Canadian Journal of Applied Linguistics
Revue canadienne de linguistique appliquée

Canadian Journal of Applied Linguistics (CJAL)
Revue canadienne de linguistique appliquée (RCLA)

Bienvenidos A Bordo: From Task-Based Needs Analysis to Design: Spanish-Destination Flight Attendants

Shakira Keller and Roger Gilabert

Volume 26, Number 2, Summer 2023

URI: https://id.erudit.org/iderudit/1109297ar
DOI: https://doi.org/10.37213/cjal.2023.32985

See table of contents

Publisher(s)

University of New Brunswick

ISSN

1920-1818 (digital)

Explore this journal

Cite this article

Keller, S. & Gilabert, R. (2023). Bienvenidos A Bordo: From Task-Based Needs Analysis to Design: Spanish-Destination Flight Attendants. *Canadian Journal of Applied Linguistics / Revue canadienne de linguistique appliquée*, *26*(2), 81–108. https://doi.org/10.37213/cjal.2023.32985

Article abstract

The aim of this task-based needs analysis is two-fold: firstly, to uncover the tasks performed by U.S.-based Spanish-language flight attendants and the associated language needs and, in doing so, to expand the breadth of task-based needs analysis (TBNA) through the application of multiple methods and sources (Long, 2005) and tackling the under-researched issue of transfer from TBNA to task design (Gilabert & Malica, 2021a; 2021b). A questionnaire-guided interview and online survey were used. Analysis of the extracted information illuminated the essential tasks and subtasks (Gilabert, 2005), including details regarding frequency, need for training, and language use. Findings suggest that each task and subtask requires varying amounts of Spanish, as well as knowledge of distinct linguistic dimensions. Triangulation of multiple sources and methods adds to the understanding of the tasks and language needs. Finally, suggestions as to how the outcome of this NA may transfer to task design are presented, hence extending the field of TBNA.

Bienvenidos A Bordo: From Task-Based Needs Analysis to Design: Spanish-Destination Flight Attendants

Shakira Keller
Universitat de Barcelona

Roger Gilabert
Universitat de Barcelona

Abstract

The aim of this task-based needs analysis is two-fold: firstly, to uncover the tasks performed by U.S.-based Spanish-language flight attendants and the associated language needs and, in doing so, to expand the breadth of task-based needs analysis (TBNA) through the application of multiple methods and sources (Long, 2005) and tackling the under-researched issue of transfer from TBNA to task design (Gilabert & Malicka, 2021a; 2021b). A questionnaire-guided interview and online survey were used. Analysis of the extracted information illuminated the essential tasks and subtasks (Gilabert, 2005), including details regarding frequency, need for training, and language use. Findings suggest that each task and subtask requires varying amounts of Spanish, as well as knowledge of distinct linguistic dimensions. Triangulation of multiple sources and methods adds to the understanding of the tasks and language needs. Finally, suggestions as to how the outcome of this NA may transfer to task design are presented, hence extending the field of TBNA.

Résumé

L'objectif de cette analyse des besoins basée sur les tâches est double : tout d'abord, découvrir les tâches effectuées par les agents de bord hispanophones basés aux États-Unis ainsi que les besoins linguistiques qui y sont associés, et ce faisant, élargir la portée de l'analyse des besoins basée sur les tâches en appliquant des méthodes et des sources multiples (Long, 2005) et en abordant la question peu étudiée du transfert de l'analyse des besoins basée sur les tâches à la conception des tâches (Gilabert & Malicka, 2021a ; 2021b). Un entretien guidé par un questionnaire et une enquête en ligne ont été utilisés. L'analyse des informations extraites a mis en lumière les tâches et les sous-tâches essentielles (Gilabert, 2005), y compris les détails concernant la fréquence, le besoin de formation et l'utilisation de la langue. Les résultats suggèrent que chaque tâche et sous-tâche nécessite une quantité variable d'espagnol, ainsi que la connaissance de dimensions linguistiques distinctes. La triangulation de plusieurs sources et méthodes contribue à la compréhension des tâches et des besoins linguistiques. Enfin, des suggestions sur la manière dont les résultats de cette analyse des besoins peuvent être transférés à la conception des tâches sont présentées, élargissant ainsi le domaine de l'analyse des besoins basée sur les tâches.

Bienvenidos A Bordo: From Task-Based Needs Analysis to Design: Spanish-Destination Flight Attendants

Introduction

Changing Linguistic Landscape

With the turn of the 21st century came a growing interest in the area of needs analysis (NA): professional, in-depth inquiries into what people in a specific community need to learn. As opposed to more general needs analysis (Long, 2005; 2015), in task-based needs analysis, the task is the unit of organization. As advocated by Long (2005), at times of limited resources and high demands on second language teaching, accountability for teaching and learning effectiveness is of the utmost importance. Long (2005) suggests that a needs analysis should be carried out for all individual language teaching programs, and every language course should be considered as a course for specific purposes. More recently, the need to address the under-researched issue of how to go from NA to actual task and syllabus design has been raised by scholars (Malicka et al., 2019; Gilabert & Malicka, 2021a, 2021b). The need to understand how task-based needs analysis (TBNA) as a first step in task and syllabus design may aid every aspect of task-based syllabus development: task selection, task pedagogical design, task sequencing, methodological implementation, task assessment, and program evaluation.

Increasing expectations for leading airlines to provide quality international service in addition to their domestic routes have created an urgency to broaden the understanding of airline employees' tasks. Flight attendants (FAs), who make up approximately 26% of Scheduled Air Transportation employees in the United States (U.S. Bureau of Labor Statistics, 2020), are largely regarded as the airline's public face, and research shows that FA courtesy is an essential aspect of passengers' airline selection (Bellizzi et al, 2020). In the U.S., the Spanish-speaking market is expanding as American and Latin-American citizens move between these regions for tourism, business, medical procedures, and family visits. As a result, airlines in this region now strive to hire flight attendants (FAs) that are fluent in Spanish to increase the quality of their in-flight service. These FAs need to be effective communicators since FA courtesy is an essential aspect of passengers' airline selection (Bellizzi et al., 2020). To give adequate service, FAs must be able to demonstrate professionalism, politeness, and respect in work-related interactions (Beech, 1990). But questions remain: What are the tasks that FAs need to perform in Spanish? How may sources and methods best be combined to investigate the language needs, difficulty, and frequency of those tasks? What information obtained from NA may directly inform task and syllabus design in our context?

The objective of this study is to explore FA duties through a task-based needs analysis with four specific aims: to identify the tasks that FAs need to carry out in a second language (Spanish) and their associated linguistic needs, to explore the efficiency of triangulation of multiple sources and methods in relation to TBNA, to contribute to advancing the TBNA field in the area of transfer from NA to task design, and to provide a curriculum base for Spanish-language instruction for FAs. The results of this study have the potential to fill gaps in the abovementioned domains and, ultimately, to impact the airline industry by laying a foundation to prepare current and potential FAs for the position of *language-of-destination speakers* (henceforth, Speakers) on Spanish-destination flights.

Task-Based Needs Analysis

Since the 1970s (*e.g.*,Munby, 1978; Wilkins, 1976), NA has been used to investigate language needs for course design. Still, the inclusion of tasks as base units of NA research is relatively new, with the theoretical task-based perspective only emerging within the last few decades (Gilabert & Malicka, 2021a; 2021b ; Long, 2005; Sasayama, 2021; Serafini et al., 2015). Though the number of reports on the advantages of task-based language teaching (TBLT) has grown exponentially, it has yet to become a common approach in language education (see Long, 2015 for an in-depth discussion). Several definitions for tasks have been proposed (see Ellis, 2021). Here, a task is defined as a goal-oriented process driven by meaning in which second language learners draw on communicative and cognitive resources in order to achieve an outcome. Tasks are susceptible to pedagogic intervention, and they can be presented in a sequence. The term subtask (Gilabert, 2005) is used when a given task has specific goals, processes, and outcomes, but it is dependent on or part of a larger task (e.g., contacting a source, documenting the interview, writing an email to make arrangements, interviewing and publishing the interview would be subtasks to an interview task in journalism).

The use of tasks as the unit of organization and analysis throughout the realm of TBLT has improved both the theoretical and practical usefulness of NA, according to task-based researchers and ESP specialists (Lambert, 2010; Long, 2005; Serafini et al., 2015). Research marks TBNA as useful for a few reasons: First, tasks unify other naturally-arising communication analysis units such as vocabulary, structures, and functions (Long, 1996; Serafini et al., 2015). Second, TBLT approaches are based on real-life objectives and stimulate a high level of real-world relevance (Robinson, 2001; Sasayama, 2021). Furthermore, the task is a meaningful unit to both domain experts (Long, 2015; Serafini et al., 2015) and employers (Long, 2005) and sets a base for more practical and successful course designs (Sasayama, 2021), In sum, if employees are to be apt at performing required tasks, educators should "structure our teaching *around* and teach *toward* those real-world tasks" (Sasayama, 2021, p.3).

Since the late 1990s, TBNAs have been conducted in diverse speech communities (Duranti, 1997). These include different groups of professionals such as hotel maids (Jasso-Aguilar, 1999), journalists (Gilabert, 2005), engineers of a manufacturing company (Spence & Liu, 2013), Vietnamese laborers working abroad (Châu, 2020), and marine life engineers (Alibakhshi et al., 2021). Various student groups have also been a focus of TBNAs. Previous groups have included students of Korean in a tertiary program (Chaudron et al., 2005), business English students (Huh, 2006), university graduates (Lambert, 2010), medical students (Nezakatgoo & Alibakhshi, 2014), mobile-assisted language learning students in college (Park & Slater, 2014), Spanish for Specific Purposes students in L2 Spanish (Martin & Adrada-Rafael, 2017; Serafini & Torres, 2015; Youn, 2018), study abroad students (Alhadiah, 2021; Camus & Advani, 2021; Iizuka, 2019), students in an EAP (Smith et al., 2022), Aboriginal adolescents (Oliver et al., 2013), and primary school refugee students (Mnatsakanyan, 2023; Trager, 2022). An overwhelming number of NAs examined English as a second or foreign language, followed by Spanish and the few exceptions of Korean, Turkish, Catalan or German. TBNAs are desperately needed in languages other than English.

To our knowledge, no TBNA exists depicting the tasks and associated linguistic demands of flight attendants performing their job in L2 Spanish. The immediate need to enrich current Spanish for Specific Purposes (SSP) programs, as well as broaden their scope, is clear: language courses without a specific purpose cannot adequately prepare

students for real-world demands (Brinton, 2012). Martin & Adrada-Rafael (2017) argue that "more theoretically grounded SSP research, which would support the creation of sound pedagogical materials, is sorely needed to advance this subfield of applied linguistics and improve SSP teaching practices and course quality" (p. 44). SSP should be expanded to educate a variety of professionals, including flight attendants. For the purposes of this study, TBNA stood out as the best way to fill those gaps by obtaining accurate information about the needs of flight attendants when performing tasks in L2 Spanish and by considering the transfer of such information to task and syllabus design.

Some Important Lessons from TBNAs and Some Gaps

Over the last few decades, a number of lessons have been learned concerning TBNA. Firstly, all studies report obtaining accurate information about real target tasks learners will need to perform in the second foreign language. In all of the studies reported here, tasks seem to work well as a unit of organization for data collection and analysis. Secondly, researchers agree that TBNA is best done when it relies on data derived from multiple sources and methods in the study (Martin & Adrada-Rafael, 2017; Serafini et al., 2015) since the use of multiple sources and methods increases the validity of a TBNA (Martin & Adrada-Rafael, 2017; Serafini et al., 2015). Sources can include domain experts, learners, and heads of departments, among others. Consulting learners exclusively is deemed "insufficient and unlikely to produce a reliable inventory of the tasks that are consistently required of them" (Serafini et al., 2015, p. 12), and domain experts should be questioned to access insider knowledge. Researchers are encouraged to select from qualitative and quantitative methods such as expert intuitions, interviews, surveys, and observation (Long, 2005; Serafini et al., 2015). Combining the above research sources and methods allows for triangulation of the information obtained, which is seen as beneficial (e.g., Gilabert, 2005; Jasso-Aguilar, 1999; Lambert, 2010; Serafini & Torres, 2015). A conclusion that may be drawn from such studies is that triangulation of sources is more reliable than its absence—although domain experts are typically the most useful source. The outcome of interviews with domain experts often informs larger-scale surveys, and these are valuable for extracting information regarding frequency and specific language training. Triangulation makes it possible to identify and build consensus among domain-independent task types.

As for the gaps, one of the major challenges is how the information coming out of TBNA may be used for task and syllabus design. As Gilabert and Malicka (2021a; 2021b) point out, the transfer from TBNA to task-based syllabus design has been under-researched. The outcomes of needs analysis are raw material, often not directly applicable to immediate, unprocessed task design. How can task descriptions inform selection, pedagogic design, and sequencing in a syllabus? What do they say about methodology, assessment, and program evaluation? In this paper, we briefly address this gap in the literature by reflecting on how the information obtained through TBNA may be used for task and syllabus design in a program for flight attendants in L2 Spanish. Other challenges to TBNA include: teachers and researchers might not have the access or time to execute analyses, forcing teachers to imagine students' needs; the degree of classroom homogeneity can fluctuate; the results of the NA may differ greatly from student interests.

Research Questions

Although NAs surveying the aviation industry have been carried out, some improvements could be implemented. For example, in Karimi and Vahdani Sanivi's (2014) analysis of students in an Aviation Training program, responses were collected only from students and instructors. A lack of industry experts hindered this study's effectiveness in understanding how the job is realistically performed. This paper improves upon that by using industry experts as the primary source of information. And, while there exist other NAs targeting airline staff (Dhanasmithivesn, 2007; Shin & Kim, 2005; Tangniam, 2006), none have taken the task-based perspective—least of all with the intention of including SSP.

This study attempts to bridge these gaps by undertaking an in-depth TBNA for FAs working as Spanish-language Speakers for U.S.-based airlines, including the following points of research: (1) *What are the tasks and associated language performed by flight attendants?* (2) *How does the triangulation of sources and methods help to further the understanding of frequency, need-for-training, and language of each task?* (3) *How might a task-based needs analysis be used for a future curriculum design?*

Methodology

To address these research questions, we conducted questionnaire-based interviews with and distributed an online survey among FAs, trainers, and managers. The participants, instruments, procedure, and analyses are discussed below.

Participants

A convenience sample[1] of nine participants took part in online interviews guided by a questionnaire. Heeding recommendations to use multiple sources (Long, 2005; Martin & Adrada-Rafael, 2017; Serafini et al., 2015), diverse participant experiences were welcomed to allow for broader perspectives. The participants represent three major U.S. airlines. Sources included industry experts (FAs), trainers, and a manager. Additional information regarding these participants can be found in Table 1.

Table 1
Demographics of Interview Participants

Participant (P)	Position	Spanish status	Years of in-flight experience (M=7)	Spanish-destination Speaker
P1	FA	L1	3	Y
P2	FA	L1	5	Y
P3	FA	L2	13	Y
P4	FA	L2	3	Y
P5	FA	L2	5	Y
P6	FA	L2	5	Y
P7	FA/Trainer	L1	8	Y
P8	Trainer	N/A	7	N
P9	Manager	N/A	14	N

The online survey received a total of 70 responses, 61 of which were included as participant data as represented in Table 2.

Table 2
Demographics of Survey Participants

		Numbers	%
Current position	Flight attendant	61	100
	Purser/Flight leader	21	34.43
Past position	Flight attendant	20	32.79
	Purser/Flight leader	17	27.87
	Airline representative	2	3.28
	Flight crew trainer	2	3.28
	Other	4	6.56
Years of experience	Less than 1 year	1	1.64
	1 to 5 years	29	47.54
	6 to 10 years	14	22.95
	11 to 15 years	6	9.84
	15 or more years	11	18.03
L1 status	NS	46	75.41
	NNS	15	24.59

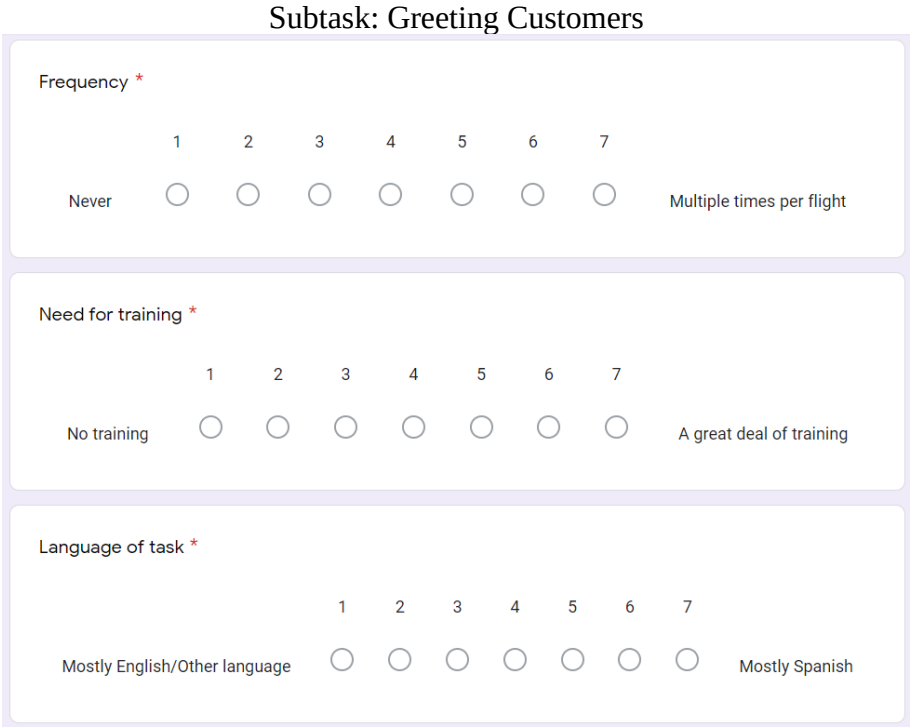
Instruments

A task-based questionnaire (see Appendix) developed by Gilabert (2005) and Gilabert & Malicka (2021b) and grounded in research of NA, discourse analysis, and linguistic descriptions, was used with the initial participants during online video interviews conducted via Zoom to perform an in-depth TBNA of the crucial communicative tasks performed throughout the FA workday and their associated linguistic needs. The seven sections of the questionnaire elicited a range of information: general aspects of tasks; participants and interaction; physical space where tasks take place; tasks' cognitive demands; linguistic demands; communication and technology; and other demands (see Gilabert & Malicka, 2021b).

Additionally, Google Forms was used to create an online survey that dissected the participants' pre-Covid-19 experience as Speakers on Spanish-destination flights. The survey both gathered information about each participant's airline experience and asked for the evaluation of subtasks deduced from the qualitative data. Survey participants were presented with three 7-point Likert scales for each subtask as shown in Figure 1.

Figure 1

Survey 7-Point Likert Scale with Subtask



Originally the constructs of frequency and difficulty were taken as a reference. Following Gilabert (2005), the highly imprecise construct of difficulty, which leads to multiple interpretations, was replaced with the concept of need for training that narrows down difficulty to mean the perceived need to train for the task in order to perform it in the L2. The use of this construct assumes that more difficult tasks are meant to require higher levels of training. Open questions documenting further comments were included. Responses were included only if the respondents worked for a U.S.-based airline, had experience as an FA, and had experience as a Spanish-destination speaker. Sixty-one survey respondents met these criteria. Testing with SPSS found the survey to be reliable (Cronbach's $\alpha = .96$).

Procedure and analyses

The instruments were essential in uncovering both the qualitative and quantitative data. Based on firsthand industry knowledge and experience, the researcher developed a 26-item task list (plus related subtasks) that was later refined with the input of industry experts before, during, and after the interview process in an effort to include the most essential communicative tasks and subtasks. An optimized list of 10 tasks and the appropriate subtasks were used for the questionnaire. Two industry experts who reviewed the task list during the pre-interview phase also piloted the questionnaire. The questionnaire was used during online video interviews conducted through Zoom over the two weeks. Each session ranged from 30 minutes to two hours.

Thirty questionnaires were completed during the interviews, which were recorded and later transcribed using Otter transcription services. Following, Nvivo (Mackey & Gass, 2016) was used to code the tasks and identify subtasks mentioned by the interviewees. A deductive coding method was used, wherein all mentions of

potential subtasks were categorized under their corresponding target tasks. Further details on task list construction can be seen in Table 3.

Table 3
Construction of Task List for Survey

Phase I: Pre-interview	26-item task list created by researcher Task list streamlined to 10 communicative tasks with associated subtasks Task list adjusted and tasks confirmed as necessary and communicative by two industry experts
Phase II: During interviews	Each task evaluated by three different interviewees (varied company, position, L1, etc.) Task list adjusted based on critiques by interviewees
Phase III: Post-interview	Subtasks identified and coded under the 10 target tasks (Nvivo) Newly mentioned subtasks identified from transcripts New subtasks confirmed by at least two interviewees evaluated by researcher for communicative nature New subtasks considered insufficiently communicative eliminated (e.g., *Preparing the carts*) New subtasks covered by another task eliminated (e.g., *Performing the safety demonstration*) Remaining new subtasks added to task list for use in online survey

The online survey using the constructed list of 35 subtasks was then written using Google Forms. Those who piloted the questionnaire also piloted the survey. Subsequently, the survey was shared directly with interview participants, and further distributed to a broad network of Facebook and LinkedIn groups frequented by FAs. Responses were collected over four weeks. Other attempts at survey distribution, including direct contact with several airlines, FA unions, and training programs, proved futile in the current downturn of the travel industry.

Interview transcripts were examined to understand the participants' views relevant to the perception of frequency, need-for-training, and language used in the main tasks. The comments pertaining to these subjects were classified into similarly named groups with Nvivo and informed the sequencing of the tasks in the curriculum suggestions later discussed. Following this, the quantitative data from the online survey were analyzed using SPSS software. Simple descriptives and the Shapiro-Wilk normality tests confirmed the data as not normally distributed. With a significance level marked as $p \leq 0.05$, not one of the three variables that were the focus of analysis (i.e., frequency, need-for-training, and language-of-task [henceforth, amount-of-Spanish]) indicated normality, so all other data inspections used non-parametric tests. Additionally, as later detailed, 11 subtasks with a less-than-adequate amount-of-Spanish (mean ≤ 3.00) usage were removed from statistical calculations. This resulted in the analysis of 24 subtasks.

Respondents were separated into "High" and "Low" groups based on their Likert scale scores by the use of K-means clusters created for each subtask-variable combination (e.g., announcements-frequency, announcements-need-for-training, etc.). "High" groups were generated from scores between 5 and 7 of an indicated variable; "Low" groups, from scores between 1 and 4. Their means were later compared. Both one-tailed and two-tailed Spearman bivariate correlations were implemented to examine

the relationships between variables for each surveyed subtask. Note that the data for any tasks and subtasks that interviewees indicated involved little or no Spanish was discarded from the applied statistical tests.

Next, the means and abovementioned clusters were used to confirm, negate, or resolve any information or discrepancies that arose during the collection of qualitative data. The results of this were used to inform task sequencing. Amount-of-Spanish used in the tasks and subtasks was adopted as the first component of task sequencing. Frequency was a secondary factor, chosen as opposed to difficulty because difficulty can be subjective and dependent on learners' individual differences (Robinson, 2001). Lastly, the suggested criterion of natural order of appearance (Martin & Adrada-Rafael, 2017) led to subtasks being featured within the overarching task to emphasize situational authenticity.

Results

The steps outlined above generated an ample amount of well-rounded data pertaining to the tasks and their associated linguistic needs. To maintain the direction of this study, analysis was limited to the three main variables of frequency, need-for-training, and amount-of-Spanish. Results are sectioned by method of data collection and later discussed per the research questions. The qualitative findings were analyzed by tasks; the quantitative data, by subtasks.

Qualitative data

Tasks and Task-Specific Language

Ten tasks and 24 subtasks were finally identified and used to shape the survey (see Table 5). The questionnaire uncovered extensive information about the associated language of each task, including sociocultural and psychological aspects, among others. Even if participants described linguistic categories in general terms, transcript analyses revealed specific vocabulary, grammar, and pragmatic requirements that should be both understood and skillfully produced for a successful performance. A sample selection of these aspects is highlighted in Table 4, the labels of which were generated based on participants' descriptions. Portions of the table remain blank where participants' interview answers did not provide an adequate description of a particular linguistic aspect (i.e., pragmatics). Some are further elaborated on in the discussion.

Table 4

Overview of Task-Specific Language

Task	Vocabulary	Grammar	Pragmatics	Tone
Attending preflight briefings	Aviation terminology & abbreviations; Weather; Altitude expressions	Modal verbs	Requests; Commands	Monotonous; Polite
Facilitating boarding	Safety requirements; Seating arrangements; Baggage options	Subject-verb agreement	Commands; Greetings; "Usted" vs. "Tú"	Positive; Warm
Conducting safety briefings	"Are you aware you're sitting in an exit row?"; "Are you willing and able to assist in case of an emergency?"	Formulaic; Simple questions	Avoid persuasion; Commands	With adults: authoritative, serious; With children: light, friendly
Executing food and beverage service	Allergies; Small talk; Alcoholic beverages; Food and beverage country variations; "Chicken or fish?"; Dining terminology	Short phrases; Y/N questions; Either/or questions	---	Friendly; positive
Making announcements	Aviation-specific; Safety; Weather; Phases of flight; Aircraft; Immigration	Formulaic; Subject-verb agreement; Subjunctive	Mitigation; Commands; Requests	Approachable; Polite; Energetic; Confident
Addressing passenger concerns	"How can I make this better for you?"; "Let me see what I can do."	Suggestions	Empathize; Apologize; Maintain control; Diffuse	Confident; optimistic
Responding to onboard threats	Stolen property; Intoxication; Discrepancies	Either/or sentences	Mitigation; De-escalation; Tailoring message to passenger; Ultimatums	Non-threatening
Managing medical emergencies	Medical conditions; Symptoms; Equipment; Medication	Reflexive verbs; Simple questions	Commands; Requests; Acknowledgements	Calm; Serious; Stern
Filling out reports/forms	Equipment; Medical; Aircraft terminology; Aviation abbreviations	First-person; Paraphrase; Truncated sentences	---	Objective; Formal
Facilitating deplaning	Parting words/goodbyes; Airport services; Special-assistance terminology	Subject-verb agreement	Acknowledgments; "Usted" vs. "Tú"	Pleasant; Calm

Amount-of-Spanish

A review of the transcripts established a unified sentiment across the sources that *"everything is in English unless it's involving the passengers on the flight"* (P3). As a result, the tasks were separated into three groups: primarily customer-facing, mixed interaction, and primarily coworker-facing. The first involved the most amount-of-Spanish use; the last, the least, as confirmed when the researcher inquired, *"Can we assume that most of the communication that happens between the other FAs and the pilots happens in English?"* To this, the participant replied, *"Absolutely"* (P5).

The primary coworker-to-coworker interactions were *attending preflight briefings* and *filling out reports/forms.* Even within these mainly English tasks, Spanish was used. Though the subtask *participating in briefings with gate agents,* under task *attending preflight briefings,* is a coworker-to-coworker interaction, Speakers might communicate in Spanish with gate agents and other ground staff in international destinations. The second, under the task *filling out reports/forms,* is the subtask *filling out immigration forms*. In this context, these forms require Spanish literacy.

Nearly all the interviewees acknowledged the presence of both English-speaking and Spanish-speaking customers on international flights. Because of this, not all communication with passengers is in Spanish, and all tasks are occasionally performed in English. The FAs switch languages based on the preference of the passenger, as noted below:

> "*So if they speak Spanish, it's in Spanish. I generally speak the language they answer me in. So if they keep answering me in English—I will then move over to English because they indicated that's their preferred language.*" – (P3)

Frequency

Perception-of-frequency for the principle is organized into three categories. First are tasks that are consistent and expected, performed nearly every flight to multiple times per flight. *Making announcements* proved to be among the most frequent and likely completed during each phase of flight, including *"two during boarding, once the boarding doors have been shut, safety demo, once you reach 10,000 [feet], cruising altitude, and maybe like, right before meal service…and initial [descent]"* (P4). Separately, another interviewee noted that her airline pre-records the required announcements, though she sometimes chooses to relay extra information through the onboard public address system. *Facilitating boarding* and *facilitating deplaning* are two tasks performed once per flight. *Conducting safety briefings* is also typically once per flight but increases if there are unaccompanied minors or special-assistance passengers present. *Executing food and beverage service* is a task completed on nearly every flight with some exceptions, such as in the case of bad weather conditions.

Second are the tasks that are neither consistent nor surprising, undergone every few flights. *Attending preflight briefings* produced a slight disagreement regarding frequency. One FA mentioned it takes place every flight, although rarely between just FAs. Another FA argued these briefings are more likely to be conducted at the beginning of every work rotation[2]. A manager took a middle stance, stating, *"It's supposed to be every flight. But that...definitely on domestic flights doesn't happen. And on international flights, I would say it happens 95% of the time."* (P9)

The frequency of the task *filling out reports/forms* ranged from *"once every quarter*" (P5) at least to "*twice a month*" (P3) at most. Comments from two

interviewees (one FA, one manager) revealed a major difference in points-of-view of perceived frequency of *addressing customer concerns*. Having previously indicated that 50 flights were equivalent to roughly three months, the FA indicated, "*For every 50 flights we have one [passenger concern]*" (P6). On the other hand, the manager stated, *"Per month? I would say 50, maybe 50 missed opportunities that come across my desk,"* (P9).

Third, are the tasks that are both inconsistent and unexpected. Answers for the frequency of *managing medical emergencies* varied drastically. The answers included every 3-4 months, twice per year, and once per year. The least frequent, *responding to onboard threats,* elicited once every other month, approximately once a year, and once every other year.

Need-for-Training

There was slightly more agreement among the majority of tasks for need-for-training. Some tasks were concluded to need between no and moderate amounts of training. *Conducting safety briefings* was perceived by one participant as needing *"no training at all"* (P1). The consensus surrounding *executing food and beverage service* was that it necessitates very little training. For *facilitating boarding*, all three interviewees said this task required low-to-moderate amounts of training, with one mentioning *"It kind of flows"* (P2). Three participants insisted *attending preflight briefings* requires a moderate amount of training, with an emphasis on knowing what information to include.

Tasks with higher stakes seemed to require moderate-to-high amounts of training. On *addressing customer concerns,* one participant noted that *"It's not rocket science*," but that confidence plays a key role "*when you're trying to be professional and rectify situations in front of strangers*" (P4). The others supported that statement. *Managing medical emergencies* was also given a moderate-to-high need-for-training by the participants. *Responding to onboard threats* was consistently rated as needing a high level of training, with one participant maintaining that the airline's training was not enough to handle these situations successfully.

Last were tasks that seemed to provoke disagreement among interviewees. *Making announcements,* for example, was said to need very low amounts of training if done in one's native language and there are available scripts; however, for a NNS completing the task in Spanish, a range of moderate-to-high levels of training was suggested. Regarding *filling out reports/forms,* one participant said no training was necessary; another, a moderate amount; the last, a high amount. Similarly, answers for *facilitating deplaning* ranged from none to a moderate amount of training.

Quantitative Data

Descriptive Overview

Subtasks with a mean ≤ 3.00 for amount-of-Spanish, indicating the language is used very little or not at all, were removed from statistical calculations. The means of each remaining subtask are featured in Table 5. The five tasks requiring the most Spanish use are highlighted.

Table 5
Task Means

Task	Subtask	Frequency	Need-for-training	Amount-of-Spanish
Attending preflight briefings	Participating in preflight briefings with gate agents	4.36	3.52	3.82
Facilitating boarding	Greeting passengers	6.61	3.62	5.62
	Verbally assisting with baggage storage	5.84	3.43	5.66
	Assisting customers with seating issues	6.21	3.66	5.77
Conducting safety briefings	Briefing exit rows	4.90	4.62	4.23
	Briefing unaccompanied minors	4.72	4.21	4.67
	Briefing special-assistance passengers	4.92	4.52	4.72
	Checking passenger compliance to safety requirements	6.13	4.82	5.05
Executing food and beverage service	Serving/selling food and beverages	6.00	3.67	4.89
	Fulfilling additional passenger requests post-service	6.02	3.52	5.21
Making announcements	Gathering appropriate announcement information	5.89	4.44	5.30
	Translating/interpreting unscripted announcements	5.90	4.64	6.08
	Reading scripted announcements	6.16	4.08	6.03
Addressing customer concerns	Clarifying/restating passenger concerns	5.70	4.25	5.25
	Offering apologies for passenger concerns	4.80	4.36	5.33
	Providing solutions to resolve passenger concerns	5.51	4.33	5.25
Responding to onboard threats	De-escalating onboard threats	3.44	5.05	3.20
	Checking on the well-being of affected passengers	3.62	4.92	4.39
Managing medical emergencies	Requesting assistance from medical professionals	3.75	4.67	3.51
	Gathering medical-related information from passengers	3.97	4.90	4.51
Filling out reports/forms	Filling out immigration forms	5.46	3.81	5.58
Facilitating deplaning	Communicating passenger assistance needs to gate agents	5.33	3.67	4.08
	Providing airport service information to passengers (baggage claim/connecting flight/immigration/etc.)	5.64	3.89	5.30
	Saying goodbye to passengers	6.48	2.64	5.79

K-Means High/Low Group Comparisons

K-means clusters created "High" and "Low" groups based on the Likert scores of the indicated subtasks. The information provided by these clusters allowed the researcher to understand whether the majority of respondents assigned a high or low score to the variable for each subtask. First, a subtask related to conducting safety briefings is analyzed in Table 6. The majority of survey participants (n = 35) agreed that less Spanish is necessary for *briefing the exit rows* (M = 2.66, SD = 1.26).

Table 6
Conducting Safety Briefings: Amount-of-Spanish High/Low Clusters

Subtask	Cluster	N	Min.	Max.	Mean	SD
Briefing the exit rows	High	26	5	7	6.35	.89
	Low	35	1	4	2.66	1.26

The clusters surrounding *making announcements* showed each subtask was perceived to be very frequent, though *translating/interpreting announcements* and *reading scripted announcements* had a higher contrast between the High (n = 52) and Low (n = 9) groups, as well as higher rates of frequency (M = 6.73, SD = .63)

Table 7
Making Announcements: Frequency High/Low Clusters

Subtask	Cluster	N	Min.	Max.	Mean	SD
Gathering information for announcements	High	30	3	7	6.13	1.20
	Low	31	2	7	5.65	1.91
Translating/interpreting announcements	High	51	5	7	6.49	.73
	Low	10	2	4	2.90	.88
Reading scripted announcements	High	52	5	7	6.73	.63
	Low	9	1	4	2.89	.93

In Table 8, the High and Low groups *for addressing passenger concerns* revealed 47 of the surveyed FAs performed the subtask *clarifying passenger concerns* close to multiple times per flight (M=6.36, SD=.82). The same held true for *providing solutions to passenger concerns* for 42 FAs (M=6.43, SD=.77).

Table 8
Addressing Passenger Concerns: Frequency High/Low Clusters

Subtask	Cluster	N	Min.	Max.	Mean	SD
Clarifying Passenger Concerns	High	47	5	7	6.36	.82
	Low	14	2	4	3.50	.65
Providing solutions to passenger concerns	High	42	5	7	6.43	.77
	Low	19	2	4	3.47	.70

For the two subtasks relevant to *responding to onboard threats* in Table 9, both *de-escalating onboard threats* and *checking on the well-being of affected passengers* were seen by the majority of participants (n = 39) as a very occasional event (M = 2.10, SD = .72; M = 2.23, SD = 1.14, respectively).

Table 9
Responding to Onboard Threats: Frequency High/Low Clusters

Subtask	Cluster	N	Min.	Max.	Mean	SD
De-escalating onboard threats	High	22	4	7	5.82	1.10
	Low	39	1	3	2.10	.72
Checking on the well-being of affected passengers	High	22	5	7	6.09	.89
	Low	39	1	4	2.23	1.14

Curriculum Design

Following Gilabert & Malicka (2021a; 2021b), the tasks were ordered by amount-of-Spanish and frequency. This was determined by both the qualitative and quantitative results above. It was additionally important to recreate situational authenticity by maintaining the task-subtask relationship. Furthermore, subtask order was arranged to maintain the integrity of the main task. The suggested sequencing for a future curriculum is reported in Table 10.

Table 10
Suggested Task Sequencing for Future Curriculum

Course objectives (tasks)	Related subtasks
1. Making announcements	Gathering appropriate announcement information Translating/interpreting unscripted announcements Reading scripted announcements
2. Facilitating boarding	Greeting passengers Assisting customers with seating issues Verbally assisting with baggage storage
3. Conducting safety briefings	Briefing special-assistance passengers Briefing exit rows Briefing unaccompanied minors Checking passenger compliance to safety requirements
4. Facilitating deplaning	Providing airport service information to passengers (baggage claim/connecting flight/immigration/etc.) Communicating passenger assistance needs to gate agents Saying goodbye to passengers
5. Executing food and beverage service	Serving/selling food and beverages Fulfilling additional passenger requests post-service
6. Addressing customer concerns	Clarifying/restating passenger concerns Offering apologies for passenger concerns Providing solutions to resolve passenger concerns
7. Managing medical emergencies	Gathering medical-related information from passengers Requesting assistance from medical professionals
8. Responding to onboard threats	De-escalating onboard threats Checking on the well-being of affected passengers
9. Attending preflight briefings	Participating in preflight briefings with gate agents
10. Filling out reports/forms	Filling out immigration forms

The significance of these results as interpreted by the authors is examined in further detail in the discussion section.

Discussion

In what follows, the research questions addressing tasks and associated language use, triangulation of sources and methods, and use of a TBNA to construct a curriculum are discussed.

Tasks and Associated Language Uses Performed by Flight Attendants

This study used the task as the unit for the NA because tasks "provide an ideal context in which to link form and function" that occurs in natural communication (Serafini et al., 2015, p. 12). Additionally, Crookes (1986) suggested that tasks have a psychological reality, whereby "much, if not most, of human activity, whether in

employment or in the classroom can be seen as a series of tasks" (p. 32, cited in Gilabert, 2005). As Long (2015) predicted, the task unit proved meaningful to the experts, allowing them to elaborate on their experiences and ultimately produce more substantive content.

The list of tasks and subtasks evolved alongside extensive discussion and analysis, which encouraged open dialogue about its inclusivity. Although the researcher's firsthand experience helped to initiate the process, Serafini et al.'s (2015) advice to strengthen the validity of the study by maintaining the flexibility of the list was followed. Thereby, the initial list of 26 tasks and 41 subtasks was finally consolidated to 10 tasks and 24 subtasks. The continuous modification of the task list based on input from experts was an improvement to studies such as Tangniam (2006)—which did not consult airline ground staff to create the list surveyed by that population.

Gaining an in-depth understanding of how the language used interacts with the objectives and procedures of each task was a primary goal of the NA, following Long's (2015) assertion that language uses tend to be contextualized and contingent, rather than isolated and devoid of context. Information like that obtained in this TBNA would be crucial to consider during the pedagogic task design for syllabus construction. Discussed below are two representative samples of the analyzed tasks. The examples serve to illustrate how the linguistic needs of a task are derived from the reality of its performance.

Task 1: Managing Medical Emergencies

The interviewees revealed that this task requires two-way communication. Specialized vocabulary surrounding medical conditions (e.g., heart attacks, diabetes), symptoms (e.g., vomiting, trouble breathing), equipment (e.g., oxygen bottles, Automated External Defibrillator), and medication were said to be vital. Also mentioned were pain description and body parts, taking into account that these words can change depending on the cultural backgrounds of the passengers. Regarding grammar, two participants accentuated the necessity of understanding reflexive verbs to avoid miscommunication. One, for instance, examined the difference in message between *¿Está bien?* (*Are you ok?*) and *¿Se siente bien?* (*Are you feeling ok?*) when asking about the well-being of a passenger. Someone less fluent might mistake the former for the latter.

The subtask *gathering medical-related information from passengers* emphasized the importance of listening skills, and the use of simple, direct questions like, *"Are you dizzy? Can you breathe?*"(P6) or *"What's today's date? What's your name?"* (P3). Although some interviewees said a calm, serious tone was appropriate, one implied that getting information from a passenger might require a more stern approach, as such: *"No, I need to see. Are you gonna pass out? …Tell me the truth"* (P5). Lastly, the interviewees highlighted important pragmatic strategies meant to maintain control of the cabin through the use of commands, requests, and acknowledging passenger assistance.

Task 2: Responding to Onboard Threats

According to one interviewee, the goal of this task is de-escalation of threats that endanger passengers or crew members, and all linguistic needs align with that objective. This task was also said to have a great deal of two-way communication, requiring both listening and speaking. FAs must be able to interact with vocabulary addressing a wide

range of possible topics that trigger threats including stolen property, drunk passengers, and racial tensions. As one participant stated, *"Adults turn into kids in the plane"* (P7).

As an example of useful speech acts, an interviewee mentioned the necessity of forming ultimatums for aggressive passengers: *"I'll be like, do you want to stay on the flight? Calm down, we'll go, and you'll come with us. Or you can stay and take the next flight"* (P2). Furthermore, it was noted that the pragmatics of de-escalation techniques differ in English and Spanish, which uses more mitigation: *"In [Spanish-destination] flights, we tend to say it in a sweeter way. So it feels like you're doing me a favor by sitting down. In English, it feels more demanding"* (P7). Another participant spoke to the necessity of tailoring one's message, mentioning that he would use more informal language with someone more demographically similar to himself (by age, ethnicity, etc.), and more formal language with someone less similar, to *"make sure that there's no, you know, misunderstanding in the language used"* (P8). All participants agreed that the less aggressive the tone used, the more likely a situation is to diffuse.

Triangulation of Sources and Methods Helps to Further the Understanding of Frequency, Need-for-Training, and Language of Each Task

In agreement with past research emphasizing the notion that multiple sources and methods are vital to the validity of a TBNA (Martin & Adrada-Rafael, 2017; Serafini et al., 2015), the conducted research aimed to nurture both. While domain experts from a variety of airlines were the primary sources of contribution to the data, managers, and trainers were also consulted during the investigation. It should be noted that managers and trainers are expected to maintain FA qualifications; thus, they too are familiar with the often contrasting "idealized" and "realistic" versions of flight tasks.

Discrepancies uncovered between the FAs and their superiors were enlightening. One of the most outstanding examples was with *addressing passenger concerns*, wherein the FA thought in terms of how often the scenario is encountered in flight, while the manager estimated how often she receives reports at her desk. The importance of having multiple sources was again highlighted when discussing *responding to onboard threats*. One of the trainers interviewed for this task had notably restrained answers, as the responses to onboard threats can contain sensitive industry information: *"We don't really get to talk much about things that are security related"* (P8). Other non-trainer sources were, though careful, willing to give slightly more information about responses to threats. The interviewer's status as an industry insider appeared to increase the level of trust between the researcher and most participants, as they were aware she is already versed in the security training they underwent.

Regarding the triangulation of methods, the use of the questionnaire and survey proved indispensable in the collection and comparison of data. The questionnaire facilitated the acquisition of qualitative data, allowed participants to expand on individual experiences, and assisted in amplifying the results of the survey responses; the survey sourced quantitative data from a wider number of participants, allowing for greater generalization, and supplemented the emergent themes of the questionnaire responses. The interaction of methods greatly illuminated the data. The survey responses, for example, emphasized the interviewees' report that coworker-only tasks are completed mainly in English. This, in turn, reinforced the decision to disregard the majority of tasks and subtasks unrelated to passenger interactions. Contrary to coworker-centered communication, customer-centered subtasks were scored much higher on the Likert scale for being executed mainly in Spanish, as was detailed in the interviews. Likely, filtering the task lists to include only items carried out in Spanish

produced the unanticipated positive correlation between frequency and amount-of-Spanish.

There were sometimes discrepancies among the interviewees that were clarified through an extensive look at the survey data. For instance, though one FA said safety briefings are done in English, the next insisted it is a primarily Spanish task. Analysis of the *conducting safety briefings* subtasks showed that most participants agreed that there is a lesser amount-of-Spanish used for *briefing the exit rows*. As the participants indicated *briefing the exit rows* tends to use formulaic, scripted language, there is a possibility that some airlines discourage modified language even on flights to non-English speaking destinations. Another direct contrast surfaced as two interviewees signaled announcements as an overwhelmingly frequent occurrence, while one indicated more irregularity in this task due to the use of recordings. Analysis of the survey data for the *making announcements* subtask indicated that, overall, this task is extremely frequent in comparison to others.

The previously mentioned disagreement in manager and FA perspectives surrounding the frequency of *attending to passenger concerns* was also resolved by the survey data, which revealed that a substantial portion of FA answers was more similarly aligned with the manager, as they signaled the subtasks *clarifying passenger concerns* and *providing solutions to resolve passenger concerns* as performed closer to multiple times per flight. Interviewees offered contradictory information on the frequency of *responding to onboard threats*. While two of the three participants agreed that threats are unlikely to happen more than once a year, one mentioned they experienced serious threats once every other month. In this case, the survey consensus suggested that managing threats is a very infrequent task, reflecting the perception of the majority of the interviewees.

Possible TBNA Contribution to Future Curriculum Design

In addition to the rich contextual, psycholinguistic, and other insights unreported here, the NA unearthed a wealth of information regarding the frequency, difficulty, importance, and complexity of each task. The final tasks selected for the course design were achieved only after thorough analysis and interpretation, as laid out meticulously in this report. As Gilabert and Malicka (2021a) suggest, the decision process of selecting and sequencing tasks for pedagogic task design and syllabus design is greatly aided by some of the mechanisms of TBNA. One of the main focuses of task-based course development is task sequencing, although researchers disagree on the best sequencing strategies (Martin & Adrada-Rafael, 2017; Robinson, 2001). While some research suggests sequencing tasks according to perception of difficulty over frequency, or cognitive complexity over difficulty (Malicka et al., 2019; Robinson, 2001), others (Martin & Adrada-Rafael, 2017; Serafini & Torres, 2015) point out that no formula is above criticism in terms of criteria for the order of task presentation in TBLT. Though task sequencing is still an unresolved issue in the TBLT field, obtaining information about the participants' perception of need-for-training in addition to perceptions of task difficulty as well as the criteria that make a task more complex can provide a basis for sequencing decisions that is empirical rather than completely intuitive.

In the particular context of this study, organizing the tasks first by amount-of-Spanish then by frequency was instrumental to and significantly aided task selection and sequencing. Amount-of-Spanish was prioritized since any course resulting from this research would be developed for current and potential NNS FAs whose objective is to learn the necessary linguistic skills for the tasks required of Spanish-destination

Speakers. Frequency was used as the second determining factor in sequencing, since degree of difficulty, believed to be correlated highly to need-for-training, was agreed by multiple sources to be too subjective and challenging to foresee before a course start (Martin & Adrada-Rafael, 2017; Robinson, 2001). Situational authenticity was maintained by keeping the subtasks grouped in natural order of appearance (similar to Martin& Adrada-Rafael, 2017); for this reason, the suggested curriculum focused on aligning the subtasks with their overarching tasks, rather than arranging the subtasks independently.

Overall, each course must adapt the sequencing to factors such as the population of the learners, the learner and course goals, the content to be covered, and the length of the course. Still, the transfer of tasks to the classroom remains an area deserving of more research. Tasks have been previously criticized as being unpredictable in real-life situations, performed differently on each occasion (Ellis, 2018; Seedhouse, 2005). This idea became apparent multiple times during the interviews, especially when, speaking on *addressing passenger concerns,* one participant mentioned: *"There's nothing in my head that tells me exactly how this is going to play out. So you have to be a little, you know,* on *[by] the seat of your pants, which FAs are excellent at doing"* (P9).

Nonetheless, it is possible to transfer tasks to pedagogical courses if taught in a way that offers a certain level of foresight (Ellis, 2018). In addition to selection and sequencing, the first crucial aspects in syllabus design, TBNA information obtained by the thorough NA in this study has the potential to provide quality insight into not only the exact steps, procedures, psychosocial settings, and levels of difficulty (among other aspects) of each task, but also its linguistic, cognitive, and interactive characteristics, which will help to aid decision-making during task design and formulate the best methodology for instruction of the task (Gilabert & Malicka, 2021b). NA allows for task-based language assessment through the demonstration of proper execution of the target task and its associated language. Lastly, it is imperative to remember that the task sequencing and syllabus design can be modified based on feedback received during and after the course. As shown by the results in this study, TBNA has served the purpose of informing task selection and task sequencing, and it can clearly assist pedagogic task design as well as hint at methodological choices during task implementation and criteria for task assessment, all important and necessary steps in syllabus design (Long, 2015; Malicka et al. 2019).

Conclusion

This study aimed to contribute to the fields of SSP by conducting a NA from a task-based perspective. Through an extensive TBNA, the essential communicative tasks of FAs were both identified and described, and their associated linguistic qualities were illuminated. Plus, the detailed reflection on the interactions of multiple sources and methods as suggested by experts in NA (Long, 2005; Long, 2015; Martin & Adrada-Rafael, 2017; Serafini et al., 2015) helped to advance this area of research. The emphasis on how the outcomes of TBNA may transfer to task and syllabus design is also a contribution to the advancement of syllabus design in TBLT and to FA training as a whole. The data collected and analyzed by frequency, need-for-training, and amount-of-Spanish assisted in creating a carefully informed base for an eventual TBLT curriculum of the Spanish language for FAs. If the suggested course were to be expanded upon and implemented, it would stand apart from existing FA training courses by adding a distinct SSP lens and providing NNS the opportunity to develop their professional skills alongside their linguistic skills.

While every effort was made to construct a valid and structurally sound NA, this study was limited by time and resources. Though it is considered "vital to deploy open-ended procedures first", like unstructured interviews, in a NA (Serafini et al., 2015, p. 13), time constraints instead mandated partial reliance on the researcher's firsthand experience as a U.S.-based, Spanish-qualified FA to develop the flexible task list used for the questionnaire. Time constraints also inhibited the opportunity to obtain a managerial or trainer perspective on every task, though it would have further complemented the data.

Additionally, in light of the Covid-19 pandemic, conducting an observation of Speakers onboard an aircraft was beyond reach. Instead, the researcher supplemented the understanding of the inner workings of in-flight interactions with personal experience. Finally, similar to Martin & Adrada-Rafael (2017) and contrary to best practices (Long, 2005; Serafini et al., 2015) participants were secured from a convenience sample rather than a stratified random sampling for the interviews and survey. As suggested by one of the reviewers, a follow-up study should also include the opinion of the passengers as the ultimate judges of ideal performance. As previously mentioned, the survey did not meet the expected response rate, in part because of the downsizing of the airline industry due to the pandemic.

Despite its limitations, this study has important implications. Much of the conversation surrounding LSP and TBLT has focused on the teaching of English in domains such as medicine and business (Klee, 2015). Those conversations have now been expanded by highlighting the necessity of SSP and TBNA for the airline industry. Apart from giving motivated FAs the tools to develop their language skills alongside their understanding of the duties of the job, it is especially useful for airlines who desire to combat the need to constantly seek out new NSs by giving the opportunity for professional development to their in-house FAs. Equally as important given the time and financial constraints affecting training, a TBNA avoids the issue of wasting resources on training for tasks that have few consequences on real-life performance. Additionally, the detailed information obtained in this needs analysis about the general aspects of tasks, their specific procedures, the role of participants in interactions, the physical space where tasks occur, their cognitive and linguistic demands, and the integration of communication and technology has the potential to improve training (see Gilabert & Malicka, 2021b).

Future studies could further dissect the wealth of qualitative data collected by the questionnaire. One of the emergent themes included the way cultural differences between destinations shifted the language used by FAs. Another was the variation in airline policies that affect the Speaker role. Moreover, though research would benefit from the evaluation of TBLT courses, especially for SSP (Klee, 2015), it is difficult to know if the sequencing methods applied are effective, as the subsequent verification of those results would be heavily delayed. Indeed, it might be reasonable to assume that it would be unsuitable to gauge the effectiveness of the TBLT course until after the students have proven their ability in the appropriate real-life context. Future research could further explore these themes, as well as adapt the study to Speakers of Other Languages and Destination Languages.

In the words of an interviewee, while all aspire to perfect their L2 use, in part for the people served, one must keep in mind that *"they just appreciate that you're making that effort"* (P4). However, courses such as these can and should be developed by both industry institutions and airlines themselves to allow current and aspiring FAs the opportunity to develop their language skills and better serve airline passengers.

Acknowledgements:

The authors would like to thank Generalitat de Catalunya 2021SGR0303. Special thanks are also extended to the members of the GRAL (language acquisition research group) at the University of Barcelona for their support and resources.

Correspondence should be addressed to Shakira Keller or Roger Gilabert
Email: shakirakeller91@gmail.com; rogergilabert@ub.edu

Notes:

[1] Due to the current pandemic conditions, a convenience sample was the most reasonable choice for the selection of interview participants. An attempt at a varied sample was made based on the researcher's industry contacts.

[2] A work rotation can be understood as the block of consecutive days an FA is assigned to work.

References

Alhadiah, A. (2021). Communicative Needs of Saudi EFL Engineering Students in an EAP Context: Task-Based Needs Analysis. *TESOL International Journal*, *16*(1), 9-33. https://eric.ed.gov/?id=EJ1329687

Alibakhshi, G., Javaheri, R., & Labbafi, A. (2021). Academic and real-life task-based language needs of marine engineering students: interface between students' and subject teachers' perspectives. *Heliyon*, *7*(2). https://doi.org/10.1016/j.heliyon.2020.e05534

Beech, John G. (1990). *Thank you for flying with us: English for in-flight cabin attendants*. Prentice Hall.

Bellizzi, M. G., dell'Olio, L., Eboli, L., Forciniti, C., & Mazzulla, G. (2020). Passengers' expectations on airlines' services: Design of a stated preference survey and preliminary outcomes. *Sustainability*, *12*(11), 4707. https://doi.org/10.3390/su12114707

Brinton, D. (2012). Content based instruction in English for specific purposes. In C. A. Chapelle (Ed.), *The encyclopedia of applied linguistics* (pp. 1–9). Wiley Blackwell. https://doi.org/10.1002/9781405198431.wbeal0191

Camus, P., & Advani, M. (2021). Preparing for study abroad. *Hispania*, *104*(3), 375-394. https://www.jstor.org/stable/27095470

Châu, N. N. B. (2020). Language needs analysis for working abroad: A case study in Thua Thien Hue province. *Hue University Journal of Science: Social Sciences and Humanities*, *129*(6B), 117-134. https://doi.org/10.26459/hueuni-jssh.v129i6B.5703

Chaudron, C., Doughty, C. J., Kim, Y., Kong, D. K., Lee, J., Lee, Y. G., Long, M. H., Rivers, R. & Urano, K. (2005). A task-based needs analysis of a tertiary Korean as a foreign language program. In M. Long (Ed.), *Second Language Needs Analysis* (Cambridge Applied Linguistics, pp. 225-262). Cambridge University Press. https://doi.org/10.1017/CBO9780511667299.009

Crookes, G. (1986). *Task classifications: A cross-disciplinary review*. University of Hawaii at Manoa. http://sls.hawaii.edu/Gblog/wp-content/uploads/2011/08/Crookes-1986.pdf

Dhanasmithivesn, K. (2007). *An analysis of English language skill needs of Thai flight attendants employed by China airlines* [Master's thesis, Srinakharinwirot University, Bangkok].

Duranti, A. (1997). *Linguistic anthropology*. Cambridge University Press. https://doi.org/10.1017/CBO9780511810190

Ellis, R. (2018). Taking the critics to task: The case for task-based teaching. In I. Walker, D. K. Guan Chan, M. Nagami, C. Bourguignon (Eds.), *New perspectives on the development of communicative and related competence in foreign language education* (pp. 23-40). Walter de Gruyter. https://doi.org/10.1515/9781501505034-002

Ellis, R. (2021). Task-based language teaching. *Research Questions in Language Education and Applied Linguistics: A Reference Guide*, 133-136. https://doi.org/10.1017/9781108643689

Gilabert, R. (2005). Evaluating the use of multiple sources and methods in needs analysis: A case study of journalists in the autonomous community of Catalonia (Spain). In M. Long (Ed.), *Second Language Needs Analysis* (pp. 182-199). Cambridge University Press. https://doi.org/10.1017/CBO9780511667299.007

Gilabert, R., & Malicka, A. (2021a). From needs analysis to task selection, design, and sequencing. In M. Ahmadian & M. Long (Eds.), *The Cambridge Handbook of Task-Based Language Teaching* (pp. 226-249). Cambridge: Cambridge University Press. https://doi.org/10.1017/9781108868327

Gilabert, R. & Malicka, A. (2021b). From needs analysis to task-based design: Methodology, assessment and programme evaluation. In N.P. Sudharshana & L. Mukhopadhyay (Eds.), *Task-based language teaching and assessment*. Springer. https://doi.org/10.1007/978-981-16-4226-5_6

Huh, S. (2006). A task-based analysis for a business English course. Second Language Studies, *24*(2), 1-64. http://hdl.handle.net/10125/40680

Iizuka, T. (2019). Task-based needs analysis: Identifying communicative needs for study abroad students in Japan. *System, 80*, 134-142. https://doi.org/10.1016/j.system.2018.11.005

Jasso-Aguilar, R. (1999). Sources, methods and triangulation in needs analysis: A critical perspective in a case study of Waikiki hotel maids. *English for Specific Purposes 18*(1), 27-46. https://doi.org/10.1016/S0889-4906(97)00048-3

Karimi, P., & Vahdani Sanavi, R. (2014). Analyzing English language learning needs among students in aviation training program. *Procedia - Social and Behavioral Sciences, 98*, 852-858. https://doi.org/10.1016/j.sbspro.2014.03.491

Klee, C. A. (2015). Content-based programs and Spanish for the professions. In M. Lacorte (Ed.), *Routledge handbook of Hispanic applied linguistics* (pp. 184-201). Taylor and Francis.

Lambert, C. (2010). A task-based needs analysis: Putting principles into practice. *Language Teaching Research, 14*(1), 99-112. https://doi.org/10.1177/1362168809346520

Long, M. H. (1996). Authenticity and learning potential in L2 classroom discourse. In G.M. Jacobs (Ed.), *Language classrooms of tomorrow: Issues and responses* (pp. 148–69). SEAMEO Regional Language Centre. http://hdl.handle.net/10125/40771

Long, M. H. (2005). *Second language needs analysis*. Cambridge University Press. https://doi.org/10.1017/CBO9780511667299

Long, M. H. (2015). *Second language acquisition and task-based language teaching*. Wiley Blackwell.

Mackey, A., & Gass, S. M. (2016). *Second language research: Methodology and design* (2nd ed.). Routledge. https://doi.org/10.4324/9781315750606

Malicka, A., Gilabert, R., & Norris, J. M. (2019). From needs analysis to task design: Insights from an English for specific purposes context. *Language Teaching Research, 23*(1), 78–106. https://doi.org/10.1177/1362168817714278

Martin, A., & Adrada-Rafael, S. (2017). Business Spanish in the real world: A task-based needs analysis. *L2 Journal, 9*(1). https://doi.org/10.5070/L29131409

Mnatsakanyan, A. (2023). A task-based needs analysis of primary school-aged children with refugee backgrounds in Catalonia. [Unpublished MA thesis, University of Barcelona.]

Munby, J. (1978). *Communicative syllabus design*. Cambridge University Press.

Nezakatgoo, B., & Alibakhshi, G. (2014). Assessing task-based English language needs of medicine students: Are they aligned with pedagogical tasks in EMS courses?. *Iranian Journal of Applied Language Studies*, *6*(2), 81-102. https://doi.org/10.22111/IJALS.2014.2186

Oliver, R., Grote, E., Rochecouste, J., & Exell, M. (2013). A task-based needs analysis for Australian Aboriginal students: Going beyond the target situation to address cultural issues. *International Journal of Training Research*, *11*(3), 246-259. https://doi.org/10.5172/ijtr.2013.11.3.246

Park, M., & Slater, T. (2014). A typology of tasks for mobile-assisted language learning: Recommendations from a small-scale needs analysis. *TESL Canada Journal*, *31*(8), 93-115. https://doi.org/10.18806/tesl.v31i0.1188

Robinson, P. (2001). Task complexity, task difficulty, and task production: Exploring interactions in a componential framework. *Applied Linguistics*, *22*(1), 27-57. https://doi.org/10.1093/applin/22.1.27

Sasayama, S. (2021). Why task? Task as a unit of analysis for language education. In M. J. Ahmadian & M. H. Long (Eds.), *The Cambridge handbook of task-based language teaching* (pp. 55-72). Cambridge University Press. https://doi.org/10.1017/9781108868327.004

Seedhouse, P. (2005). "Task" as research construct. *Language Learning*, *55*(3), 533-570. https://doi.org/10.1111/j.0023-8333.2005.00314.x

Serafini, E. J., Lake, J. B., & Long, M. H. (2015). Needs analysis for specialized learner populations: Essential methodological improvements. *English for Specific Purposes*, *40*, 11–26. https://doi.org/10.1016/j.esp.2015.05.002

Serafini, E. J., & Torres, J. (2015). The utility of needs analysis for nondomain expert instructors in designing task-based Spanish for the professions curricula. *Foreign Language Annals*, *48*(3), 447-472. https://doi.org/10.1111/flan.12150

Shin, D. & Kim, H. (2005). English for aviation specific purposes: Needs analysis for English proficiency requirements. *Korean Journal of the Applied Linguistics*, *21*(2), 193-217. https://www.kci.go.kr/kciportal/ci/sereArticleSearch/ciSereArtiView.kci?sereArticleSearchBean.artiId=ART000983453

Smith, G. F., Jung, H., & Zenker, F. (2022). From task-based needs analysis to curriculum evaluation: Putting methodological innovations to the test in an English for academic purposes program. *English for Specific Purposes*, *66*, 80-93. https://doi.org/10.1016/j.esp.2022.01.001

Spence, P., & Liu, G.-Z. (2013). Engineering English and the high-tech industry: A case study of an English needs analysis of process integration engineers at a semiconductor manufacturing company in Taiwan. *English for specific purposes*, *32*(2), 97-109. https://doi.org/10.1016/j.esp.2012.11.003

Tangniam, T. (2006). An analysis of English language needs for Thai Airways ground staff. [Master's thesis, Kasetsart University, Bangkok, Thailand]. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.465.8381&rep=rep1&type=pdf

Trager, V. (2022). A task-based needs analysis of primary school-aged children with migrant or refugee backgrounds in Austria.[Master's thesis, Universitat de Barcelona. http://hdl.handle.net/2445/200321

U.S. Bureau of Labor Statistics. (2020). *May 2019 OES industry-specific occupational* employment and wage estimates: *NAICS 481100 -Scheduled air transportation.* [Data set] U.S. Bureau of Labor Statistics https://www.bls.gov/oes/2019/may/naics4_481100.htm

Wilkins, D. A. (1976). *Notional syllabuses: A taxonomy and its relevance to foreign language curriculum development*. Oxford University Press.

Youn, S. J. (2018). Task-based needs analysis of L2 pragmatics in an EAP context. *Journal of English for Academic Purposes, 36*, 86-98. https://doi.org/10.1016/j.jeap.2018.10.005

Appendix

Questionnaire excerpts

TARGET TASK NAME: _____

UNIVERSITAT DE BARCELONA

***Interviewee*'s data:**

Name: _____ Position: _____ Company: _____

Company representative ☐ Domain expert ☐ Trainer ☐ Potential task user ☐

Associated recordings:_____

Associated samples/materials: _____

4.3 Type of language required for this task

Mainly receptive ☐ Mainly productive ☐ Both ☐

Any specific *terms*? (e.g specialized or technical vocabulary;)

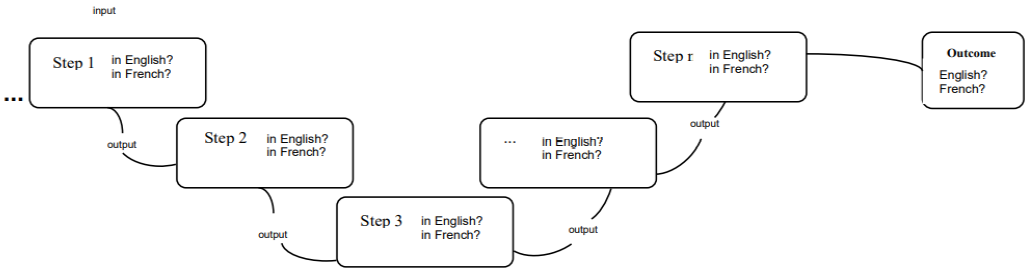
Any specific *expressions*? (e.g. idioms or useful word combinations)

Any specific *phonological features* (tone/intonation)? (e.g. raising intonation to sound positive)

Any specific *grammatical features*? (e.g. use of highly complex questions)

5. SEQUENCE OF PROCEDURES

Indicate the *steps* involved in this task and the languages (French? English? Others?) required for each step.



- What are the sources of input in each case? (e.g. the clients themselves, specialized texts, audio or video materials?
- What is the output of each step/phase? (e.g. a text, an oral or written decision, an action, another task).

Indicate the *target sub-tasks* related to this target task