future LAP use encourage students to try new things, specifically suggested that a "week-by-week outline of certain activities to try" accompany the LAP.

Student 5's recommendations potentially reflected a low level of language learner autonomy, and this may or may not be representative of other students, regardless of the level of course enrollment. As reported, Student 5 resorted to LAP activities that were seemingly comfortable or familiar, perhaps instigated by default or by concerns about personal readiness or a proper learning sequence. The need for an expert's encouragement to vary activity and mete out independent practice may stem from autonomy-related constructs such as motivation, self-direction, willingness, confidence, and self-efficacy, all factors in true learner autonomy. Benson and Voller (1997) defended the "abiding importance of *teachers* in autonomous language learning" among learners who work to increase autonomy (p. 9):

> … there is very little evidence that self-instructional modes of learning are in themselves sufficient to lead to greater autonomy or independence. On the contrary, it appears that

> learners who are forced into self-instructional modes of learning without adequate support will tend to rely all the more on the directive elements in the materials they use. (p. 9)

That is, if students understand and are able to access materials' "directive elements" without teacher guidance in the first place.

Context

In the present study, students' out-of-class language learning with technology occupied a space where in-class learning merged with out-of-class experiences. The LAP intentionally sought to overlap and bridge the two by means of structured opportunities for autonomous language practice (Lai, 2017). Together, learners and the researcher constructed a "third space" from personal experiences fostered by expert resource recommendations, access to technology resources, and a potentially increasing ability to engage in those resources for effective language learning (Benson, 2013; Benson et al., 2016; Reinders & Benson, 2017). In the current study, students reported engaging in independent technology-based language practice more often than interpersonal communication or in-person activities.

The master list of activities from which LAPs were constructed primarily included web resources as opposed to in-person activities, such as clubs, field trips, and service learning, although every personalized LAP recommended at least one opportunity for in-person language practice. LAPs encouraged exploration of new resources, as per Reinders' (2011) sixth criterion for autonomous materials implementation, and this led to three students learning to depend on a new resource to learn language. The Spanish 201 student who, as a result of LAP implementation, newly realized the amount of resources available for practicing Spanish, recommended LAP provision of more on-campus activities. However, no response to any APUS

during the semester reflected engagement in in-person activities, and few responses reflected a preference for interpersonal communication over private digital language practice, despite generally high ratings on a preference for and the usefulness of speaking activities in language learning.[23] The review below further addresses this apparent contrast.

Ascertaining and Meeting Needs

The present study addressed a need to research self-study materials, specifically materials selected to meet learners' needs and materials implementation among language learners with some TL proficiency (Nielson, 2011). Students' consistently positive evaluation of alignment between the personalized LAP and their interests suggested the BQ was an adequate tool for expressing individual preferences related to language and technology, expressed as both content and mode, and for aligning those preferences to broadly available Internet resources. The BQ did not ask about preferences for the amount of time required for activity completion, and this may or may not have been useful information in the personalization process. The APUS instrument had additional potential as a tool to encourage reflection necessary for developing language learner autonomy (Moore et al., 2019), although this aspect of the study was complicated by the COVID-19 pandemic.

Comparison of responses from the BQ about goals with APUS responses about characteristic LAP implementation suggested some level of mismatch between student-identified needs and reported language practice. For example, Spanish 303 Student 2 hoped to improve fluency and the ability to communicate in real life for a specific purpose but, in practice, expressed a preference for reading and private digital practice over speaking. Interpretation of

[23] As a result of the pandemic, many in-person and on-campus events were canceled during Week 7 of the study for the duration of the semester.

these results is limited by Student 2's single response to APUS and by noted variation among responses therein, particularly to Items #15, 18, and 19. The LAP attempted to address this variation but may or may not have had any degree of success.

This initial observation, however, provides for consideration of the role and benefits of a true language advisor, as defined in the literature and which iterates that students are not always able to identify their own learning needs. Reinders (2011) reflected:

> It is surprising to note how often learners have no clear idea of their language needs, and the discrepancies that exist between what learners think they need and where their actual weaknesses lie. Equally worryingly, many learners have little idea of their *learning* needs (Barcelos 2008). In other words: they have little knowledge of their strengths and weaknesses as language learners. (p. 177)

Sorting their learning needs, students often prioritize language skills over improved language learner autonomy (Shelton-Strong, 2018). However, autonomy development is an imperative goal in language education (Chong et al., 2019; Lamb & Reinders, 2005). Language advising may be well suited to address this characteristic challenge of autonomous learning. Carson (2012) explained advantages of the advising role for meeting individual students' needs:

> Advising, with its focus on learning ability, is in one sense, less constrained than language teaching in how it develops its learning environment . . . Advising most commonly occurs on a one-to-one basis, and focuses on language learning issues facing a specific advisee, and works to engender the necessary learning understanding and abilities in the advisee, through a guided process of self-discovery. In many ways, this process seems an ideal environment for meaningful and developmentally appropriate learning to occur . . . An advisor can take time to understand the learners' existing

> knowledge and schemata, and can work slowly, at appropriate levels of dependence, interdependence and independence to allow expertise to develop, and manage the process in a manner that works to transfer the locus of control to the learner. (p. 248)

Teachers, also, can and should seek to develop language learners' autonomy (Benson, 2006; Carson & Mynard, 2012; Jones, 2001; Lai et al., 2015; Mynard et al., 2020; Shelton-Strong, 2018; Tassinari, 2016; Sanchez-Villalon et al., 2010). For example, teachers might offer in-class support for out-of-class language learning (Mynard et al., 2020). In the present study, the LAP sought to align learner needs, out-of-class practice opportunities, in-class experiences, and support for learning. The LAP was a proxy guide—away from the language classroom, teacher, or advisor—to the development of both language learner autonomy and language skills.

The Preferences–Usefulness Parallel and the Practice Paradox

Data from this study also expressed a parallel between usefulness and preferences, evoking Lai's (2013) call to consider willingness as we initiate future studies of out-of-class language learning with technology. Paradoxically, participants in this study rarely engaged in the kind of practice they reported as both most preferred and most useful for learning Spanish: speaking. Given the observed skills increases for three students, the most useful language learning activities may be the ones in which students engage.

Participants generally reported a preference for speaking or pronunciation activities, over both music or podcasts and TV or film. Specifically, "speaking or pronunciation" ranked in the top three preferences more than half the time (see Figure 13), while "music or podcasts" had a higher average preference rating (see Figure 14). There was some spread of preferences in results of the study overall, that is, there was observed variation among students, not unanticipated in light of the goal of LAP personalization.

In a parallel manner, students indicated speaking activities as most useful for language learning (see Figure 15). Of note, APUS items about preferences directed students to select or rank activities from the LAP, whereas APUS Item #20 about usefulness did not specify LAP-included activities but asked only more generally.

Despite both an indicated preference for and the perceived usefulness of speaking activities, students reported greater amounts of time engaged in private digital language practice than interpersonal communication, and in comprehension than language production (Orhon, 2018). For example, Spanish 102 Student 1 reported routinely engaging in the same activities across the semester, primarily in plan-recommended TV and movies, and correspondingly indicated these as the most preferred activities. Student 1 also consistently evaluated speaking activities as most useful for meeting learning goals and reported on FUS having communicated with a previously unknown native speaker of Spanish as a result of LAP implementation. However, Student 1 reported four times having engaged more often in (a) comprehension than language production practice and (b) private digital language practice than interpersonal communication. Furthermore, Student 1 failed to indicate an intent to continue using the LAP-recommended speaking activity, Tandem, in the future, planning instead to continue watching movies and TV to practice Spanish. Finally, Student 1 attributed to LAP implementation gains in all the following: practice time, Spanish skills, the ability to practice independently, final course grade, general learning, and personal goals. Thus, Student 1 ultimately judged implemented activities as useful for learning, despite a failure to engage primarily in speaking practice, originally deemed most useful.

Orhon (2018) suggested teachers need training to align learners' preferences with out-of-class activities. In the present study, personalized LAPs may have failed to provide appropriate

or sufficient opportunities for speaking practice. Tandem, the language exchange app, was the most often LAP-recommended speaking activity—although it also served for communicating via text messages—, having been thoroughly vetted and personally enjoyed by the researcher prior to recommending. In addition to Tandem, personalized LAPs suggested talking to Spanish-speaking friends, as identified on BQ, visits to a local Latino grocery or restaurant, ESL tutoring opportunities at the library, and attendance at a Spanish-speaking church service, where deemed appropriate based on BQ results. Spanish 102 Student 3, who identified a Spanish speaking personal friend, was the only participant who reported consistently engaging in language production as a result of LAP implementation. Regardless of the amount or quality of LAP-recommended opportunities for speaking practice, the global pandemic and subsequent quarantine inhibited all in-person interaction and interpersonal communication during data collection.

Finally, no personalized LAP focused entirely on one type or mode of language practice, regardless of preferences expressed on BQ; in theory, personalized LAPs provided for and encouraged exploration of a variety of practice across the four language domains, reading, writing, speaking, and listening. Only Student 3 reported having consistently mixed equal opportunities to practice grammar/vocabulary and culture/geography. This same learner reported more equal distribution of practice across communication modes than other students, which may have represented a conscientious effort to vary practice that, in turn, may have been the result of either inherent learner traits or of the particular LAP provided. It remains unknown whether or not Student 3's personalized LAP encouraged practice in ways the other seven implemented plans did not, or if Student 3 trusted the LAP relatively more than other student participants and thus attempted to engage in as many of the provided activities provided as possible.

Per results of the present study, students attributed value to speaking and pronunciation practice, although they did not report significant engagement in this type of activity. Furthermore, results may reflect a failure here of the LAP to adequately provide opportunities for speaking practice, or they may reinforce previous findings that suggested language students typically prefer comprehension-related as opposed to production-related practice (Orhon, 2018). The latter case, if true, might represent a default to familiarity, comfort, routine, or ease, as well as the failure to develop language learner autonomy.

Supporting Language Uptake Opportunities in Authentic Resources

The very nature of LAP-recommended resources, or students' inability to engage with them in level-appropriate ways (Jones, 2001), may have caused the observed mismatch between personal goals and ways in which students practiced, rather than incomprehension of their own needs or of the learning process. The range of authentic resources in the world is not leveled; that is, authentic resources, by their very nature, are designed for native speakers of the target language and not for learners at a particular level of language learning or proficiency. The LAP, therefore, sought to align learner needs with authentic resources and opportunities for language uptake by means of directing engagement and impact (Benson, 2001; Blake, 1997; Lai, 2017; Reinders, 2011; Sanchez-Villalon et al., 2010), and not through mediation of their content or form.

A preference for learning by means of one specific language domain or mode over another, such as reading as opposed to speaking, assisted selection and prioritization of LAP-recommended activities with regard to both content and format. This follows Benson (2006), who emphasized "divergent learning processes" in autonomous language learning (p. 29), and the individual nature of autonomous learning in general (Benson et al., 2016; Bouchard, 2009).

Furthermore, the selection of activities on familiar web platforms may have reduced the risk of maximizing learners' cognitive load with implicit expectations for paying attention to language, content, and technology requirements at the same time. The analysis of data collected about obstacles to plan implementation did not suggest activities were too hard or too boring; however, data collection did not provide opportunity for students to consider the worth of instructions that accompanied activity recommendations within the LAP. Thus, it is unknown to what degree instructions on the LAP may have served as appropriate cognitive and metacognitive support for using technology to learn language outside of class (Lai et al., 2017). Spanish 303 Student 5's suggestion for a weekly guide to activity implementation may have constituted a request for more cognitive assistance.

Validity and Generalizability

The limited amount of available data curbs both the validity and generalizability of results of this study. The participants may or may not have been generally representative of the population of university students of Spanish in the U.S. or even of a subset therein. Moreover, the COVID-19 global pandemic crisis may have affected students' LAP implementation as well as data collection in Spring 2020, although the nature and extent of its effects are unknown.

Selection and Sampling

Of those enrolled at the end of Spring 2020 in courses from which students were recruited, 9.68% of them chose to participate in the study, volunteering information about LAP implementation at least one time. Of nine students, only two reported consistently throughout the semester. As a result, the data set contains many missing scores. Recruits to the study may or may not have been generally representative; regardless, the study did not produce sufficient data for generalizing across the wider population. The failure of many students to seek a personalized

LAP may represent a broader trend. That is, potentially, university SFL in the U.S. are uninterested in receiving a personalized plan for practicing Spanish outside the classroom or are generally unwilling to practice in ways that are not required for a formal grade in the course. The literature reviewed in Chapter 2 suggested integrating autonomous practice and an explicit autonomy goal in the formal language curricula (Jones, 2001; Nielson, 2011; Orhon, 2018; Tassinari, 2016). Additionally, it supported the present study's observation that the few students who implemented a personalized LAP potentially reported higher-than-average levels of confidence and overall practice time (Ushioda, 2011).

Those students who volunteered for and subsequently participated in the study may have been more highly motivated or more confident in their language skills or autonomy, or both, than students who did not. If true and, further, if higher motivation and confidence levels among those seeking a personalized LAP are indeed generalizable to the population, then results described here may speak narrowly to the potential of a pedagogical process for guiding autonomous language learning with technology only among university foreign language students who are relatively willing and able to independently practice the target language outside of class. Interpreted thus, results may be less able to suggest an approach for addressing the lack of willingness observed by the literature or for profoundly encouraging the development of language learner autonomy where it presently lacks.

Data Collection during the Pandemic

The ways and degree to which the global COVID-19 pandemic and the University's subsequent move to online-only learning in Spring 2020 affected in-class survey administration and students' efforts at out-of-class language practice are relatively unknown. No data are available on the responses, formal or informal, of instructors and students to the university's

pandemic-related announcements or about changes in data collection as a result. Thus, it may be unlikely results of this study are generalizable for the sake of understanding LAP implementation. At the same time, the pandemic may have intensified the trend toward technology-dependent, asynchronous teaching and learning, a mode that likely requires higher than ever levels of student autonomy for language learning.

Discussion and Implications

The study, in general, hoped to address the current state of university foreign language education in the U.S. and to merge the expectations of language students with the needs of teachers while considering the economic status of foreign language programs and the ubiquitous presence of technology in our lives. In turn, the literature review synthesized approaches to SLA, foreign language pedagogy, and language learner autonomy as relevant to this dissertation's research; it also addressed the emerging field of out-of-class language learning with technology; and it identified opportunities for, but lack of, current understanding about implementing procedural autonomy support and TCS for students' out-of-class language learning with technology. The literature review provided for the significant revision of an existing pedagogical tool, Larocque and Sterling's (2019a) language autonomy plan, and lent itself to the development of an original activity master list and plan matrix, as well as to the revisioning of the LAP per TCS and language advising.

With the LAP reimagined, the study sought to investigate its implementation among university SFL students, to ascertain its impact on practice time and, consequently, on the potential for increases in perceived Spanish skills and language learner autonomy. The study explored the ability to personalize the LAP, choices students made for implementing it, and their pertinent reactions to activity engagement. While results of the exploratory study did not lead to

definitive, generalizable conclusions about the effectiveness of implementing personalized LAPs in the university Spanish classroom, this section addresses considerations for continuing investigation of its implementation warranted by the exploration just conducted. Based on the analysis here, then, we might entertain LAP implementation as a worthwhile pedagogical process that responds to the literature about TCS. In turn, I propose LAPs as a practice within guided autonomous language learning, with or without technology.

A Worthwhile Pedagogical Process

Overall, the analysis of results in this study suggested students who implemented a personalized LAP increased the amount of time spent practicing Spanish outside of class, did not find LAP-recommended activities to be too difficult or too boring, and may have been prompted to (a) consume authentic Spanish-language media, (b) interact with a previously unknown native speaker of Spanish, or (c) to depend on a new tool for independent language learning.

Any increase in the amount of out-of-class language practice is significant in foreign language education, supported by the studied relationship between practice and language learning within second language acquisition research. Lightbrown (2000) explained:

> When ‘practice’ is defined as opportunities for meaningful language use (both receptive and productive) and for thoughtful, effortful practice of difficult linguistic features, then the role of practice is clearly beneficial and even essential. Nevertheless, research evidence shows that communicative practice in the classroom, as valuable as it is, is not sufficient to lead learners to a high degree of fluency and accuracy in all aspects of second language production. (p. 443)

In the present study, the LAP supplemented in-class language instruction. In five extra minutes a week, for example, a student might hear two songs in Spanish on Spotify or intentionally listen

to the same song twice, gaining exposure to authentic target language and cultural input. Thus, results suggested the LAP potentially increased student awareness of and interaction with language learning resources, and it may have initiated or strengthened connections to target cultures or improved students' ability and confidence with respect to using resources for language learning.

On the other hand, the failure of most recruits to enroll in this study may have suggested a lack of motivation among university Spanish students to practice language in ways they do not expect to meet course requirements or earn points toward a course grade. Muñoz–Restrepo et al. (2020) identified autonomy, competence, and relatedness as learners' "motivational triggers" that require teacher relational support (p. 176). If effective at all, then, personalized LAPs may serve as means of encouraging a teacher–student relationship around language learning. Alternatively, LAPs may be appropriate only for students who are sufficiently motivated to seek additional opportunities for language learning and practice in order to meet personal goals. In this study, the three students who completed FUS indicated a high level of importance for practice, and the few students who consistently reported LAP implementation also reported higher levels of confidence than those who did not. Data analysis suggested these students valued LAP-recommended activities as contributing to practice and learning and, further, that they would not have practiced Spanish for as much time or in some ways had they not implemented a personalized LAP.

It is immediately useful to practicing language educators to know which broadly available resources are most likely to attract students' attention and engagement and thus represent meaningful messages and comprehensible TL input (Curtain & Dahlberg, 2010). As participants in this study did not report that LAP-recommended activities were too difficult

and/or too boring, results were in line with the existing pedagogical practice of incorporating authentic resources in SFL instruction. Further, the results may have pointed toward a process for adequately incorporating mainstream technology, by nature attractive and evolving, and whose sheer volume and ubiquity are occasionally overwhelming, into instruction (Blake, 1997). The successful introduction of a new tool or resource to those three students who completed FUS suggests students may be able to repurpose familiar webtools and mobile apps for language learning, and that the process of developing LAPs lightened learners' cognitive burden. Potentially, using familiar pop media outlets, such as Spotify, Netflix, and Google search, brought students new awareness to the plain presence of these tools and their usage in the Spanish-speaking world. That is, the LAP may have appropriately contextualized authentic resources (Blake, 1997) and successfully facilitated connections between learning, the learners' process and world, and TL cultures.

For the sake of addressing a potentially viable pedagogical process, the potentially observed increase in practice time among students in this research should be compared to the researcher's time spent personalizing LAPs (Larocque & Sterling, 2019a). I did not track the total amount of time required to make all fourteen personalized LAPs but did note the following: (a) I spent approximately two hours each on the first two personalized LAPs; (b) subsequent plans required less time each for completion; (c) the personalization plan process became easier and repetitive, as there were common interests and preferences among students (Larocque & Sterling, 2019a), and therefore recommended activities; and (d) the personalization process was naturally more difficult when I encountered unfamiliar themes, especially when reported by students of lower language levels for whom the LAP recommended specific titles.

Only eight of 14 students reported implementing the personalized LAP after prompt

distribution, although it is unknown whether any student implemented the plan without reporting. Of those eight, however, results suggested one student increased reported practice time by between one and 10%; one increased by between 21 and 30%; two increased by between 41 and 60%; and one nearly doubled reported practice time as a result of implementing a personalized LAP. These students may or may not have represented a set of more highly motivated students within the general population. Implications range for addressing the requests of more highly motivated students for extra language practice opportunities. In a small university setting, where efforts at student retention and personal relationships with language instructors are particularly salient, the process for developing a personalized LAP may offset the need to use instructor time regularly or repeatedly outside of class for adequately addressing such requests. Special attention to the needs of more highly motivated students may or may not be justifiable.

Teacher Capacity Support for OCLL with Technology

The implementation of personalized LAPs studied here may or may not be qualitatively different from Lai et al.'s (2017) notion of TCS, proposed as key to addressing an observed expectation among U.S. students' for help using technology to practice language outside of class. Personalized LAPs did not attempt to meet fully each of the provisions of TCS—resource recommendations, cognitive and metacognitive tips, and community discourse. The present study explored only time spent, preferences for, and obstacles to implementing LAPs, when the LAP attempted to provide relatively more cognitive and metacognitive support than Larocque and Sterling's (2019b) original template. Particularly, the present study did not examine the nature of in-class survey administration nor is it known to what degree in-class survey administration encouraged appropriate conversation between students and instructor, or among students, about out-of-class language practice. Furthermore, the value of this study's FUS as a

reflective or metacognitive tool should not be underestimated, although it was not measured here.

The implementation of LAPs primarily intended to encourage extra language practice through expert recommendation of available resources, thereby attempting to address students' need for assistance in identifying and selecting technology resources for language learning. Instructions that accompanied individual activities within the LAP, as described, attempted to help students appropriately engage with those resources for language learning (Lai et al., 2017). It may be that individualized alignment of LAPs to learners' language level, explicitly suggested by Larocque and Sterling (2019a) and not addressed by Lai et al. (2017), was essential to the success of LAPs as TCS and should have been more systematically addressed by the research.

As suggested by the contrast between the responses of Students 5 and 6 to FUS, students with relatively lower amounts of confidence or language learner autonomy may benefit from additional structure and stronger guidance (Jones, 2001). This additional structure and guidance potentially takes the form of a week-by-week guide to assist LAP implementation, as suggested by Student 5.

Finally, LAP implementation may align with TCS beyond the provision of recommended resources, regardless of including activity instructions. The personalized LAP represents an opportunity for university Spanish instructors to compile resources they value but previously had no systematic way of sharing with students. As such, effective integration of LAPs in SFL instruction may further assist teachers in modeling cognitive and metacognitive strategies for practicing language with favorite resources. Additionally, LAPs in SFL instruction may encourage students to discover and share resources with each other and with the teacher. Instructors might also provide and encourage the use of LAPs as proxy guides when classes are

not in session or when a schedule conflict prevents Spanish course enrollment, as means of providing self-directed language practice when formal instruction is unavailable. In this way, LAP implementation might effectively prepare students to maintain Spanish language skills between semesters or quarters, at precisely a time when they have no alternative but to be more autonomous language learners.

Guided Autonomous Language Learning with Technology

The implementation of personalized LAPs in this study also drew on literature about advising in language learning, of which TCS might be proposed as a function where feasible. A language advisor, as reviewed, is devoted to the process of developing learners' autonomy and thereby assists in identifying the needs, strategies, and outcomes of language learning (Carson & Mynard, 2012). Dedicated language advisors are not feasible in all contexts and, thus, personalized LAPs were studied in and have been proposed for the classroom context (Carson & Mynard, 2012). Regardless of ubication, the LAP studied here sought to promote the development of Spanish skills and language learner autonomy simultaneously via opportunities for and hypothesized motivation to practice. Recommended practice provided entrée to communities and cultures, and opportunities for connections, comparisons, and communication. In form, the LAP sought to foster students' willingness and ability to vary the content and mode of interactions with and through the target language.

If "language advisor" pertains to the role devoted to developing learner autonomy, and if TCS is a set of teacher actions intended to foment students' use of technology for language learning, then the personalized LAP may be poised to assume both the advising role and teacher support functions. In this way, the LAP becomes a proxy guide for shepherding students' use of technology for learning language outside the classroom, capable of cyclically fostering language

learner autonomy and scaffolding autonomous technology use, and theoretically leading to increased autonomous language learning and autonomous language use. We might deem this process guided autonomous language learning with technology. Though technology was the impetus for LAP development in this study, and though it seems an obvious means for self-directed language learning in today's society, guided autonomous language leaning ought not be limited to technological means alone; thus, we might refer to guided autonomous language learning, with or without technology, as GALLt. Indeed, "…learning a language takes multitasking to the maximum degree" (VanPatten, 2003, p. 15).

The LAP, if implemented, signals to students the accessibility of TL communities through authentic resources, whereby it may build learner confidence. As proficiency exists on a continuum, and although a learner may occupy the lower end of that continuum, students should not wait to experience and engage with authentic expression in the target language. The very nature of practice is evolving, ever leading to increased language skills and lifelong language learning abilities.

In the absence of a dedicated language center, the LAP is the pedagogical tool I sought in my role as a university SFL instructor. Students expected to learn Spanish, evidenced by an ability to comprehend or produce the language to some degree. Where there was no university language requirement, motivated SFL students perceived Spanish as something existing in and relevant to the world. Thus, language practice divorced from authentic experiences or from the normal routine of life made little sense. A tool was needed to create a more integrated experience overall, bridging personal interests, pop culture, current events, familiar and unfamiliar communities, and the in- and out-of-class experiences that informed their goals, motivation, learning, and language acquisition. The personalized LAP was intended for the teacher, for

availing oneself of available, free, attractive resources, for relativizing those resources according to any level of language learning, and for eliminating obstacles blocking the bridge's path, including the burdens of economics, motivation, and dependency. The LAP is target language interaction, *tertulia*, and office hours all in one.[24]

Low Participation and the Pandemic Crisis

The literature supports the role of proper motivation in language learning. In the present study, low levels of motivation to practice for zero points may have resulted in the observed failure to seek and implement a personalized LAP. However, any of the following may have been possible also: (a) LAP implementation, as initially reported, declined because students did not attribute value to or did not enjoy LAP-recommended activities, that is, the LAP was a potential cause of its own ineffectiveness; (b) students who received LAPs but did not report implementation engaged in LAP-recommended activities but did not ascribe value to data reporting for the sake of the research; or (c) students became overwhelmed by the onset of the global pandemic crisis or subsequent changes to university instruction, whereby either LAP-implementation or data reporting lost relevance and consequently dropped off. These things remain unknown.

Conclusions

Results of analysis on the data set did not provide for generalizable conclusions about the effectiveness of personalized LAPs for promoting out-of-class language practice; however,

[24] According to Collins Dictionary (n.d.), "The term *tertulia* is used for groups of people who meet informally on a regular basis to chat about current affairs, the Arts etc, and is also used to refer to the gathering itself." *Tertulia* is a practice encouraged among language learners, particularly in Spain.

neither did they necessarily determine that LAPs were ineffective or harmful. Thus, we need not warn against LAP implementation.

The study observed the following phenomena among the group of participants:

(a) an increase in practice time among students who may have been more highly motivated than their peers;

(b) strong perceived alignment between personalized LAPs and both interests and language level, which was insufficient for encouraging students to continue reporting implementation, or perhaps to continue implementation;

(c) some general perceived overlap between out-of-class and in-class language learning;

(d) attributed usefulness to reported implementation, although it is possible students who found activities useless failed to report them as such;

(e) real-life distractions as obstacles to LAP implementation, as opposed to difficulty or tedium;

(f) acknowledgement and appreciation of activity variety among three students;

(g) differing reactions from two students with regard to the amount of guidance provided by the LAP; and

(h) a call for more on-campus learning opportunities.

We also learned something about these few students' preferences for practicing language autonomously, findings primarily in line with previous work that showed a preference for comprehension-related over production-related activities (Hyland, 2004; Orhon, 2018), as well as the popularity of listening to songs in the target language (Orhon, 2018). Further, results of the study provided some support for the repurposing of popular resources, such as Netflix and

Spotify, for learning Spanish at university. Finally, a refined LAP template is now available (Appendix E).

Recommendations

I cannot make strong recommendations based on conclusions that are tentative at best; however, as results did not warn against implementing personalized LAPs, I cautiously address the potential and relevance of LAP implementation for university Spanish instruction in the U.S.

First, results may suggest personalized LAPs as a reasonable means of addressing requests from more highly motivated students for additional ways of independently practicing language outside of class. Such students exist: in the anecdotal experience of university instructors, they appear in doorways after class and in office hours. Personalized LAPs may be of value in such scenarios, saving the instructor the time of personally searching for resources and of teaching a student how to repurpose a familiar resource for language learning.

My experience of personalizing LAPs, if implemented, recommends maintaining a bank of activities with accompanying instructions, organized by thematic content and language level, for copying and pasting. Furthermore, engagement levels observed in the present study suggest any attempt at implementing personalized LAP be integrated into an SFL class as a graded course component to improve the tool's ability to encourage increases in the time and variety of out-of-class practice. In this case, a survey may be more efficient than an activity log for holding students accountable, as a survey requires less time and provides similar opportunities for reflection, evidence of use, and signaling opportunities for bridging in- and out-of-class learning experiences.

As the degree of LAP effectiveness is yet unknown, results of this study recommend setting limits to the use of both class and instructor time for developing LAPs at any point in the

future, at least until more and better data, potentially from action research, have determined ways for maximizing integration of personalized LAPs in foreign language instruction. Results of this study may justify the use of 30 to 50 minutes of class time, and 30 additional minutes of students' out-of-class time, for introducing the LAP to students and for completing the BQ. Time left over might be devoted to in-class discussion of LAP implementation, student questions, and resource sharing, which constitute an important opportunity for metacognitive skill building and reflection. This sort of activity might also be hosted via a synchronous webchat on a learning management system such as Blackboard. Though the present study observed strong levels of interests–LAP and language level–LAP alignment, it might also recommend securing alignment as well as implementation follow-through by means of meeting with students in the third week of implementation, as an occasion to make adjustments to the content or mode of language and technology, or to fine-tune a specific avenue of practice.

Finally, in a university where language advising or a self-access center is available, the task of personalizing LAPs may be assigned to a language advisor, as results of the study did not suggest any conflict between their respective roles.

Future Research

Results of the study warrant future research about LAP implementation, especially with a broader student sample and during a time not affected by a global pandemic crisis. Particularly, future research should investigate if the LAP template expanded here affects the amount of time and ways in which students independently practice a foreign language outside of class. Future research should seek empirical evidence of the LAP's ability to bridge the student's personal sphere, the classroom, and the world that communicates primarily through the target language.

A future study of LAP implementation on a wider scale might gather information about both in-class survey administration and instructor-led class discussions of LAP implementation, in addition to student-provided survey data. The present study recommends closer collaboration between the researcher and language instructors for the purpose of encouraging more consistent survey completion and especially for learning about in-class opportunities for student reflection and the nature of instructors' metacognitive tips and models for language learning, both intended to support autonomy development.

The study also recommends additional research for building a better LAP template. Beyond Reinders' model for the creation of successful autonomous materials, future research might strive for a theory-based template directly informed by Crook's (2008) four types of learner interaction, Crook's (2008) four dimensions of learner experience, or Laurillard's (2002) five media forms. The development and implementation of LAPs per this aspect of the literature review may have additional implications for Barnett's (2011) formula for deriving the "potency of any learning space" (Lai, 2017, p. 101).

At the conclusion of the present study, any future use, repeated or adapted, of instruments developed here should address the following.

First, APUS should include questions that seek to understand the effect of specific instructions on learners' practice. For example, did instructions constitute TCS as marginally intended? Did they have any effect on students' willingness to use technology or on the amount of time and frequency with which students engaged in out-of-class language learning with technology? Did they help students repurpose familiar resources for independent Spanish practice?

Second, APUS Item #20, which asked students to rank language domains according to their usefulness for meeting learning goals generally, might be moved to the BQ instrument to support fuller alignment between preferred language activity domains and personalized LAPs as developed.

Third, the BQ might retain the combination of questions about interests or content and preferences related to learning and technology, as all these responses were essential to the personalization of LAPs. Even so, this study could not determine how essential personalization was to increasing willingness to practice or practice time, because it was unable to compare the effects of practice per a personalized LAP to those of practice per a generic LAP.

Last, all items on FUS might use the same four- or five-point scale to ease comparison between items, and FUS might also avoid even-point, forced choice Likert scales, particularly for the autonomy measure in Item #8.

Generally, we might continue asking the following questions: (a) How might instruction facilitate learners' ability to practice language autonomously, that is, to evaluate effectively, prioritize, and access materials and activities for the sake of independent practice? (b) How can instructors sufficiently motivate learners to follow through on tailored suggestions for independent language activities? (c) How worthwhile, then, is the provision of suggestions for autonomous practice to the university foreign language classroom? (d) Does this information have practical significance for university language instructors? (e) What kinds of independent activities do learners perceive as contributing to successful autonomous language learning? and finally (f) Does the conscientious implementation of an individualized language autonomy plan contribute to a statistically significant gain in perceived use of the target language? More and improved research is required to in order to endorse LAP implementation, whether personalized

or generic, as a sound and effective pedagogical process for incorporation into university foreign language instruction.

REFERENCES

American Council on the Teaching of Foreign Languages (1999). *Standards for foreign language learning in the 21st century*. http://www.actfl.org/sites/default/files/pdfs/public/StandardsforFLLexecsumm_rev.pdf

American Council on the Teaching of Foreign Languages (2014). *NCSSFL-ACTFL can-do statements: Progress indicators for language learners* [PDF file]. Charles University. http://ujop.cuni.cz/upload/stories/Sluzby/Can-Do_Statements.pdf

American Council on the Teaching of Foreign Languages (2017). *NCSSFL-ACTFL Can-Do Statements*. https://www.actfl.org/publications/guidelines-and-manuals/ncssfl-actfl-can-do-statements

American Council on the Teaching of Foreign Languages (n.d.). *Guiding principles for language learning*. Retrieved May 4, 2019, from https://www.actfl.org/guiding-principles

Anstey, L.M., & Watson, G. P. L. (2018). Rubric for eLearning tool evaluation [PDF file]. Western University Canada. https://teaching.uwo.ca/pdf/elearning/Rubric-for-eLearning-Tool-Evaluation.pdf

Barnett, R. (2011). Configuring learning spaces. In A. Boddington and J. Boys (Eds.), *Re-shaping learning: A critical reader* (pp. 167–178). Sense Publishers.

Barron, B. (2006). Interest and self-sustained learning as catalysts of development: A learning ecology perspective. *Human Development*, *49*, 193–224.

Benson, P. (2006). Autonomy in language teaching and learning. *Language Teaching*, *40*(1), 21–40. https://doi.org/10.1017/S0261444806003958

Benson, P. (2013). Learner autonomy. *TESOL Quarterly*, *47*(3), 839–843.

Benson, P., Chávez Sánchez, M., McLoughlin, D., Mynard, J., & Peña Clavel, M. (2016). New scenarios in autonomy for foreign language learning: Conference summary and reflections. *Studies in Self-Access Learning Journal*, *7*(3), 287–296.

Benson, P., & Voller, P. (1997). Introduction. In P. Benson & P. Voller (Eds.), *Autonomy and independence in language learning* (pp. 1–12). Pearson Education Limited.

Blake, J. (April 1997). The virtual global village: The World Wide Web, instructional technology and the "communicative" language classroom. Proceedings from *Mid-South Instructional Technology Conference*. Middle Tennessee State University. http://www.mtsu.edu/~itconf/proceed97/village1.html

Blake, R. (2015). The messy task of evaluating proficiency in online language courses. *The Modern Language Journal*, *99*(2), 408–412. https://doi.org/10.1111/modl.12234_5

Bouchard, P. (2009). Some factors to consider when designing semi-autonomous learning environments. *Electronic Journal of e-Learning*, *7*(2), 93–100.

Carson, L. (2012). Why classroom-based advising? In J. Mynard & L. Carson (Eds.), *Advising in language learning: Dialogue, tools and context* (pp. 247–262). Taylor & Francis.

Carson, L., & Mynard, J. (2012). Introduction. In J. Mynard & L. Carson (Eds.), *Advising in language learning: Dialogue, tools and context* (pp. 3–25). Taylor & Francis.

Chapelle, C. A. (2009). The relationship between second language acquisition theory and computer-assisted language learning. *The Modern Language Journal*, *93*(1), 741–753. https://doi.org/10.1111/j.1540-4781.2009.00970.x

Chong, S. W., Mynard, J., & Reinders, H. (2019). Learner autonomy search engine & repository. *Relay Journal*, *2*(1), 212–217.

Collins. (n.d.). *Collinsdictionary.com dictionary.* Retrieved August 28, 2020, from https://www.collinsdictionary.com/us/dictionary/spanish-english/tertulia

Criado, R. (2016). Insights from skill acquisition theory for grammar activity sequencing and design in foreign language teaching. *Innovation in Language Learning and Teaching*, *10*(2), 121–132. https://doi.org/10.1080/17501229.2015.1090996

Crook, C. (2008). What are web 2.0 technologies, and why do they matter. In N. Selwyn (Ed.), *Education 2.0? Designing the Web for Teaching and Learning* (pp. 6–9). TLRP.

Curtain, H., & Dahlberg, C. A. (2010). *Languages and children: Making the match: New languages for young learners, grades k–8* (4th ed.). Pearson.

Friedman, E. H. (1990). The bridge. In E. H. Friedman, *Friedman's fables* (pp. 9–16). Guilford Publications. The Crux Movie. http://www.thecruxmovie.com/pdf/TheBridgeShortStory.pdf

Garret, N. (2009). Computer-assisted language learning trends and issues revisited: Integrating Innovation. *The Modern Language Journal*, *93*(1), 719–740. https://doi.org/10.1111/j.1540-4781.2009.00969.x

Gass, S. M., & Mackey, A. (2006). Input, interaction and output: An overview. *AILA Review*, *19*(1), 3–17. https://doi.org/10.1075/aila.19.03gas

Hyland, F. (2004). Learning autonomously: Contextualising out-of-class English language learning. *Language Awareness*, *13*(3), 180–202. https://doi.org/10.1080/09658410408667094

Jones, J. F. (2001). CALL and the responsibilities of teachers and administrators. *ELT Journal*, *55*(4), 360–367. https://doi.org/10.1093/elt/55.4.360

Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. Association Press.

Lai, C. (2013). A framework for developing self-directed technology use. *Language Learning & Technology*, *17*(2), 100–122.

Lai, C. (2017). *Autonomous language learning with technology: Beyond the classroom.* Bloomsbury Academic.

Lai, C., Li, X., & Wang, Q. (2017). Students' perceptions of teacher impact on their self-directed language learning with technology beyond the classroom: Cases of Hong Kong and U.S. *Educational Technology Research and Development*, *65*, 1105–1133. https://doi.org/10.1007/s11423-017-9523-4

Lai, C., Yeung, Y. & Hu, J. (2015). University student and teacher perceptions of teacher roles in promoting autonomous language learning with technology outside the classroom. *Computer Assisted Language Learning*, *17*(2), 703–724. https://doi.org/10.1080/09588221.2015.1016441

Lamb, T., & Reinders, H. (2005). Learner independence in language teaching: A concept of change. In D. Cunningham & A. Hatoss (Eds.), *An international perspective on language policies, practices, and proficiencies* (pp. 225–239). Fédération Internationale des Professeurs de Langues Vivantes.

Larocque, L., & Sterling, S. (2019a). *Language autonomy plan usage for second language learners*. [Unpublished PowerPoint slides]. Indiana State University, Terre Haute, IN.

Larocque, L., & Sterling, S. (2019b). *Language plan*. [Unpublished instructional material]. Indiana State University, Terre Haute, IN.

Laurillard, D. (2002). *Rethinking university teaching: A conversational framework for the effective use of learning technologies.* Routledge.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.

Lee, J. F., & VanPatten, B. (2003). *Making communicative language teaching happen* (2nd ed.). McGraw-Hill.

Lexico. (2020). *Lexico Oxford English and Spanish dictionary, thesaurus, and Spanish to English translator*. https://www.lexico.com/en/definition/mobile_application

Lightbrown, P. M. (2000). Anniversary article. Classroom SLA research and second language teaching. *Applied Linguistics*, *21*(4), 431–462. https://doi.org/10.1093/applin/21.4.431

Macaro, E., Handley, Z., & Walter, C. (2012). A systematic review of CALL in English as a second language: Focus on primary and secondary education. *Language Teaching*, *45*(1), 1–43. https://doi.org/10.1017/S0261444811000395

McLoughlin, D., & Mynard, J. (2018). *How do self-directed learners keep going? The role of interest in sustained learning.* Unpublished manuscript.

Moore, P. J., Mynard, J., Wongsarnpigoon, I., & Yamamoto, K. (2019). Autonomy and interdependence in a self-directed learning course. *Relay Journal*, *2*(1), 218–227.

Muñoz-Restrepo, A., Ramírez, M., & Gaviria, S. (2020). Strategies to enhance or maintain motivation in learning a foreign language. *Profile: Issues in Teachers' Professional Development*, *22*(1), 175–188. http://dx.doi.org/10.15446/profile.v22n1.73733

Mynard, J., Ohashi, L., Peeters, W., Shelton-Strong, S. J., Tweed, A. D., Watkins, S., &

Wongsarnpigoon, I. (2020). Understanding learner autonomy through research: A summary of a forum at JALT 2019. *Studies in Self-Access Learning Journal*, *11*(1), 53–63. https://doi.org/10.37237/110106

Nielson, K. (2011). Self-study with language learning software in the workplace: What happens? *Language Learning & Technology*, *15*(3), 110–129. http://dx.doi.org/10125/44265

Orhon, Y. (2018). An investigation of out-of-class language activities of tertiary-level EFL learners. *Education Reform Journal*, *3*(1), 1–14.

Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. Newbury House.

Plonsky, L., & Ziegler, N. (2016). The CALL-SLA interface: Insights from a second-order synthesis. *Language learning & Technology*, *20*(2), 17–37. http://dx.doi.org/10125/44459

Qualtrics. (2019). *Qualtrics* XM: The leading experience management software. Retrieved June 24, 2019, from https://www.qualtrics.com/

Reinders, H. (2011). Materials development for learning beyond the classroom. In P. Benson and H. Reinders (Eds.), *Beyond the language classroom* (pp. 175–189). Palgrave Macmillan.

Reinders, H., & Benson, P. (2017). Research agenda: Language learning beyond the classroom. *Language Teaching*, *50*(4), 561–578. https://doi.org/10.1017/S0261444817000192

Reinders, H., & Lewis, M. (2006). The development of an evaluative checklist for self-access materials. *ELT Journal*, *60*(2), 272–278. https://doi.org/10.1093/elt/ccl007

Richards, J. C., & Rodgers, T. S. (2001). *Approaches and methods in Language Teaching* (2nd ed.). Cambridge University Press.

Ringbom, H. (1979). *On the distinction between second-language acquisition and foreign-language learning* [Paper presentation]. Second Nordic Conference on Applied Linguistics, Hanasaari, Espoo, Finland.

Sanchez-Villalon, P.P., Ortega, M., & Sanchez-Villalon, A. (2010). Multimedia integration for language e-learning: Content, context, and the e-dossier. *U.S.–China Education Review*, *7*(8), 1–10. https://eric.ed.gov/?id=ED514718

Savignon, S. (2002). Communicative language teaching: Linguistic theory and classroom practice. In S. Savignon (Ed.), *Interpreting communicative language teaching: Contexts and concerns in teacher education*. Yale. http://yalepress.yale.edu/yupbooks/excerpts/0300091567_1.pdf

Shelton-Strong, S. J. (2018). Fostering the development of language learner autonomy through peer- and self-assessment. *Relay Journal*, *1*(1), 21–46. https://kuis.kandagaigo.ac.jp/relayjournal/issues/jan18/shelton_strong/

Stefanou, C. R., Perencevich, K. C., DiCintio, M., & Turner, J. C. (2004). Supporting autonomy in the classroom: Ways teachers encourage student decision making and ownership. *Educational Psychologist*, *39*(2), 97–110. https://doi.org/10.1207/s15326985ep3902_2

Tassinari, M. G. (2016). Assessment for learning; assessment for autonomy. In C. Gitsaki & C. Coombe (Eds.), *Current issues in language evaluation, assessment and testing: Research and practice* (pp. 118–136). Cambridge Scholars Publishing.

Tigchelaar, M., Bowles, R. P., Winke, P., & Gass, S. (2017). Assessing the validity of ACTFL can-do statements for spoken proficiency: A Rasch analysis. *Foreign Language Annals*, *50*(3), 584–600. https://doi.org/10.1111/flan.12286

Thomas, M., Reinders, H., & Warschauer, M. (Eds.). (2013). *Contemporary computer-assisted language learning*. Bloomsbury.

Ushioda, E. (2011). Why autonomy? Insights from motivation theory and research. *Innovation in Language Learning and Teaching, 5*(2), 220–232. https://doi.org/10.1080/17501229.2011.577536

VanPatten, B. (2003). *From input to output: A teacher's guide to second language acquisition*. McGraw-Hill.

Yamaguchi, A., Okamoto, E., Curry, N., & Konno, K. (2019). Adapting a checklist of materials evaluation for a self-access center in Japan. *Studies in Self-Access Learning Journal, 10*(4), 339–355.

APPENDIX A: LEARNER BACKGROUND AND INTERESTS QUESTIONNAIRE

LANGUAGE AUTONOMY PLANS AND GUIDED AUTONOMY IN UNIVERSITY FOREIGN LANGUAGE INSTRUCTION

You are invited to participate in a research study. This study aims to learn about how university students use a personalized plan for practicing Spanish on their own outside of class. This research study is divided in two parts. The first step asks you to do short surveys throughout the semester about the practice plan. The second short step is a follow-up activity at the very end of this semester.

This is a letter of informed consent. In it, I introduce the research study and explain what I will ask you to do if you agree to participate in the first step. This letter will help you decide if you want to participate in this research study or not. If you agree to participate in the first step of this research, you will receive a Spanish practice plan that is tailored to your personal interests instead of a generic plan. If you agree to participate, you will share your data with me from five in-class surveys about how you use your plan. These surveys are a regular part of your Spanish class and all students do them in class, but these surveys do not get an individual grade. I will never know any of your grades, but I will see your answers to these five surveys. As a result, I may learn something about how you study Spanish, how much you study Spanish, and how you like to study Spanish outside of class.

If you agree to participate in this first step of the research study, I will ask you to complete one survey outside of class that is NOT part of your regular Spanish class and to share your answers with me. This survey will take about 15 minutes and has two sections. The first section is a questionnaire about your personal interests and Spanish goals. I will use your answers to make your personalized practice plan. The second section contains Can-Do Statements about what you think you can do in Spanish currently. As a result of participating, I will know something about your personal interests, hobbies, about you as a student, and about what you think you can do in Spanish.

If you decide to participate in this research study, I will analyze data you share with me and use it to understand how students practice Spanish outside of class. This information may help other teachers and learners of foreign language, especially teachers who want to help students learn Spanish better on their own.

There are personal reasons you may want to participate in this study. Personalized Spanish activities may be fun. You may discover and explore new ways for practicing Spanish. You may

learn how to practice Spanish more effectively. You may not want to participate in this study to eliminate a sense of having one more thing to do.

The choice to participate—that is, to share your data from your in-class surveys, and to complete and share your interests and Can-Do Statements—or not is yours. Participation is entirely voluntary. You can decline to receive an individualized practice plan, and to complete the interests questionnaire and Can-Do statements.

You can withdraw from any research study. In this study, you can email me or my faculty supervisor, Dr. D'Amico, any time until June 1, 2020, to withdraw from participation. Our contact information is at the bottom of this document. You will not be able to withdraw from the research or eliminate your data from analysis after analysis is complete, and it is unlikely your personal data will be removed from this study or from any related publication once data analysis is complete. If you decide not to participate, or if you decide to withdraw, you will not lose any benefits which you may otherwise be entitled to receive.

There are approximately 115 Spanish students involved in the study. During the semester, your name and identity will be linked to all of your responses on the five in-class surveys, the interests questionnaire, and the Can-Do Statements. Your Spanish professor will not know who is participating and who is not. S/he will not know who has a generic practice plan and who has a personalized plan. S/he will not know your answers to the interests questionnaire or the Can-Do Statements or even if you completed them.

After data collection ends at the end of the semester, I will go one step further to protect your confidentiality: I will remove your identity from ALL data. I will remove your name and every personally identifying factor from all of your in-class surveys, your interests questionnaire, and your Can-Do Statements. At that point, every effort will be made to protect your confidentiality by assigning you an identification number. In separate locations, I will store (a) a record of data associated with your ID number, and (b) a record that links your data to your personal identification.

There are still potential minimum risks to this study, including the potential discovery of your personal participation in this research study and of how you practiced Spanish or about what you think you can do in Spanish. Every precaution has been taken to reduce the risk, but there is still a very low likelihood of the discovery of the quality of your independent Spanish practice.

If you choose to participate in this research, no activity on your practice plan is mandatory. You may do all, some or none of the activities on your plan. That is completely up to you. Your personalized practice plan may include online language activities. There is inherent risk whenever you use the internet, but risks associated with participation in this research are the same as those for using the internet for other daily life activities.

No fee or expense is associated with participation in this research study. You are not required to pay money at any point. All activities in your practice plan will be free, but there is a risk you will decide to spend your own money to practice Spanish. You may encounter opportunity to purchase paid content on the internet, subscriptions, and the like. You may really like a song or a

movie and want to download an MP3 or rent a movie from Amazon. It is your decision and personal responsibility to spend or commit funds in order to practice Spanish, such as those related to music or video purchases, access to web content, online subscriptions, or club dues, as a result of participation in this research.

Finally, the collection of survey data about your Spanish practice outside of class may involve risks to you that are currently unforeseeable. This research may benefit you directly by increasing your motivation and the time you spend practicing Spanish. This may benefit your grade Spanish grade. Society may benefit through a better understanding of independent foreign language practice.

If you have any questions, please contact Erin Real, ISU Graduate Student, 208 E. Nebraska St. Apt. B, Elburn, IL 60199, 847-370-5815, erin.real@sycamores.indstate.edu, or Dr. Melanie D'Amico, Associate Professor of Spanish and Linguistics, Indiana State University, Root Hall A-154, Melanie.D'Amico@indstate.edu.

If you have any questions about your rights as a research participant or if you feel you have been placed at risk, you may contact the Indiana State University Institutional Review Board (IRB) by mail at Indiana State University, Office of Sponsored Programs, Terre Haute, IN 47809, by phone at (812) 237-3088 or by email at irb@indstate.edu.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

Q2 What is your first and last name?

_____

Q3 So I may provide you a personalized study plan, what is your e-mail address?

_____

Q4 Which Spanish class are you taking this semester?

a. SPAN 102 Elem Spanish II (Professor A)
b. SPAN 102 Elem Spanish II (Professor B)
c. SPAN 201 Interm Spanish I (Dr. C)
d. SPAN 217 Span Professional (Professor A)
e. SPAN 303 Readings in Spanish (Dr. C)
f. SPAN 495 Span Topics: Defining Chile (Dr. C)

Q5 Have you ever studied Spanish before?

a. Yes (1)
b. No (2)

Q6 Have you studied a foreign language other than Spanish?
a. Yes (1)
b. No (2)

Q7 Is there any language spoken at home other than English?
a. Yes (1)
b. No (2)

Q8 Have you traveled outside of the United States?
a. Yes (1)
b. No (2)

Q9 Are you currently planning a trip to a Spanish-speaking country?
a. Yes (1)
b. No (2)

Q10 Are you a student-athlete?
a. Yes (1)
b. No (2)

Q11 What is your academic major?

_____

Q12 What is your academic minor?

_____

Q13 Do you expect or hope to use Spanish in your future career?
a. Yes (1)
b. No (2)

Q14 What is your primary reason or goal for studying Spanish?

_____

Q15 Realistically, what grade do you hope to earn in this Spanish class?
a. A (1)
b. B (2)
c. C (3)
d. D (4)
e. F (5)

Q16 List your specific interests or hobbies you do in your free time.

_____

Q17 Rank the following ways of learning according to your preference (most preferred item at top).

_____ Talk about it with other people interested in the same thing. (1)
_____ Read about it. (2)
_____ Take an in-person class or workshop. (3)
_____ Watch full-length films or documentaries. (4)
_____ Listen to a podcast, watch a short YouTube, or similar. (5)
_____ Take an online training or open course. (6)

Q18 How confident are you that you can . . . ?

	I'm worried; I don't think I can do it. (1)	Maybe I'll be able, maybe not. (2)	I can do it if I work hard. (3)	I'm very confident! (4)
Pass this class with a C or better (1)	○	○	○	○
Learn to pronounce Spanish well enough to have a conversation with native speakers? (2)	○	○	○	○

Q19 Based on your work in other classes, how motivated are you to . . . ?

	Not at all motivated (1)	I do it only if I have free time. (2)	I do it all the time because the teacher says it works. (3)	I love it! (4)
Study every day (1)	○	○	○	○

Q20 How motivated are you to use free time to do each of the following? Use 5 stars for the most motivation.

Listen to music in Spanish. (1)	☆	☆	☆	☆	☆
Talk or write in Spanish to a friend or in a journal. (2)	☆	☆	☆	☆	☆
Do online Spanish activities, like Duolingo, Mango and Quizlet. (3)	☆	☆	☆	☆	☆
Read news or books in Spanish, print or electronic. (4)	☆	☆	☆	☆	☆
Watch TV or movies in Spanish. (5)	☆	☆	☆	☆	☆

Q21 Rank the following interests in order of your personal preference (most preferred at the top).

_____ Sports, fitness or yoga
_____ Cooking or nutrition
_____ Web development, programming or gaming
_____ Volunteering, committee or council work, service, or philanthropy
_____ Music or dance
_____ Nature, gardening, or geography
_____ Graphic design, painting or fashion
_____ Film or theater
_____ Celebrity gossip
_____ Politics, news, economy or agriculture
_____ Crafts, jewelry, woodworking or construction
_____ International travel, cultures or history
_____ Creative writing

APPENDIX B: CAN-DO SELF-ASSESSMENT OF SPANISH SKILLS

Last, you will read some sets of statements about things we do in language.
Use the scale to indicate how well you think you can **CURRENTLY USE SPANISH TO DO EACH THING**.

Start of Block: Interpersonal Communication - Novice Low

Q21 In Spanish, I can . . .

	I cannot do this yet. (1)	I can do this with much help. (2)	I can do this with some help. (3)	Yes, I can do this well. (4)
Tell someone my name. (1)	○	○	○	○
Respond to yes/no questions. (2)	○	○	○	○
Respond to an either/or question. (3)	○	○	○	○
Respond to who, what, when, where questions. (4)	○	○	○	○

Start of Block: Presentational Mode - Novice Low

Q22 In Spanish, I can . . .

	I cannot do this yet. (1)	I can do this with much help. (2)	I can do this with some help. (3)	Yes, I can do this well. (4)
State my name, age, and where I live. (1)	○	○	○	○
Give my phone number, home address, and email address. (2)	○	○	○	○
Count from 1 - 10. (3)	○	○	○	○
Sing a short song. (4)	○	○	○	○
Name countries on a map. (5)	○	○	○	○
Name famous landmarks and people. (6)	○	○	○	○

Start of Block: Interpersonal Communication - Novice High I

Q23 In Spanish, I can . . .

	I cannot do this yet. (1)	I can do this with much help. (2)	I can do this with some help. (3)	Yes, I can do this well. (4)
Ask and talk about family members and their characteristics. (1)	○	○	○	○
Order a meal. (2)	○	○	○	○
Make a purchase. (3)	○	○	○	○
Buy a ticket. (4)	○	○	○	○

Start of Block: Interpersonal Communication - Novice High II

Q24 In Spanish, I can . . .

	I cannot do this yet. (1)	I can do this with much help. (2)	I can do this with some help. (3)	Yes, I can do this well. (4)
Ask and respond to simple questions about dates, times, places, and events on schedules, posters, and tickets. (1)	○	○	○	○
Exchange information about where to go, such as to the store, the movie theater, a concert, the lab, or when to meet. (2)	○	○	○	○
Accept or reject an invitation to do something or go somewhere. (3)	○	○	○	○
Invite and make plans with someone to do something or go somewhere. (4)	○	○	○	○
Ask for directions to a place. (5)	○	○	○	○
Tell someone where something is located, such as next to, across from, or in the middle of. (6)	○	○	○	○
Tell someone how to get from one place to another, such as go straight, turn left, or turn right. (7)	○	○	○	○

Start of Block: Presentational Mode - Novice High

Q25 In Spanish, I can . . .

	I cannot do this yet. (1)	I can do this with much help. (2)	I can do this with some help. (3)	Yes, I can do this well. (4)
Tell what I do in class or at work. (1)	○	○	○	○
Tell about what happens after school or work. (2)	○	○	○	○
Tell about what I do during the weekend. (3)	○	○	○	○
Talk about others' free time. (4)	○	○	○	○
Give basic biographical information about others. (5)	○	○	○	○
Talk about my favorite musical group, actor, or author. (6)	○	○	○	○
Present a topic from a lesson based on pictures or photos. (7)	○	○	○	○
Present information about something I learned in a class or at work. (8)	○	○	○	○
Present information about something I learned in the community. (9)	○	○	○	○
Tell how to prepare something simple to eat. (10)	○	○	○	○
Describe a simple routine, like getting lunch in the cafeteria. (11)	○	○	○	○

Give simple directions to a nearby location or to an online resource. (12)	○	○	○	○

Start of Block: Interpersonal Communication - Intermediate Low

Q26 In Spanish, I can . . .

	I cannot do this yet. (1)	I can do this with much help. (2)	I can do this with some help. (3)	Yes, I can do this well. (4)
Talk with someone about family or household tasks. (1)	○	○	○	○
Talk with someone about school or work. (2)	○	○	○	○
Ask and answer questions related to subjects such as geography, history, art, music, math, science, language, or literature. (3)	○	○	○	○
Make a reservation. (4)	○	○	○	○
Arrange for transportation, such as by train, bus, taxi, or a ride with friends. (5)	○	○	○	○

Start of Block: Presentational Mode - Intermediate Low

Q27 In Spanish, I can . . .

	I cannot do this yet. (1)	I can do this with much help. (2)	I can do this with some help. (3)	Yes, I can do this well. (4)
Describe the physical appearance of a friend or family member. (1)	○	○	○	○
Describe another person's personality. (2)	○	○	○	○
Describe a school or workplace. (3)	○	○	○	○
Give a presentation about a famous athlete, celebrity, or historical figure. (4)	○	○	○	○
Give a presentation about a movie or television show that I like. (5)	○	○	○	○
Talk about what I want or need to do each day. (6)	○	○	○	○
Describe what I need for school or work. (7)	○	○	○	○
Describe what my plans are for the weekend. (8)	○	○	○	○
Describe what my summer plans are. (9)	○	○	○	○
Describe holiday or vacation plans. (10)	○	○	○	○
I can describe what is needed for a holiday or a celebration. (11)	○	○	○	○
I can describe what I plan to do next in my life. (12)	○	○	○	○
I can explain the rules of a game. (13)	○	○	○	○

I can give multi-step instructions for preparing a recipe. (14)	○	○	○	○
I can express my thoughts about a current event I have learned about or researched. (15)	○	○	○	○

Start of Block: Interpersonal Communication - Intermediate High

Q28 In Spanish, I can . . .

	I cannot do this yet. (1)	I can do this with much help. (2)	I can do this with some help. (3)	Yes, I can do this well. (4)
Ask for and provide information about a hobby or lifestyle, such as bicycling, vegetarianism, video games, or sports. (1)	○	○	○	○
Talk about my family history. (2)	○	○	○	○
Talk about jobs and career plans. (3)	○	○	○	○
Give the basic rules of a game or sport and answer questions about them. (4)	○	○	○	○
Ask for, follow, and give instructions for preparing food. (5)	○	○	○	○
Ask for and follow directions to get from one place to another. (6)	○	○	○	○

Start of Block: Presentational Mode - Intermediate High

Q29 In Spanish, I can . . .

	I cannot do this yet. (1)	I can do this with much help. (2)	I can do this with some help. (3)	Yes, I can do this well. (4)
Give a presentation about my interests, hobbies, lifestyle, or preferred activities. (1)	○	○	○	○
Make a presentation about an interesting person. (2)	○	○	○	○
Present ideas about something I have learned, such as a historical event, a famous person, or a current environmental issue. (3)	○	○	○	○
Summarize a personal, historical, or cultural event. (4)	○	○	○	○
Present on something I learned from the media. (5)	○	○	○	○
Explain my point of view on current event topics such as recycling, nutrition and exercise, the food supply, conserving energy resources, extreme weather events, etc. (6)	○	○	○	○
Make a presentation about the history or current status of a school, organization, or company. (7)	○	○	○	○

Explain a series of steps needed to complete a task or experiment. (8)	○	○	○	○
Explain to someone who was absent what took place in class or on the job. (9)	○	○	○	○
Present my qualifications and goals for an academic program, training, or job. (10)	○	○	○	○
Share and justify my opinion on common issues such as allowances for children, curfews for teenagers, budget-related topics, etc. (11)	○	○	○	○
Make a presentation about future plans. (12)	○	○	○	○

Start of Block: Thank you

Your participation may help improve foreign language learning and instruction.

End of Block: Thank you

APPENDIX C: AUTONOMY PLAN USE SURVEY #1–5

Q1 What is your FIRST and LAST name?

_____

Q2 Which Spanish class are you taking this semester?

- ○ SPAN 102 Elem Spanish II (Professor A)
- ○ SPAN 102 Elem Spanish II (Professor B)
- ○ SPAN 201 Interm Spanish I (Dr. C)
- ○ SPAN 217 Span Professional (Professor A)
- ○ SPAN 303 Readings in Spanish (Dr. C)
- ○ SPAN 495 Span Topics: Defining Chile (Dr. C)

Q3 Are you CONFIDENT when you listen to songs, watch videos, or read websites in Spanish?

- ○ I'm worried. I don't think I'm good at that. (1)
- ○ I give up pretty quickly. (2)
- ○ I try my best and love it! (3)

Q4 In the last 2 weeks, about how much total time did you practice Spanish OUTSIDE of class, including assignments AND your plan?

- 0-30 minutes PER DAY (1)
- 30-60 minutes PER DAY (2)
- 1-2 hours PER DAY (3)
- More than 2 hours PER DAY (4)

Q5 In the last 2 weeks, about how FREQUENTLY did you use activities from your personal practice plan?

- 0 days (1)
- 1-2 days (2)
- Every other day (3)
- Every day (4)

Q6 In the last 2 weeks, about HOW MUCH TIME did you spend on activities from your personal practice plan?

- 0-15 minutes PER DAY (1)
- 15-30 minutes PER DAY (2)
- 30-60 minutes PER DAY (3)
- More than 60 minutes PER DAY (4)

Q7 In the last 2 weeks, did you spend more time on required assignments OR using your personal plan?

- ○ I spent more time on required assignments. (1)
- ○ I spent more time using my personal plan. (2)
- ○ I divided my time equally between the two. (3)
- ○ I did not practice Spanish outside of class. (4)

Q8 So far, how well does your personal plan MATCH your CURRENT SPANISH LANGUAGE LEVEL?

- ○ They don't match at all. (1)
- ○ Some activities match my Spanish level. (2)
- ○ There's a very strong match. (3)
- ○ I did not use my personal practice plan. (4)

Q9 So far, how well does your personal plan MATCH your PERSONAL INTERESTS?

- ○ They don't match at all. (1)
- ○ Some activities match my personal interests. (2)
- ○ There's a very strong match. (3)
- ○ I did not use my personal practice plan. (4)

Q10 In the last 2 weeks, did you USE something from your personal plan during Spanish class or to do a homework assignment?

- ○ No. (1)
- ○ I used a FEW things from my plan for class. (2)
- ○ I used MANY things from my plan for class. (3)
- ○ I did not use my personal practice plan. (4)

Q11 In the last 2 weeks, did you REMEMBER something from your personal plan during Spanish class?

- ○ No, I did not recall any plan activity during class. (1)
- ○ I recalled a FEW things from my plan in class. (2)
- ○ I recalled MANY plan activities during class! (3)
- ○ I did not use my personal practice plan. (4)

Q12 Please rate the overall OVERLAP between your Spanish CLASS and activities from your PERSONAL PLAN.

- ○ My plan does not match things we do for class. (1)
- ○ My plan matches some things from class. (2)
- ○ There is a very strong overlap between my Spanish class and my personal plan. (3)
- ○ I did not use my personal practice plan. (4)

Q13 In the last 2 weeks, what kinds of activities did you USE MOST from your personal practice plan?

- ○ I spent most time on grammar and vocabulary. (1)
- ○ I spent most time on culture and/or geography. (2)
- ○ I spent equal time on grammar-vocabulary and culture-geography. (3)
- ○ I did not use my personal practice plan. (4)

Q14 In the last 2 weeks, what kinds of activities did you USE MOST from your personal practice plan?

- ○ I spent most time communicating WITH PEOPLE. (1)
- ○ I spent most time on PRIVATE digital activities, without interacting with people. (2)
- ○ I spent equal time communicating with others and using private self-language. (3)
- ○ I did not use my personal practice plan. (4)

Q15 So far, which types of activities do you LIKE MOST from your personal practice plan?

- ○ Music, YouTube, podcast, TV or film (1)
- ○ E-books, chatting or social media (2)
- ○ Language learning apps (Mango, Duolingo, etc.) (3)
- ○ I did not use my personal practice plan. (4)

Q16 In the last 2 weeks, what kind of activities did you USE MOST from your personal practice plan?

- ○ I spent most time on language COMPREHENSION. (1)
- ○ I spent most time on language PRODUCTION. (2)
- ○ I spent equal time understanding and producing Spanish. (3)
- ○ I did not use my personal practice plan. (4)

Q17 In the last 2 weeks, what OBSTACLES did you have when you tried to use your personal practice plan?

- ○ Activities were too hard or too boring. (2)
- ○ Real-life distractions, including tech problems. (3)
- ○ I practiced without distractions. (1)
- ○ I did not use my personal practice plan. (4)

Q18 So far, which activity do you LIKE MOST from your personal practice plan?

- ○ Film or TV, including sports (1)
- ○ Language learning apps (Mango, Duolingo, etc.) (2)
- ○ Podcasts or YouTube (3)
- ○ I have not used any of these activities. (4)

Q19 So far, which activity is MOST USEFUL for meeting your personal learning goals?

- ○ Film, TV, podcasts, YouTube, or music (1)
- ○ Language learning apps or video games (2)
- ○ Google search and follow-up activities (3)
- ○ I have not used any of these activities. (4)

Q20 Rank the following according to USEFULNESS for meeting your learning goals (most useful at the top).

_____ Reading activities (1)
_____ Speaking activities (2)
_____ Word recognition activities (3)
_____ Online chat activities (4)
_____ I do not use my personal practice plan. (5)

Q21 Rank the following Spanish practice plan activities according to your PREFERENCE (most preferred at the top).

_____ Social media (Facebook, Twitter, etc.) (1)
_____ Writing or online chat (2)
_____ Language learning apps (Mango, Duolingo, etc.) (3)
_____ Music or podcasts (4)
_____ Video games (5)
_____ TV or film (6)
_____ Speaking or pronunciation (7)
_____ Reading (8)
_____ Field trips, service, or club activities (9)

APPENDIX D: FINAL USE SURVEY

Start of Block: Letter of Informed Consent B

LANGUAGE AUTONOMY PLANS AND GUIDED AUTONOMY IN UNIVERSITY FOREIGN LANGUAGE INSTRUCTION

You are invited to continue participating in this research study about how university students use personalized plans for practicing Spanish on their own outside of class. This research study is divided in two parts.

This is a letter of informed consent that explains the second, final step of the research, and asks you to complete a final survey about your Spanish practice plan. It will help you decide if you want to participate in this step of the research or not.

If you agree to participate in this step of the research study, you will be presented after this letter with a final survey that is NOT part of your regular Spanish class and asked to share your answers with me. This survey will take about 15 minutes and has two sections. The first section has some questions with open-ended responses about your experience using an independent practice plan. I will use your answers to learn more about how you used the plan to study Spanish outside of class this semester. The second section contains Can-Do Statements about what you think you can do in Spanish currently. If you agree to participate, you will share with me data from both parts of this survey. As a result of participating, I will know something about how you study Spanish and about what you think you can do in Spanish.

If you decide to participate in this step of the research study, I will analyze data you share with me and use it to understand how students practice Spanish outside of class. This information may help other teachers and learners of foreign language, especially teachers who want to help students learn Spanish better on their own.

There are personal reasons you may want to participate in this step of the research. You may want to tell me what aspects you liked best or least about your practice plan. You may not want

to participate in this step of the research study in order to eliminate a sense of having one more thing to do.

The choice to participate—that is, to complete and share your data from the final survey and Can-Do Statements—or not is yours. Participation is entirely voluntary. You can decline to complete the survey and Can-Do Statements.

You can withdraw from any research study. In this study, you can email me or my faculty supervisor, Dr. D'Amico, any time until June 1, 2020, to withdraw from participation. Our contact information is at the bottom of this document. You will not be able to withdraw from the research or eliminate your data from analysis after analysis is complete, and it is unlikely your personal data will be removed from this study or from any related publication once data analysis is complete. If you decide not to participate, or if you decide to withdraw, you will not lose any benefits which you may otherwise be entitled to receive.

There are approximately 115 Spanish students involved in the study. During this semester, your name and identity will be linked to all your responses on the final survey and the Can-Do Statements Post- Self-Assessment. Your Spanish professor will not know who is participating and who is not. S/he will not know your answers to the final survey or the Can-Do Statements post-assessment or even if you completed them.

After all data collection ends at the end of the semester, I will go one step further to protect your confidentiality: I will remove your identity from ALL your data. I will remove your name and every personally identifying factor from all of survey responses and your Can-Do Statements. At that point, every effort will be made to protect your confidentiality by assigning you an identification number. In separate locations, I will store (a) a record of data associated with your ID number, and (b) a record that links your data to your personal identification.

There are still potential minimum risks to this study, including the potential discovery of your personal participation in this research study and of how you practiced Spanish or about what you think you can do in Spanish. Every precaution has been taken to reduce the risk, but there is still a very low likelihood of the discovery of the quality of your independent Spanish practice. Finally, the collection of survey data about your Spanish practice outside of class may involve risks to you that are currently unforeseeable.

This research may benefit you directly by increasing your motivation and the time you spend practicing Spanish. This may benefit your grade Spanish grade. Society may benefit through a better understanding of independent foreign language practice.

If you have any questions, please contact Erin Real, ISU Graduate Student, 208 E. Nebraska St. Apt. B, Elburn, IL 60199, 847-370-5815, erin.real@sycamores.indstate.edu, or Dr. Melanie D'Amico, Associate Professor of Spanish and Linguistics, Indiana State University, Root Hall A-154, Melanie.D'Amico@indstate.edu.

If you have any questions about your rights as a research participant or if you feel you have been placed at risk, you may contact the Indiana State University Institutional Review Board (IRB) by

mail at Indiana State University, Office of Sponsored Programs, Terre Haute, IN 47809, by phone at (812) 237-3088 or by email at irb@indstate.edu.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

Start of Block: Final Survey about Independent Practice Plans

Q1 What is your first and last name?

_____

Q2 Which Spanish class are you taking this semester?

- SPAN 102 Elem Spanish II (Professor A)
- SPAN 102 Elem Spanish II (Professor B)
- SPAN 201 Interm Spanish I (Dr. C)
- SPAN 217 Span Professional (Professor A)
- SPAN 303 Readings in Spanish (Dr. C)
- SPAN 495 Span Topics: Defining Chile (Dr. C)

Q3 In your opinion, how important is practicing on your own outside of class for learning Spanish?

- Extremely important (1)
- Very important (2)
- Moderately important (3)
- Slightly important (4)
- Not at all important (5)

Q4 Generally, when are you more confident practicing Spanish?

- In class (1)
- Outside of class (2)

Q5 Do you think you can do more in Spanish now than you could at the start of the semester?

- Yes (1)
- Maybe (2)
- No (3)

Q6 Did your Independent Practice Plan make you want to visit a new place or learn more about something?

- Yes (1)
- No (2)

Q7 How effective is your Spanish practice on your own outside of class?

- Extremely effective (1)
- Very effective (2)
- Moderately effective (3)
- Slightly effective (4)
- Not effective at all (5)

Q8 Did your Independent Practice Plan contribute to your ability to effectively practice Spanish on your own?

- Definitely yes (1)
- Probably yes (2)
- Probably not (3)
- Definitely not (4)

Q9 Were most activities from your plan new or familiar to you?

- Familiar (1)
- New (2)

Q10 In the future, will you continue using some activity from your Independent Practice Plan?

- ○ Yes (1)
- ○ Maybe (2)
- ○ No (3)

Q11 If so, which?

_____

Q12 Do you think your Independent Practice Plan increased your total time spent practicing Spanish?

- ○ Definitely yes (1)
- ○ Probably yes (2)
- ○ Might or might not (3)
- ○ Probably not (4)
- ○ Definitely not (5)

Q13 Did your Independent Practice Plan help you gain Spanish language skills this semester?

- ○ Definitely yes (1)
- ○ Probably yes (2)
- ○ Might or might not (3)
- ○ Probably not (4)
- ○ Definitely not (5)

Q14 Did your Independent Practice Plan contribute to your learning in general?

- ○ Yes (1)
- ○ Maybe (2)
- ○ No (3)

Q15 Did your Independent Practice Plan contribute positively to your grade in Spanish class this semester?

- ○ Yes (1)
- ○ Maybe (2)
- ○ No (3)

Q16 Did your Independent Practice Plan help you meet personal learning goals?

- ○ Yes (1)
- ○ Maybe (2)
- ○ No (3)

Q17 What was the most memorable or interesting aspect of your Independent Practice Plan?

_____

Q18 In real life or virtually, did you communicate with a native Spanish speaker you did not previously know as a result of using your Independent Practice Plan?

- ○ Yes (1)
- ○ No (2)

Q19 Did you learn to depend on a new tool or resource for learning Spanish as a result of using your Independent Practice Plan?

- ○ Yes (1)
- ○ No (2)

Q20 What aspect(s) of the independent language practice plan should be kept?

_____

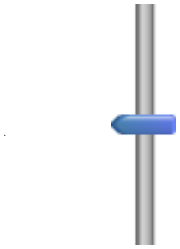
Q21 What aspect(s) of the independent language practice plan should be eliminated?

_____

Q22 How would you improve your independent language practice plan?

_____

Q23 Please rate your overall experience of using an Independent Practice Plan this semester.



1 (1)
2 (2)
3 (3)
4 (4)
5 (5)

Q24 May I contact you at the end of this study for more information about your experience of the Independent Practice Plan?

- Yes (23)
- No (24)

Q25 Please provide the best email address where I may reach you.

APPENDIX E: REVISED LANGUAGE AUTONOMY PLAN TEMPLATE

	5-10 minutes	**15 minutes**	**20-30 minutes**	**+ time**
Conversation	After setting up an account on the *Tandem* mobile app, https://www.tandem.net/, **text with a native speaker** of Spanish for at least 15 minutes about anything you like. Consider adjusting your Privacy-Location settings so that you do not share your location. Also consider using the recording option to include brief recordings of you speaking Spanish - just a few words or a sentence - in your text/chat thread.			
Listening				
Reading				
Writing				
Interactive Quizzes & Games				
Field Trip! | Service Learning				

APPENDIX F: EXAMPLE PERSONALIZED LANGUAGE AUTONOMY PLAN A

<table>
<tr><th></th><th>5-10 minutes</th><th>15 minutes</th><th>20-30 minutes</th><th>+ time</th></tr>
<tr><td>Listening</td><td colspan="2">In Spotify (Pandora or YouTube), search “en español” or “Latin Rock” and choose a station, artist or playlist that suits you. Listen to music in Spanish while you drive or clean up. Save favorites or build your own playlist. Sing along! Need suggestions to start? Try some of my recommendations below.</td><td colspan="2">Watch soccer games on Spanish-language TV or follow them live via a blog. Go here &, when a game is live, click the red En Juego link. Posts are marked by the minute and major plays are headlined under Comentarios, such as “Disparo” & “Tiro libre.”</td></tr>
<tr><td>Spotify playlists</td><td colspan="2">Tutu…; Esenciales; Mana, Enanitos Verdes, Santana, Juanes…; Hogar, Dulce Hogar</td><td colspan="2">Watch Spanish-language TV with your boyfriend.</td></tr>
<tr><td>Bands, artists</td><td colspan="2">Julieta Venegas; Café Tacuba; Facto Delafé y las Flores Azules; Ana Tijoux; La Oreja de Van Gogh; Aleks Syntek; La Bien Querida; Fonseca</td><td colspan="2" rowspan="2">In Netflix, edit your “Profile” language setting to Spanish and let Netflix recommend programs. While viewing, use the bottom-right menu for closed captions when desired and available. Try the same thing in Amazon Prime or any other service!</td></tr>
<tr><td></td><td>Try 5-minute YouTube lessons in medical Spanish. The first one is at the bottom!</td><td></td></tr>
<tr><td></td><td colspan="2">Set your Waze or other GPS app to Spanish & listen as you ride to places you already know how to get to.</td><td colspan="2">In Spanish, watch television programs and movies you have already seen and follow the plot.</td></tr>
<tr><td>Conversation</td><td colspan="4">You have the perfect conversation resource: talk to your boyfriend’s family IN SPANISH – in person, by FaceTime, WhatsApp, text – whatever it takes! They won’t care how many mistakes you make; they will be so happy you are trying! Try to text or chat in Spanish for at least 15 minutes about anything you like.</td></tr>
<tr><td></td><td colspan="4">I recommend doing the above, but if you prefer to chat with strangers, you might try the Tandem mobile app. Set up an account and text in Spanish with a native speaker for at least 15 minutes a day. Consider adjusting your Privacy-Location settings so that you do not share your location. Also consider using the recording option to include brief recordings of you speaking Spanish - just a few words or a sentence - in your text/chat thread.</td></tr>
<tr><td>Interactive Web Activities</td><td>Create a free Duolingo account & pick up where you left off!</td><td rowspan="2">Access Mango Languages online through Cunningham Memorial Library. Choose a Spanish module. Preview the grammar goals in the following & use them as practice when you get to similar lessons in your Spanish class: Unit 2. Connections > Help & Requests, 4. Lifestyle > Hospital & Pharmacy, 5. Ambitions > Emergencies & Aid, or the Specialty Unit, Text Talk.</td><td></td><td></td></tr>
<tr><td></td><td>Use Memrise to train your memory & practice skills at a lightning pace. Select your preferred level of practice.</td><td></td><td></td></tr>
<tr><td>Writing</td><td colspan="4">If your boyfriend speaks Spanish, it may be hard to avoid English when you talk… but you can still text in Spanish! Check out texting hacks in Spanish!</td></tr>
<tr><td></td><td>Use Twitter to follow a Spanish-speaking celebrity. Create your own posts IN SPANISH a few times a week.</td><td>Write a love letter, poem or keep a journal in Spanish.</td><td></td><td></td></tr>
<tr><td></td><td colspan="2">Simplify instructions for a favorite recipe; translate them to Spanish (use commands).</td><td></td><td></td></tr>
<tr><td>Reading</td><td>Read sports headlines at any major Spanish-language news outlet. Try ESPN Deportes > fútbol or tenis.</td><td rowspan="2">Check out celebrity gossip in Spanish! Google “chismes de farándulas” or “chismes de famosos.” For a direct hit, visit Univisión, TeleMundo, or El Universal.</td><td colspan="2" rowspan="2">Create a free account an online library & listen to the Harry Potter audiobooks… en español! Use the same resource to find other books and audiobooks.</td></tr>
<tr><td>Scan a blog about healthy living. Start here or here, or Google “vida sana blog” to find one that interests you.</td></tr>
<tr><td>Field Trip!</td><td colspan="4">If your boyfriend’s family lives in a Spanish-speaking country, take a virtual tour of that place, including cultural & historical sites. In Google Maps, search the name of town + country.</td></tr>
<tr><td></td><td colspan="4">Visit a Hispanic or Latino grocery or restaurant; try a new food or product that interests you. Read the label or menu.
Google the name of an ingredient or food and locate a recipe that uses it.</td></tr>
</table>

APPENDIX G: EXAMPLE PERSONALIZED LANGUAGE AUTONOMY PLAN B

<table>
<tr><th></th><th>5-10 minutes</th><th>15 minutes</th><th>20 minutes</th><th>+ time</th></tr>
<tr><td>Listening</td><td>In Spotify (Pandora, YouTube), search “en español” or “Latin Rock” and choose a station, artist or playlist that suits you. Listen to music in Spanish whenever you drive or clean up. Sing along! Save favorites or build a playlist. Need suggestions? Try the ones below.</td><td>Subscribe to rfen TV on YouTube (Real Federación Española de Natación) and daily follow Spain’s national effort to support the sport of swimming, or find something similar from another Spanish-speaking culture.</td><td>Watch ESPN’s short film in Spanish, “The Opposition,” currently available for free.</td><td></td></tr>
<tr><td>Artists</td><td colspan="2">Ana Tijoux; Mon Laferte; La Bien Querida; Café Tacuba; Facto Delafé y las Flores Azules; Aleks Syntek; La Oreja de Van Gogh; Julieta Venegas</td><td rowspan="3" colspan="2">Watch full-length Spanish-language films on Netflix. Try Roma; También la Lluvia; El Laberinto del Fauno; Gran Hotel. Edit the “Profile” language setting to Spanish & let Netflix recommend. While viewing, use the bottom-right menu for closed captions when available. Try the same in Amazon Prime or other services!</td></tr>
<tr><td>Spotify playlists</td><td>It turns out that Spotify “natación” [swim] playlists, like this one, are amazing. Some other great random playlists: Top Chile 50…; This is Mon Laferte; Tutu…; Esenciales; Mana, Enanitos Verdes, …; cuentame como paso; Hogar, Dulce Hogar.</td><td>Combine sports and nature: Search “deportes de aventura” in YouTube and watch or follow channels about adventure sports, especially those from the extreme terrain of Latin America. Try Chile here first, if you like!</td></tr>
<tr><td></td><td>Try these 5-minute YouTube lessons in medical Spanish. The first one is at the bottom!</td><td>Use SPOTIFY to listen to the podcast Coffee Break Spanish, with Season 2 for Intermediate learners & Seasons 3-4 for Advanced.</td></tr>
<tr><td></td><td>Set your Waze or other GPS app to Spanish and listen to it as you ride to places you already know how to get to.
Follow the latest swimming headlines at ESPN Deportes.</td><td>Watch SHORT FILMS in Spanish. Start with these, some with English subtitles: Clara Como El Agua ; Juan con Miedo ; Cuerdas ; Vidas Paralelas ; Santiasco: Santiago de Chile”. For more, Google “los mejores cortos en español."</td><td colspan="2">Keep up on the news from home… en español. Watch Univisión Portland!</td></tr>
<tr><td>Reading</td><td>Scan blogs in Spanish about healthy living. Start here or here, or Google “vida sana blog” to find more that interest you.
Peruse this windsurfer’s blog about the lifestyle that comes with aquatic sports.</td><td>Explore https://artsandculture.google.com/partner?hl=es or take a virtual tour of a cultural site, such as a museum or a university campus in the Spanish-speaking world. Google "recorrido virtual" and scroll to select one with .mx, .co, or .gob, in the domain.</td><td></td><td></td></tr>
<tr><td>Conversation</td><td colspan="4">Try the Tandem mobile app; it will match you to others interested in hiking, swimming, kayaking & rock climbing. Text with a native speaker of Spanish every day for at least 15 minutes about anything you like. Consider adjusting your Privacy-Location settings so that you do not share your location. Also consider using the recording option to include brief recordings of you speaking Spanish - just a few words or a sentence - in your text/chat thread.</td></tr>
<tr><td>Writing</td><td>Use Twitter to follow a Spanish-speaking swimmer, like Mireia Belmont, or her Club de fanes (Cf). Create your own posts IN SPANISH a few times a week.</td><td>Simplify instructions to your favorite recipe or swim drill; translate them to Spanish & use commands.</td><td></td><td></td></tr>
<tr><td>Interactive Web Activities</td><td>Create a free Duolingo account; learn at will!
Create a free MEMRISE account at & get lightning fast exposure to vocabulary with speed reviews.</td><td>Access Mango Languages online through Cunningham Memorial Library. Choose one of the Spanish modules and try Unit 2. Connections > Help & Requests, 4. Lifestyle > Hospital & Pharmacy, or 5. Ambitions > Emergencies & Aid.</td><td></td><td></td></tr>
<tr><td>Service Learning</td><td colspan="4">Consider volunteering your language skills at a local hospital. Check ISU’s website here for contact information.</td></tr>
</table>

APPENDIX H: GENERIC LANGUAGE AUTONOMY PLAN

<table>
<tr><th></th><th>5 minutes</th><th>10 minutes</th><th>15 minutes</th><th>20+ minutes</th></tr>
<tr><td>Conversation</td><td colspan="4">After setting up an account on the Tandem mobile app, https://www.tandem.net/, text with a native speaker of Spanish for at least 15 minutes about anything you like. Consider adjusting your Privacy-Location settings so that you do not share your location. Also consider using the recording option to include brief recordings of you speaking Spanish - just a few words or a sentence - in your text/chat thread.</td></tr>
<tr><td rowspan="4">Listening</td><td>In Spotify (Pandora or YouTube), search “en español” or “Latin Rock” & choose a station, artist or playlist that suits you. Listen to music in Spanish while you drive or clean up. Sing along! Save favorites; build a playlist. Need suggestions? Try my favorites listed below.</td><td rowspan="4">Listen to a podcast in Spanish at your level. Try one of the following or use Google or the Podcasts app to search for others: News in Slow Spanish (Intermediate), El Misterio de la Calle de Cervantes (Novice), Españolistos (Intermediate), or Nómadas, Café del Sur and El Explicador (for native speakers).</td><td rowspan="4">Use any combination of these activities to practice Spanish autonomously.</td><td>Watch your shows, but in Spanish! Turn on dubbing and closed captioning so you can read AND listen in Spanish to your favorite programs. Watching things you’ve seen & follow the plot!</td></tr>
<tr><td>Esenciales; cuentame como paso; or Hogar, Dulce Hogar.</td><td rowspan="2">Free full-length movies on the web: https://www.youtube.com/playlist?list=PLNq2eaZvd5PsY9bF9QTeJ30IRscWVT_4c</td></tr>
<tr><td>La Bien Querida; Café Tacuba; Ana Tijoux; Facto Delafé y las Flores Azules; Aleks Syntek</td></tr>
<tr><td>Set your Waze or other GPS app to Spanish and listen to it as you ride to places you already know how to get to.</td></tr>
<tr><td>Reading</td><td>Explore https://artsandculture.google.com/partner?hl=es or take a virtual tour of a cultural site, such as a museum or a university campus in the Spanish-speaking world. Google "recorrido virtual" and scroll to select one with .mx, .co, or .gob, in the domain.</td><td></td><td></td><td></td></tr>
<tr><td></td><td colspan="2">Scour Target, the library or the Internet for the Spanish translation of a familiar text, Harry Potter, Chancho el pug, Danza de dragones (George R. R. Martin), la Biblia, La telearana de Carlota (E.B. White), etc., and read for at least 10 minutes a day without distraction.</td><td></td><td></td></tr>
<tr><td>Writing</td><td></td><td></td><td>Write a poem, love letter or keep a journal in Spanish.</td><td></td></tr>
<tr><td></td><td></td><td></td><td>Follow a celebrity on Twitter who posts in Spanish. Post to your own social media account in Spanish every day.</td><td></td></tr>
<tr><td>Interactive Quizzes</td><td>Use Memrise, the mobile app or web version, to train your memory and practice skills at a quick pace.</td><td></td><td></td><td></td></tr>
<tr><td></td><td>Create a free Duolingo account at https://www.duolingo.com/, & pick up where you left off!</td><td></td><td></td><td></td></tr>
<tr><td>Field Trip!</td><td colspan="4">Involve yourself in some element of the local Spanish-speaking community. Join a club, volunteer, or visit a restaurant, grocery, or church.</td></tr>
</table>