Universidad Nacional de Costa Rica

Campus Omar Dengo

Facultad de Filosofía y Letras

Escuela de Literatura y Ciencia del Lenguaje

Maestría Profesional en Lingüística Aplicada

Assertiveness in English Communication: Effective Interaction Among Cabin Crew, Passengers, and On-board Healthcare Professionals During Medical Emergencies in a Latin American Airline

Howard Lubín González Martínez

701430769

Trabajo presentado para optar al grado de Master.

Cumple con los requisitos establecidos en plan de estudios de la carrera Maestría Profesional en Lingüística Aplicada con Énfasis en le Enseñanza del Inglés para Fines Específicos

Universidad Nacional, Heredia Costa Rica

Fecha 08 noviembre de 2024

Presentado por el estudiante:

Howard Lubín González Martínez

Ph.D Christian Fallas Escobar

Docente tutor

CRISTHIAN FALLAS ESCOBAR (FIRMA)
PERSONA FISICA, CPF-07-0145-0241.
Fecha declarada: 16/12/2024 02:37:27 PM
Razón: Firmado digitalmente

M.Sc. Rosemary Castro Solano

Docente lector

ROSEMARY CASTRO SOLANO (FIRMA)

Digitally signed by ROSEMARY CASTRO SOLANO (FIRMA)
Date: 2024.12.12 23:44:34 -06'00'

M.A. Vivian Vargas Barquero

Coordinadora

VIVIAN VARGAS BARQUERO (FIRMA)
PERSONA FISICA, CPF-01-1056-0971.
Fecha declarada: 12/12/2024 04:55:23 PM
Esta es una representación gráfica únicamente, verifique la validez de la firma.

Dedication

This research is dedicated firstly to my family, mother and brother, whose valuable support and encouragement made this journey possible.

To my professors, participants (cabin crew members) and friends: may this work contribute to your journey toward effective communication and preparedness in the skies.

List of Tables

List of Figures

Abstract

This exploratory case study examines the impact of an English for Occupational Purposes (EOP) course based on a Content and Language Integrated Learning (CLIL) curriculum had on cabin crew members' linguistic and cross-cutting skills for in-flight medical emergencies. Participants included 10 in-service cabin crew members from a well-known Latin American airline who participated in the 10-week virtual course. Data was collected via student journal entries, weekly observations, and artifacts (e.g., aviation manuals), which were then coded inductively and deductively using Dedoose. From participants' self-reporting feedback, the study found that these participants showed emotional and linguistic challenges with a positive attitude, as they recognized the importance of effective communication and assertiveness in the dialogical interaction cabin crew-ailing passenger or cabin crew-healthcare volunteer. Moreover, these participants expressed that the teaching methodology employed (the CLIL approach), which highlighted structured phrases and situated language use, helped them to gain confidence for a timely intervention in the management of medical event on-board. Lastly, participants pointed out that training should expand its scope and increase its frequency so that cabin crew members be more prepared to face a medical scenario. These findings have implications for training of cabin crew members, which could be adapted by other airlines and aviation schools.

Resumen

Este estudio de caso exploratorio examina el impacto que la implementación de un currículo de Inglés con Fines Ocupacionales (EOP), basado en el Aprendizaje Integrado de Contenidos y Lenguas Extranjeras (AICLE), tuvo en las habilidades lingüísticas y transversales de los miembros de la tripulación de cabina para manejar emergencias médicas a bordo. Los participantes incluyeron a 10 miembros activos de una tripulación de una reconocida aerolínea latinoamericana que participaron en el curso virtual de 10 semanas. Los datos se recopilaron a través de entradas en diarios de los estudiantes, observaciones semanales y artefactos (por ejemplo, manuales de aviación), que luego fueron codificados de manera inductiva y deductiva utilizando Dedoose. El estudio encontró que estos participantes mostraron desafíos emocionales y lingüísticos, manteniendo una actitud positiva al reconocer la importancia de la comunicación efectiva y la asertividad en la interacción dialógica entre el tripulante de cabina y el pasajero con alguna condición médica pre-existente o entre la tripulante de cabina y el voluntario médico abordo. Además, los participantes expresaron que la metodología de enseñanza empleada (el currículo ESP), que destacó frases estructuradas y el uso del lenguaje en contexto, les ayudó a ganar confianza para una intervención oportuna en el manejo de un evento médico a bordo. Finalmente, los participantes señalaron que la capacitación debería expandir su alcance y aumentar su frecuencia para que los miembros de la tripulación estén mejor preparados para enfrentar un escenario médico abordo. Estos hallazgos tienen implicaciones para la capacitación de la tripulación, que podría ser adaptada por otras aerolíneas y escuelas de aviación.

Keywords: in-flight medical emergencies, assertiveness, aviation, English for Specific Purposes, effective communication, cross-cutting skills.

Language proficiency is not merely knowledge of a set of grammar rules, vocabulary, and ways of pronouncing sounds. It is a complex interaction of that knowledge with a number of skills and abilities.

-ICAO State of Global Aviation Safety

I. Introduction

Global aviation travel industry continues to evolve. This activity has experienced a substantial increase in recent years. The International Civil Aviation Organization (ICAO) has stated that since 2012, the number of global passengers, including both domestic and international operations, has reached 3.01 billion air travelers. Also, according to its annual 2018 report, the number of passengers reached 4.3 billion which represents a 7.1% increase over the previous year. In like manner, in 2018 nearly 2.8 million passengers traveled in and out The United States every day (Hu & Smith, 202, p. 547). However, during the years 2019 and 2020 the emergence of COVID-19 provoked a massive decline that led to a 1.78 billion of passengers traveling during those years accordingly. Nonetheless, the percentage of air travelers increased by 28.1% in 2021, exceeding the last 10 years (ICAO, 2021, p. 1) The growing numbers of air traffic implies that the commercial aviation industry is by and large safe.

Given these numbers provided above, air carriers must ensure their airworthiness by complying with safety protocols and practices. Thus, in adherence to the civil aviation regulations, Xu et al. (2023) explains that:

> In the case of a medical emergency while in flight, they [cabin crew] must respond quickly, conduct a preliminary inspection, and give pre-hospital treatment. Besides, the cabin crew should be able to deal with abnormal conditions such as illness and injury of passengers or themselves, including being familiar with emergency medical equipment. (p. 1)

Similarly, Yu and Liang (2021) highlight the importance of cabin crew members when handling a stressful situation and how they become available as the first aid responders to ensure the safety of passengers. Particularly, they point out first aid skills, positive attitude, ability to work under pressure, and the capacity of confidence to perform first aid successfully (p. 1) The presence and knowledge of the cabin crew in handling an in-flight medical emergency is essential. Unfortunately, no clear guidelines referring cabin crews' linguistical preparedness to cope with medical emergencies were found out.

There are four main causes that may increase odds of medical emergency: long-haul flights, larger-passenger capacity of big commercial airliners, the age of the passenger (especially elderly),and pre-existing medical conditions (Yu & Liang, 202, p. 1). In the event of a medical emergency onboard, cabin crew members play a significant role as they become the first responders. Essentially, in-flight medical emergencies affect a significant number of air travelers. In this scenario, clear and effective communication between cabin crew members and on-board medical practitioners during medical incidents cannot be overstated.

Effective communication in English among cabin crew, passengers, and on-board medical practitioners is crucial as the commercial aviation industry is characterized by dynamic processes and protocols that need to be executed in routine scenarios. These scenarios include unexpected events such as in-flight medical emergencies, where assertive communication is essential to ensure the safety and well-being of passengers. Ragan (1997) explains that "a greater awareness of the nature of Aviation English and of relevant resources can assist those aviation professionals whose daily work depends significantly on the use of language" (p. 25). Similarly, Han (2019) states that

> Flight attendants, especially, who work on international routes usually meet passengers from all over the world. To handle their business, they have to

> speak the internationally recognized de facto lingua franca, English. This means, flight attendants must be competent in English to handle every possible situation during their flight duties and even when off-duty. Thus, flight attendants need to develop proficient English communication skills before they are put in real work conditions. (p. 92)

In addition, Kanki and Palmer (1993, as cited in Camocamo et al., 2018) mention that communication has a multi-faceted nature, and can have multiple functions in a variety of settings and situations. These authors present a remarkable overview of the function that communication plays in aviation and aviation safety, especially as it affects crew performance: (1) Communication provides information, (2) Communication establishes interpersonal relationships, (3) Communication establishes predictable behavior patterns, (4) Communication maintains attention to task and monitoring, and (5) Communication is a management tool (p. 15).

When facing a medical emergency on-board, the cabin crew member who first encounters the emergency must assess the situation and request voluntary assistance from any available medical professional on-board. Once this step is reached, several scenarios may arise in which the cabin crew member needs to exercise good judgement and cooperate to ensure effective communication. In these situations, if the ailing passenger is conscious and able to establish communication, the cabin crew member must initiate a dialogue to gather all the necessary information. Simultaneously, another crew member should promptly page for a doctor and provide a clear description of the current situation to the medical professional, if available. At the same time, another crew member should also retrieve the necessary medical equipment and efficiently disclose its contents to the on-board medical professional. Additionally, the cabin crew members

should assist the medical practitioner by providing and collecting any other required information that may be needed.

The specific linguistic demands placed upon cabin crew staff implies that general English skills do not suffice to complete their duties effectively. That is, cabin crew members need to be provided with English for Specific Purposes (ESP) courses that cater to their linguistic needs, lacks, and wants. Specifically, English for Occupational Purposes (EOP) curriculum is strongly constructive and functional to execute specific tasks for which general English is not enough to fulfill a particular situation. Considering the specific language skills required by cabin crew members, I conducted a preliminary study (needs analysis) to find out about the needs, lacks, and wants of a group of cabin crew personnel. Ten participants contributed to the needs analysis that generated the following results:

A. 9 out of 10 participants need training in vocabulary and medical terminology in English communication e.g. diseases, conditions, symptoms, medical devices, among others.
B. All 10 participants perceive limitations on their own English proficiency when facing a medical emergency.
C. All 10 participants lack formal training in English as part of their annual cabin crew training.
D. All 10 participants communicated their awareness that assertive communication in English is crucial when relaying information to healthcare volunteers.
E. All 10 participants suggested an enhancement and incorporation of learning resources focused on medical emergencies such as: interactive videos, simulated scenarios, handbooks, etc.

Based on these findings, I created an ESP curriculum for a ten-week EOP course that catered to B1.1 level according to The Common European Framework of Reference for Languages. This course included a combination of assertiveness, medical terminology,

and cross-cutting skills to efficiently manage in-flight medical emergencies. The main purpose of the ESP curriculum was to equip cabin crew members with linguistic competences, as well as reinforce cross cutting skills to cope with various medical situations. The program was designed to comply with the recommended guidelines of the International Civil Aviation English Association (ICAEA) enforced by the International Civil Aviation Organization (ICAO). Moreover, the program followed learning-centered methods, and it adopted an eclectic approach integrating Content and Language Integrated Learning (CLIL), content-based learning, and situational approach to learning.

The present action research examines the extent to which the above-mentioned ESP curriculum successfully addresses the participants' needs for enhanced language proficiency and cross-cutting abilities to effectively respond medical emergencies. The purpose of this action research was to assess the feasibility or effectiveness of a comprehensive curriculum design that combines medical terminology, and the standard operating procedures (SOP's), together with cross-cutting skills with the objective that cabin crew members feel more confident when facing medical emergencies on-board. Medical terminology is understood as the explicit language that healthcare professionals and cabin crew members are going to be using as the mean to communicate clearly and effectively to address a medical emergency. Cross cutting skills are known as those abilities required to solve different situations, namely, teamwork, leadership, problem solving, time management, among others.

Research Question

The research aims to answer one main question:

- How does an ESP curriculum that integrates cross-cutting skills and enhanced language proficiency influence cabin crew members' perceptions of their capacity to efficiently manage medical emergencies on-board?

II. Theoretical Framework

The present research is grounded in the field of linguistics, specifically interactional sociolinguistics proposed by John Gumperz (1982). It incorporates the cooperative principle and its conversational maxims (Grice, 1975), intercultural competence, and cross-cutting skills.

2.1 Interactional Sociolinguistics

Interactional sociolinguistics draws from both linguistic anthropology and conversation analysis. This field is interested in how speakers signal and interpret meaning during social interactions. It seeks to connect word choice, prosody, register shifts, etc. with the meanings that speakers and listeners create in an intergroup context (Bailey, 2015, p. 1). The need for an interactional sociolinguistics approach to this study revolves around the intercultural communication that takes place inside of an international community (i.e., aviation) in a very specific context or event (medical emergencies). There are situations when people from very diverse linguistic and cultural backgrounds meet each other, making their interactions inherently complicated, adaptive, dynamic, and emergent (Toomaneejinda & Saengboon, 2021, p. 157). In such situations, interactional sociolinguistics helps examine the discourse of all participants within a specific context. Clark (2012) asserts that interactional sociolinguistics has three purposes: situated language use, the active role of the speaker who produces the language, and the relationships that the speaker assume in handling particular events (pp. 41-42).

2.2 Cooperative Principle

In addition, this study draws on the “Cooperative Principle” proposed by H.P. Grice (1975) According to Grice (1975), the cooperative principle holds that speakers in conversation have a shared goal of mutual understanding. This goal is achieved through cooperation and adherence to certain conversational norms (p. 46). The speaker must

consider the purpose and direction of the conversation and tailor their contributions accordingly, while the listener must actively engage with the speaker and seek to understand their contributions. Grice points out that there are four components called “Maxims” in talk exchanges. These maxims aid the logic of participants’ conversation and are categorized as: Quantity, Quality, Relation, and Manner.

Quantity	1. Make your contribution as informative as is required (for the current purposes of the exchange).
	2. Do not make your contribution more informative than is required
Quality	1. Do not say what you believe to be false.
	2. Do not say that for what you lack adequate evidence.
Relation	1. Be relevant.
Manner	1. Avoid obscurity of expression.
	2. Avoid ambiguity.
	3. Be brief (avoid unnecessary prolixity).
	4. Be orderly.

(adapted from Grice, 1975, pp.45-47)

The “cooperative principle” and the maxims become relevant in the study of aviation because, as explained by Touiserkani and Hazrati (2020), Grice’s maxims should be taken into consideration in verbal communication, as miscommunication is one of the major causes leading to adverse effects in flight safety (p. 121).

2.3 Intercultural Interaction Competence

Furthermore, this study draws from the concept of intercultural competence in communication among members of diverse cultural groups. Spencer-Oatey and Franklin (2009, as cited in Gollin-Kies et al., 2015) formulated the term Intercultural Interaction Competence (ICIC) to refer to the proficiency that people involved in a specific context

must acquire to interact with other groups. ICIC refers not only to transmitting the message (verbally and non-verbally) and behaving effectively and suitably with groups from diverse linguistic backgrounds, but also to handling and controlling the psychological demands and dynamic effects that result from those interchanges or mutual interactions (pp. 52-53). ICIC is understood as a competency framework that interrelates four clusters, specifically knowledge and ideas, communication, relationships, and personal qualities and disposition (Spencer-Oatey & Stadler, 2009, pp. 4-6); they also explain that ICIC is reached when there is enough awareness and willingness to learn and use the language of our international partner, as well as to adjust our language proficiency level to become more active and attentive listeners. Thus, if ICIC applied in the aviation environment and the daily activities of the cabin crew, it is possible to increase cabin crew members' awareness of the necessity of communicating efficiently a vital message and instructions to ailing passengers and healthcare practitioners in a critical situation.

2.4 Cross-cutting Skills

The last theoretical element this study draws on is that of Cross-cutting skills. According to Wake County Public School System (2020), cross-cutting skills are abilities crucial for the development of the students' linguistics skills to become productive in various professions. However, there is no agreed definition of what cross-cutting skills constitutes; cross-cutting skills are non-cognitive components mixed with personality traits (p. 1-2). For the purposes of the present study three cross cutting skills will be considered as the essential ones. Firstly, critical thinking, which is seen as one of the top skills necessary for effective communication according to National Training Aircraft Symposium in 2022 which defined it as "the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, or evaluating information gathered from or generated by observation, experience, reflection, reasoning or communication, as a

guide to belief and action" (Aydiner et al., 2022, p. 2). Secondly, problem solving, and thirdly, decision-making are two required components in the process of workload and information management during unexpected events. Problem solving and decision-making help the cabin crew to identify the main tasks and prioritize the information to be shared (Pruchnicki et al., 2019, p. 23).

These theoretical elements are at the heart of the ESP course created to enhance cabin crew members' the acquisition of effective communicative skills when managing critical situations. Likewise, these are the theoretical constructs guiding the present research, which aims to corroborate the effectiveness of the implementation of the ESP curriculum.

III. Literature Review

3.1 The importance of English in Aviation

English for Specific purposes (ESP) is crucial in the aviation context and its use is not only limited to pilots or traffic controllers, but it extends to all those involved in the field of aeronautics. Namely, cabin crew members and other service staff are required to be able to communicate with their counterparts in English for work-related issues. All personnel involved need to employ a fusion of technical terminology and plain language for every possible scenario appropriately; regardless of nationality, race, and different cultural backgrounds (Aiguo, 2008, p. 151-163).

Setyaningsih (2015) concluded that speaking and listening abilities are essential to flight attendants having international routes to enhance their performance during a flight. His study suggests that training is crucial for the effective acquisition and development of the underlying knowledge of the cabin crew (p. 114). Furthermore, his study suggested that cabin crew must master effective communicative abilities together with other skills, such as critical thinking and decision making for immediate problem-solving and prompt actions in case problems arise. Communication then must be clear and understandable among actors involved (p. 119).

In another study, Park (2005, as cited in Han, 2019) researched the linguistic skills in discourse between two groups, Korean flight attendants and foreign flight attendants. The results yielded that the Koreans were not confident in the use of English. On the other hand, foreign flight attendants showed more confidence and efficiency in the use of English as a second language due to the exposure time they had had to the language. In other words, the background these foreign flight attendants had was considered the cornerstone for the effectiveness in their proficiency when speaking in English. Similarly, Han (2019) explains that those flight attendants serving international routes have to speak

the recognized de facto lingua franca, English. These flight attendants meet passengers from all over the world. Therefore, flight attendants must be skilled in English (p. 92).

Another prominent research related to this line of study deals with the examination of situational analysis where Thai nurses were the object of the study. In this group of nurses, English became a necessity as the number of medical tourists began to increase, hence, the nurses were expected and required to be able to communicate with the patient (customer) in English. Consequently, the acquired linguistic skills in the use of a second language would represent a prominent quality of service (Gass, 2012, as cited in Han, 2019, p. 93).

3.2 The Necessity of English Proficiency for Aviation Safety

Although there is a compelling necessity for improved use of English in the global aeronautical industry, the European Union Aviation Safety Agency (EASA) suggests a different reality through its regulation. According to EASA, there are no mandatory regulations that demand airlines cabin crew to speak English. Specifically, it emphasizes that “The operator shall ensure that all personnel are able to understand the language in which those parts of the OM (Operations Manual) which pertain to their duties and responsibilities are written” (ORO.MLR.100). The manual also states that “The operator shall ensure that all crew members can communicate with each other in a common language” (The European Commission, 2012, p. 64). However, no mention of English is explicitly addressed. Furthermore, the International Civil Aviation Organization (ICAO) carried out a seminar in March 2013 where all managerial and office-related actors including stakeholders, civil aviation administrations, international organizations, aviation language training centers, test providers, and airlines were present. All concluded to support the reinforcement and enhancement of the Language Proficiency Requirements

(LPRs), but only for pilots and air traffic controllers in radiotelephony communications (ICAO Journal, 2013, p. 64).

Despite the exclusion of the need for English for cabin crew members, Nicole Barret and Dawn Flanagan, two aviation specialists, referred to an airplane crash that occurred in India in 1998, in a seminar held in 2013 and organized by ICAO, they expounded that New Delhi investigators concluded that one of the key elements of the crash was the lack of English proficiency between the flight crew and the cabin crew. Furthermore, Flanagan stated “Language is a component of communication and the ability to speak at a certain level of proficiency in order to communicate with each other if something unexpected occurs is essential” (ICAO Journal, 2013, p. 64). The seminar sought to strengthen LPRs for maintenance personnel as well. Hence, a challenging problem which arises is the exclusion of an adequate English training for cabin crew members in the communication chain. The absence of effective communication training means a high risk for aviation safety because the “communication process in aviation should be treated professionally” (Santos et al., 2014, p. 125).

The cabin crew field started in the late 1920’s after more than one hundred carriers in the United States rapidly began to grow. Alongside that, it grew the necessity of hiring nurses to look out for passengers in case of medical emergencies (Barry, 2007). Doctors Amit Chandra and Shauna Conry conducted research on the liability, qualifications, and preparedness that volunteer medical professionals must have. These two doctors found out that there are no best practices to guide actions to handle a medical emergency, and despite the increased number of passengers in the last decades, medical practitioners are called to respond effectively with improvisational skills and leadership in coordination with the crew members (Chandra & Conry, 2013, p. 503).

Another study found that 65% to 70% of medical emergencies on-board are handled without the assistance of a medical volunteer (Hu & Smith, 2021, p. 547). Thus,

due to the lack of healthcare professionals on-board, this situation raises the issue of communication among cabin crew and passengers. As a manner of solving this issue, The Good Samaritan doctor serves as a guide for medical doctors and first aid responders. The main tasks this guide provides to the cabin crew are delineated as the 5Cs which are listed as follows: competence, communication, collaboration, consent, and clinical records (Ho et al., 2017, p. 14-15). More explicitly, communication and collaboration are underscored as they are centered within the interaction maintained by the crew and doctor which is mentioned below:

- Communication: Communicate clearly with the passenger who is ill and the cabin crew. Disclose the limits of what one can do, i.e. competency, specialty, and level of training. Communicate one's assessment of the situation to the passenger and cabin crew.
- Collaboration: Collaborate with the flight and cabin crew, the patient and the patient's family or accompanying persons. The airline crew is trained to manage inflight medical emergencies and basic resuscitation. Ask for available medical kits and direct the resuscitation if the situation requires one. Suggest options for managing the situation and balance the benefits and risks of treatment. (Ho et al., 2017, p.15).

In addition to the applicability of the 5C's, Kodama et al. (2018) consider that the increase in passenger traffic and the longer flight duration has resulted in increasing the frequency of in-flight medical emergencies. Hence, they sustain that one approach to solve these problems involves the use of a "two-way communication with the flight attendants, cockpit and ground-based consultants [which] should be maintained to ensure the pilots can make the safest decisions for all of the passengers" (p. 217).

Communication also implies quality of information. In connection to this, Kanki and Palmer (1993, as cited in Camocamo et al. 2018, p. 4) express that communication is relevant because it ties together efficiency and safety. Furthermore, communication is necessary in the organization and management of any event, including the aviation environment. It is through communication that data collection and sharing, leadership, direction, and decision-making is possible across the members of the crew. The information conveyed by flight attendants (cabin crew), regardless of regular onboard services or required safety briefings, is significant to confront emergency events (Krivonos, 2005, p. 4; Krivonos, 2007, p. 2; Nevile, 2006, p. 5).

Driskell and Adams (1992) explain that “The effective transfer of information is a complex process, and requires that information be conveyed when needed, transferred clearly, attended to by the receiver, understood and acknowledged by the receiver, and clarified if needed” (p. 16). To clarify the importance of communication, Billings and Reynard (1981, as cited in Driskell & Adams, 1992) conducted an analysis of a large group of incidents on-board. They discovered that 70% of the reports contained errors in the transfer of information. In most of the cases examined, they found out that the required information to be transmitted was always present, however, it was not made available pertinently to those who needed it. Another recurrent problem was the quality of the messages analyzed, most of which were described as inaccurate, incomplete, ambiguous, or garbled (p. 16). This is typically a complex problem that needs to be addressed promptly. Besides, in-flight medical emergencies occur in a very austere environment in the absence appropriate equipment and personnel. Thus, one of the possible solutions seems to be the training of cabin crew and healthcare practitioners declared Dr. William Brady from University of Virginia School of Medicine. Both parties should comprehend the level and the frequency of most emergencies (Barney, 2015, para. 6).

3.3 Phraseology and Formulaic Speech

Communication using fixed phraseology, also known as formulaic speech, refers to word strings that are stored and easily retrieved from the memory at the time of use. Such word strings are described as opaque because the relation to its meaning and substitutability is substantially constrained (Wray & Perkins, 2000, p. 1). Phraseology must follow conventions to be characterized as practical. However, there are no formulaic expressions to handle all possible emergencies: “It is not possible to provide phraseologies to cover every conceivable situation which may arise; sufficient proficiency in the language being used is also required” (International Civil Aviation Organization, 2007, p. iii). In addition, in some cases the use of plain language will be required. The Federal Aviation Administration (FAA) states that prescribed phraseology must be used in communications to direct and define specific procedures, nonetheless, specialists must ensure the content is understood by rephrasing the message. It is paramount that good judgement be exercised when employing non-standard phraseology (FAA, 2024).

Simmons (1974) asserts that all parties require a mutual understanding, mainly those that share activities in the same field (e.g., pilots and air traffic controllers) and the communication must be efficient to promote safety (para. 1). In fact, ICAO provides a definition for the use of formulaic speech as “a restricted or coded use of language comprising fixed standard phrases or lexical and syntactical routines, developed either by consensus for highly repetitive communications (e.g. everyday exchanges of greetings) or formally prescribed for special or professional purposes (International Civil Aviation Organization, 2007, p.iii). The DOC 9432 and Simmons (1974) share the same view in terms of the use phraseology as to be mutually comprehensible by those members sharing the same or similar activities and by consensus. Parallel to this, Katsartska (2021) argues that more research about formulaic speech needs to be done. On the one hand, formulaic speech might lead to ambiguity, confusion, or communication breakdown. On the other

hand, it might have a positive impact on aviation students by providing them with an enhanced set of interactive skills (p.239-240). Managing a medical stressful situation needs to be handled via both rehearsed and spontaneous interaction, from two different parties in which no formulaic expressions can provide the required and effective exchange of information to efficiently handle an emergency.

3.4 Crew Resource Management

Another element associated to the significance of communication is Crew Resource Management (CRM), one of the pillars for the management of routine scenarios, as well as for unexpected situations that occur on-board an aircraft. In fact, Driskell and Adams (1992) highlights six principles of CRM.(1) Effective performance depends on both technical proficiency and interpersonal skills. (2) A primary focus of CRM is effective team coordination. The team encompasses the flight crew (cockpit and cabin), dispatchers, air traffic controllers, maintenance, and others. (3) CRM focuses on crew members' attitudes and behaviors. (4) Effective CRM involves the entire flight crew. CRM is not simply a responsibility of the captain, nor should CRM training be viewed as captain's training. All crewmembers are responsible for effective management of the resources available to them. (5) The acquisition of effective CRM skills requires the active participation of all crewmembers. Effective resource management skills are not gained by passively listening to classroom lectures, but by active participation and practice, including the use of simulations such as Line-Oriented Flight Training (LOFT). (6) CRM training should be blended into the total training curriculum, including initial, transition, upgrade, and recurrent training (p.8).

In this regard, Gordon Dupont in 1993 developed a concept known as "The Dirty Dozen," which refers to the twelve of most human error preconditions that can act as the prelude for an undesired result. Notably, the list starts with lack of communication and is

followed by distraction, lack of resources, stress, complacency, lack of teamwork, pressure, lack of awareness, lack of knowledge, fatigue, lack of assertiveness, norms (The Human Factor “the Dirty Dozen,” n.d.). In connection with this issue, it is crucial to highlight the role of communication. The FAA also underscores communication thusly:

> Failure to transmit, receive, or provide enough information to complete a task. Never assume anything. Only 30% of verbal communication is received and understood by either side in a conversation. Others usually remember the first and last part of what you say. Improve your communication. Say the most important things in the beginning and repeat them at the end. Use checklists. (FAA [FAA safety], 2012)

When transmitting a message, it must be done assertively, during the interaction among all team members, which can help mitigate anger and conflict and get your needs better met. You can express your needs clearly but respectfully and using clear language to get your point across (Centre for Clinical Interventions, n.d.). Assertive communication is defined by the capacity to actively consider others’ viewpoints while honestly and courteously expressing one's own thoughts and feelings. It entails articulating requests or thoughts with clarity and confidence and providing a consistent verbal and non-verbal message (What is assertive communication? para.1). In like manner, Pipas and Jaradat (2010) explain assertiveness as the ability to express what you do and what you do not agree with in an elegant manner leaving room for discussion, as well as, for imposing your way of thinking (Aggressive Communication, para.4). Wiemann (1977, as cited in Vieira & Santos, 2010) affirms that successful communication consists of being competent in choosing various communicative behaviors according to the situation and favorably fulfilling their own interpersonal goals (p. 362).

Another important is assertiveness. In this regard, Viera and Santos explain that this assertive behavior offers great support when dealing with a conflict. The individual dealing with a stressful situation confronts it with ease and satisfaction, feels less stressed, gains greater confidence, and improves his/her image and credibility, and prompts others to act assertively as well (2010, p. 367). Hence, interactions involving communication are inherently tied to specific situations. It is important to adapt how we communicate to match the requirements of each unique situation, rather than using the same approach in every circumstance. Our actions and the messages we convey should be tailored to fit the specific demands of that situation and the people involved (Krivonos, 2005, p. 8). Therefore, concerning cabin crew, it means transmitting the message to the involved actors, namely passengers, healthcare volunteers, and flight crew to quickly assess the type of emergency and therefore choose the most suitable procedure.

In summary, the aviation industry needs significant changes in terms of ab-initio and recurrent training together with awareness of all the actors involved in the operation of an aircraft when it comes to communication skills enhancement. Specifically, English for Specific Purposes needs more attention: “It is important to raise awareness that communication is a shared responsibility,” as stated by Paul Stevens CEO Mayflower College (Together4safety, 2023). Therefore, the English language proficiency in non-native speakers requires to be elevated from recommendation to regulation in training centers for pre-service cabin crew members, as well as, for those who are currently exercising the duties, to enhance their performance in the field. One relevant gap that needs attention is the lack of mandatory regulations that requires cabin crew to have English language proficiency. Based on the LPRs the focus should be extended from pilots or air traffic controllers to cabin crew members. Another notable problem is the lack of attention authorities pay to several tasks performed by the flight attendants, such as medical emergencies.

Local governments and international agencies should build up a robust program with guidelines and best practices. In this context, the Lufthansa Aviation training, a German airline and one of the airlines in the European Union recommends that it is paramount to ensure that cabin crew has the skills to handle any extreme situation. “Just like pilots, the cabin crew plays a decisive role in the events of a flight” (Lufthansa Aviation Training, n.d., Greater Safety on Board, para. 1).

IV. Methodology

In this section, I outline the methodological approach that was employed to develop this research proposal, which seeks to discover the impact of implementing a curriculum designed for an English program focused on first aid medical assistance for cabin crew members of a Latin American airline. I define the research paradigm, research design, its purpose and genre. Additionally, I describe the research context, participants, and the ethical considerations taken in conducting this study, specifically consent, confidentiality, rapport, and reciprocity. Subsequently, I discuss the study's data collection and data analysis procedures. Finally, I reflect upon the trustworthiness and limitations of the study.

4.1 Research Paradigm, Design, Purpose, and Genre

The present study is rooted on a constructivist paradigmatic stance, alternatively referred to as interpretive stand because "meaning is socially constructed via the interaction between humans or between humans and objects" (Hesse-Biber, 2017, p.23). Furthermore, a constructivist standpoint acknowledges the social and subjective view of reality, actively co-constructed by the researcher and the participants. Under this paradigm, the experiences collected by the investigator and the interactions with others provide multiple perspectives of the context and the nature of knowledge being examined. Furthermore, realities are unique to each person and to garner and interpret those realities, researchers must engage in a collaborative process of interactions with the participants to comprehend the subjectivity and socially constructed realism of the individuals being studied (Hatch, 2002, pp. 15-16).

In connection with the paradigm outlined above, the research design is qualitative in nature. As indicated by Ayton and Tsindos (2023) "Qualitative research is embedded in

the interpretivist, or constructivist paradigm" (p. 15). Primarily, the present study sought to examine co-created meanings collected from the cabin crew members. In this sense, Hesse-Biber (2017) asserts that "Qualitative researchers are after meaning. The social meaning people attribute to their experiences, circumstances, and situations, as well as the meanings people embed into texts, images, and other objects are the focus of qualitative research" (p. 4). Initial interpretations were carried out via a needs analysis to ten crew members in which these participants mainly expressed a lack of linguistic preparedness in English due to insufficient training.

In addition, the purpose of this qualitative research was exploratory as it sought to delve into an under-researched area. In exploratory research, the investigator interacts with the participants seeking to learn from their insights. The objective is to build an understanding of what is being heard (Creswell & Creswell, 2018, p. 33).

The selected genre for my research is a case study since it focused on examining a phenomenon within its context, specifically a collective case study as expressed by Stake (2007, as cited in Glesne, 2016). From this perspective, I intended to understand the impact that a curriculum design had on the selected active cabin crew members, which was the main unit of my analysis. Flyvbjerg (2011, as cited in Marshall & Rossman, 2016) states that "Case studies favor intensity and depth, as well as exploring the interaction between case and context" (p. 69). Adopting a case study approach generated crucial data to accomplish my purpose of discovering the effectiveness of the ESP program. A case study becomes the best alternative owing to the "explicit focus on context and dynamic interactions" (Marshall & Rossman, 2016, p. 69).

4.2 Research Context

The selected setting for my research is the aviation industry, specifically commercial travel, centering my attention on the cabin crew members of a Latin American airline. The flight operator under consideration has a substantial network of short to long-haul flight diversity across America. My decision for the commercial aviation sector was due to three main reasons. First and foremost, my decision was driven by my seventeen years of service as a cabin crew member for this air service provider, in which I have observed and interacted with my colleagues in reference to the linguistic limitations that my counterparts have, especially when assisting passengers in distress and transmitting crucial information to healthcare professional on victim's state.

Secondly, the chosen airline constantly serves an assorted multicultural and multilingual passenger population. Given that, the frequency and percentage of passengers undergoing medical conditions typically increase. This combined with larger capacity of airplanes, passengers with pre-existing medical conditions, the reduced physical space, the limited medical equipment, and the austere environment makes it difficult to exercise a clinical treatment competently.

Thirdly, commercial aviation is a field that has been characterized by highly progressive advances regarding airworthiness in terms of technology concerning design, construction, and maintenance. Additionally, airworthiness entails safety procedures to ensure passengers' safety and well-being during the flight experience.

4. 3 Research Participants

For my research, I examined the performance of ten active cabin crew members as participants of the implemented ESP course, all serving for a Latin American Airline. The participating crew members included a diverse range of ages, spanning from 21 to 41 years, all holding diverse levels of education. They also have all received the same annual

recurrent training, aligned with international, local, and airline-standard operational requirements to ensure passenger safety. The participant's information is listed below:

Table 1

Participants Demographics

Participants	Age	Experience	Education	Gender
Glenda	41	1 – 5 years	Professional degree (Licenciatura)	F
Barbara	21	1 – 5 years	High School	F
Victoria	37	10+ years	Bachelor's degree	F
Juliet	24	1 – 5 years	Professional degree (Licenciatura)	F
Keylin	24	1 – 5 years	High School	F
Ana	23	1 – 5 years	High School	F
Lorena	25	1 – 5 years	Incomplete university	F
Mike	26	1 – 5 years	High School	M
Patricia	23	1 – 5 years	High School	F
Diana	21	1 – 5 years	Incomplete university	F

4.4 Research ESP course

This English for Specific Purposes (ESP) course featured an English for Occupational Purposes (EOP) emphasis which employed an eclectic approach, primarily

focused on CLIL, integrating content-based and situational methods. Classroom dynamics were learner-centered, starting with presentation of topics or situations, to interactive activities, role plays, and discussions. The course aimed to provide a comprehensive learning experience, reinforcing the use of functional phrases, assertiveness, and cross-cutting skills through real-life scenarios and collaborative learning experiences within the context of commercial aviation, precisely during the interaction among cabin crew, passengers, and on-board healthcare professionals. The following table shows the scope and sequence used during the 10 weeks course

Table 2

Scope and sequence used for the EOP course

Date	Week	Unit	Content	Assessment Tasks
August 19th - 24th	1	**UNIT 1: I am prepared to help you (Phase of approach)**	Welcome and introduction to the program. Injury-related medical emergencies Impromptu safety announcements Individual advice. Basic concepts about medical emergencies	Journal entry 1 Diagnostic test
August 26th - 31st	2	**UNIT 1: I am prepared to help you (Phase of approach)**	First Aid basic concepts and general guidelines Most frequent manifestations Health-related medical emergencies Basic medical instructions	Journal entry 2
September 2nd - 7th	3	**UNIT 1: I am prepared to help you (Phase of approach)**	Roles of cabin crew in a medical emergency Illness Assessment: The SAMPLE procedure Symptoms Identification and definitions	Journal entry 3
September 9th - 14th	4	**UNIT 1:**	Emotional conditions Basic advices Reassurance and comfort	Journal entry 4

		I am prepared to help you (Phase of approach)	Frequent minor health manifestations	
September 16th - 21st	5	**Unit 2: Is there a doctor on the plane? (Phase of deepening)**	Hypoglycemia presentation Paging a healthcare volunteer Data collection EGOS Reporting signs Reporting symptoms Parts of the body	Journal entry 5
September 23th - 28th	6	**Unit 2: Is there a doctor on the plane? (Phase of deepening)**	Syncope presentation First aid kit's components Medical kit's components	Journal entry 6 2 simulations
September 30th - October 5th	7	**Unit 2: Is there a doctor on the plane? (Phase of deepening)**	Seizure presentation Objectivity and precision Medical terminology Airplane layout	Journal entry 7
October 7th - 12th	8	**Unit 3: Do you need any medical assistance upon arrival? (Phase of mastery)**	Asthma Presentation Basic formal speech Narration of events to on-ground personnel, paramedics and authorities Writing a report	Journal entry 8
October 14th - 19th	9	**Unit 3: Do you need any medical assistance upon arrival? (Phase of mastery)**	Panic Attack Presentation Leadership in medical emergencies The importance of assertiveness Review of description, advising and reporting of events	Journal entry 9
October 21th - 26th	10	**Unit 3: Do you need any medical assistance upon arrival? (Phase of mastery)**	Review Training closing	Journal entry 10 2 simulations

4.5 Ethical Considerations

Before data collection started, I contacted the ethics committee and review board of the airline to request authorization and support for the research project with the cabin crew participants. Marshall and Rossman (2016) state that to approach a large organization, researchers are required to get permission to its workplace and participants, and such permission must include the research design and the explicit plans (p. 218). Hence, this request included specific information about the purpose and significance of the study, and the potential benefits for passenger's safety and the crew staff.

Regarding rapport, I approached cabin crew staff with respect and empathy. Since I grounded my position on constructivism, I valued the role that the participants in this research had, for which I am also aware of the power dynamics that may arise from the dual role as a colleague-researcher. For this reason, I ensured that my colleagues felt free to share their most perceptive and honest opinions about experiences, training, and the necessity of effective interaction during inflight medical emergencies. All this was done through asynchronous assignments represented as weekly journal entries in which my colleague participants shared their thoughts via guiding questions regarding topics covered in the class, insights about necessities perceived and future trainings.

Pertaining the rigorous confidentiality protocols the researched airline has, I signed a formal confidentiality pledge letter that all participants names, assessments, observations, and additional comments remained anonymous. "The participant has the right to privacy and the right to request that identities remain confidential and not be revealed" (Seidman, 2019, p.70). Likewise, the airline's operational procedures remained secured. Such procedures were accessed only by the researcher and the evaluator. Besides, the research did not investigate inherent and individual procedures of the airline, instead the focus was based on observations, cabin crew's perceptions, artifacts, and

standard protocols that are recommended, practiced, regulated, and enforceable by international, federal, and local aviation authorities within the airline.

Finally, regarding reciprocity I ensured that both the airline itself, particularly the cabin crew's department as well as the participants obtained a benefit in return. Glesne (2016) expresses that rapport and reciprocity are interconnected; and to gain easy access in your research, both parties will be more interested in cooperating if they get something in return. Therefore, the findings that are meant to contribute to ESP curriculum design and to create workshops or training sessions that enhance participant's communicative skills during in-flight medical emergencies.

4.6 Data Collection Methods

In this case study, I applied three types of data collection methods, namely journal entries, observations, and artifacts to triangulate the data effectively.

Journal Entries

I employed journal entries in the first stage of data collection. Journals are necessary at the first stage as a reflexive method to collect the perceptions of the necessities, lacks and wants of the participants. Glesne (2016) describes the use of journals as an essential tool to grasp the phenomenon of your research (p. 27). Via this method, I encouraged the cabin crew member to share their experiences in linguistically delivering and handling a medical emergency on-board. Specifically, I requested information based on what was studied during class regarding confidence levels using specific terminology, language related challenges during medical emergencies, the potential safety implications of non-assertive communication, some impressions on possible resources to reinforce or improve English communication, and finally recommendations as a proposal for the creation of a curriculum design.

Observations

The second data collection method I used was participant observation (See appendix B). Weekly observations were used to gather instant data and spontaneous cabin crew's reactions during their performance in medical emergency scenarios. Qualitative observations are understood as those in which "the researcher takes field notes on the behavior and activities of the individuals at the research site" (Creswell & Creswell, 2009, p. 181). Participants observation implies immersion in the setting, as described by Glesne (2016), who explains that engaging in participant observation places you within the context of the issue being explored (p. 64). However, emergencies unexpectedly occur, therefore being present at the precise moment of an emergency to carry out an observation is almost impossible. Hence, the participant observation included simulations that took place at a controlled setting, different from cabin crew's regular context. For instance, cabin crew were divided into groups. Each group was assigned a case and was video recorded performing the given situation. They were provided with prompts to guide and assess the type of emergency to be developed.

Document Collection

The third collecting method employed was an analysis of documents (artifacts). Hatch (2002) explains that the utilization of artifacts is part of many qualitative research projects, however it is unusual to be considered as primary resource, unless this artifact is of text-based nature (p. 25). In like manner, Hatch (2002, as cited in Glesne, 2016) defends that "Artifacts are objects that participants use in the every-day activity of the contexts under examination" (p. 84). Taking into consideration the nature of my study, I reviewed the cabin crew members' manual of a Latin American airline, which contains the procedures and protocols to be consulted every time when conducting a medical emergency. Alongside, I examined the Manual of Civil Aviation Medicine of the

International Civil Aviation Organization (2012), which contains regulations on the physiological conditions and their necessary treatment, as well as the advocacy for communication during aviation operations, the importance of speech intelligibility, and the significance of communication with relevant parties (p. II-1-17). Other artifacts that provided beneficial information were training materials, lesson plans, video recordings of lessons, and operational manuals regulated by civil aviation authorities.

4.7 Data Analysis Procedures

Creswell and Creswell (2009) identify three initial steps for the analysis of qualitative data. The first step for data analysis is the organization of the dataset, which involves scanning the material and the field notes taken from methods used (pp. 185-186). The second step stated by Creswell and Creswell (2009) is reading in depth and writing all the ideas that emerged to get a deeper impression (p. 185). These ideas may include themes, patterns, or relevant observations leading to initial interpretations of the data. Step three refers to coding all the data: the process of categorizing and labeling textual data used in fieldnotes, documents, and journal entries containing all the experiences and perceptions provided by the cabin crew participants. However, Saldaña (2009, as cited in Glesne, 2016) states “Coding is not just labeling, it is linking” (p.195). As for this study, I initiated assigning codes (inductive coding) on Dedoose based on the journal entries and observations, allowing several different themes to emerge from the information garnered. During this stage, the following types of coding were used: emotion coding, descriptive coding, and concept coding (Saldaña, 2015). Subsequently, the data that was inductively processed underwent a more analytical categorization (Axial coding). Specifically, I made a list of the codes generated and arranged them into subcategories using a codebook (Glesne, 2016, p. 198). This process was guided by the theoretical framework that I had

previously extracted. Finally, with the aim of complementing the analysis, I used deductive coding approach to test the results obtained in the inductive and axial coding process.

4.8 Trustworthiness

For any research conducted, it is crucial to ensure the credibility and reliability of the qualitative findings (Ahmed, 2024, p. 1), as well as to ensure the effectiveness of the qualitative study in terms of transferability and dependability. This study employed journals, observations and artifacts analysis which allowed for triangulation (Creswell & Creswell, 2018, p. 332). Triangulation helped the researcher to enhance validity of the investigation by providing a more believable level of credibility, offers a balanced explanation to readers, and helps explain complex human behaviors (Noble & Heale, 2019, p.67).

4.9 Researcher's Positionality

As a professional in the aviation field, it prompts me to disclose my positionality pertaining to the usefulness of the present research. I have been active in the aviation industry as a cabin crew member for a Latin American Airline since September 2007. I have lived through diverse experiences involving operational emergencies, unlawful acts of interference, and medical emergencies. Particularly, on-board medical emergencies have captured my interest, and it has also motivated me to conduct the present research due to three main reasons. The first one pertains to the prerequisite of complying with international civil aviation regulations that subsequently have derived in me a sense of responsibility as an active cabin crew member. I consider this sense of responsibility essential, together with my journey in pursuing a Master's program in Applied Linguistics specifically in teaching English for Specific Purposes (ESP). Therefore, both the legal accountability required by international civil aviation regulations and the academic journey

has urged me to develop and implement better communication strategies in English during in-flight stressful medical situations.

Secondly, the immediate impact on passengers' well-being produced by a rapid implementation of first aid techniques is crucial because it leads to successful outcomes for airworthiness of every flight. To accomplish such an outcome, I have examined several aspects regarding collaborating with peers and medical volunteers which I perceive as a valuable constructive manner to efficiently carry out such a challenging task. Thus, it has really motivated me to seek enhancing the linguistic operational communications during medical emergencies. Hence, in this present research, I do not only aim to explore the topic as an academic endeavor, instead I seek to incorporate the linguistic and cross-cutting competencies to enhance the quality of the medical response.

Thirdly, medical emergencies have challenged my preparedness and prompted me to assess the necessities in training developments during the years of service. This insider standpoint has allowed me to closely relate different angles to approach the topic in which I have decided to contact the airline and my counterparts to obtain their consent and their insights to consider the impact of an ESP curriculum.

V. Findings

In this section, I examine the experiences of the cabin crew members who participated in the ESP course which integrated the use of medical terminology and cross-cutting skills. First, I present the emotional and linguistic challenges that the participants face during the progress of the ESP course. This section includes a discussion on how the participants kept a positive attitude towards learning in the course because they are aware of the importance of communication for passenger's care. Secondly, I analyze how the methodological features of the ESP regarding content, activities and exercises positively impacted the students. This point addresses the students' increased level of confidence and awareness for in-flight medical emergency intervention, as well as their acquisition of vocabulary helped them to improve the efficiency in communication during the management of medical situations. Finally, this section shows that cabin crew members perceive the necessity for expanding the training scope and its frequency by incorporating clearly defined situations in which specific vocabulary is required.

5.1 Facing Challenges with a Positive Attitude

As stated earlier, participants stated that they face emotional and linguistic challenges when confronted with a situation where they must assist a passenger during an inflight emergency. These emotional and linguistic challenges are discussed in the subsection below.

5.1.1 Cabin Crew's Emotional and Linguistic Challenges

Regarding emotions, participants shared to still struggle with a level of fear when it comes to dealing with an in-flight emergency, specifically, providing initial medical instructions, advising, asking questions and reporting information to medical professionals. For example, Leticia stated the following in a journal entry where she was asked to reflect about how she feels about advising during medical emergencies: "After the class I can say

I feel more confident because I learned a lot of things but at the moment probably, I will fell [sic] a bit nervous" (Journal entry 1). After having engaged in a classroom activity where she had to provide impromptu recommendations to passengers, she expressed that she still feels nervous, implying that although practicing might build her confidence, classroom differs somehow from how she will have to act in a real-life scenario.

Another participant expressed a similar sentiment during lesson 6, in which the first simulation was carried out. Simulations were activities in which the participants role-played a scenario where they provided medical assistance to a passenger. At the end of Juliet's performance, I asked how she and her peer Diana felt after simulating assisting a passenger experiencing heartburn. Juliet quickly spoke up and said: "*Nervous*" (Observation, simulation I). As the instructor to the class, I could notice her nervousness. During this simulation, Juliet relied on her notes, which suggests that although she had practiced similar scenarios for five weeks already, nervousness when interacting in English was still present.

Relatedly, under the same simulation, another pair of students, Mike and Victoria were observed performing two scenarios in which both had to assist passengers experiencing dizziness and panic attack. After assessed the simulation, I perceived some level of fear that made one of the students rely on her notes. On my fieldnote, I wrote: "*Despite, the usefulness that this activity represents, Victoria was observed constantly seeing her notes when responding to Mike's complaint. This seems to indicate that there is some level of fear to be spontaneous" (Observation simulation I).* Although during the development of the course, one of my objectives was for the participants to gain confidence (see Figure 1 below), they still showed residual nervousness and fear. During the first simulation carried out by other participants, these emotional challenges of nervousness and fear were noted as well.

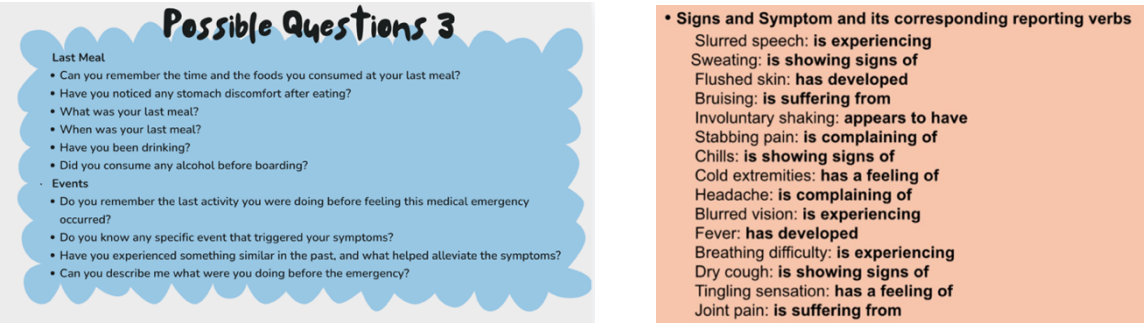
Figure 1

Objectives for one of the sessions.

In addition, the participants also experienced linguistic challenges regarding their knowledge of technical language. For lesson three, I requested the participants to reflect on what challenges they faced during a role-play activity and how they addressed such challenges. Victoria shared that she struggles with the pronunciation of certain terminology. Specifically, she wrote "*The challenges could be the pronunciation of some vocabulary we are not used to listen*" (Journal entry 3). Essentially, the role-play carried out by Victoria and the other participants included the use of questions frequently used in medical emergencies, together with collocations of medical signs and symptoms with the corresponding reporting verbs (see Figure 2 below). Both resources are employed to collect data from ailing passengers. Victoria, as well her peers, were noted pronouncing complex structures with some level of difficulty.

Figure 2

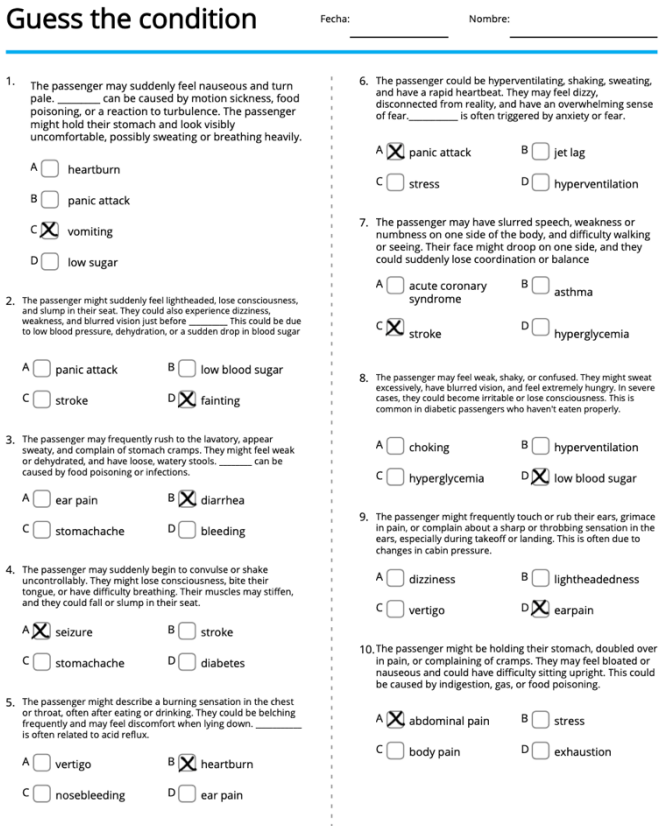
Frequent questions in medical emergencies and collocations for medical signs.



It is worth mentioning that this pronunciation difficulty was found not only on week three but also on previous weeks. For example, on week two, participants partook in on an online game in wordwall.net, where they had to match the medical conditions to their corresponding definitions (see Figure 3 below).

Figure 3

Activity for matching the medical condition to its definition.



Guess the condition

Fecha: _____ Nombre: _____

1. The passenger may suddenly feel nauseous and turn pale. _____ can be caused by motion sickness, food poisoning, or a reaction to turbulence. The passenger might hold their stomach and look visibly uncomfortable, possibly sweating or breathing heavily.

A ☐ heartburn
B ☐ panic attack
C ☒ vomiting
D ☐ low sugar

2. The passenger might suddenly feel lightheaded, lose consciousness, and slump in their seat. They could also experience dizziness, weakness, and blurred vision just before _____. This could be due to low blood pressure, dehydration, or a sudden drop in blood sugar

A ☐ panic attack
B ☐ low blood sugar
C ☐ stroke
D ☒ fainting

3. The passenger may frequently rush to the lavatory, appear sweaty, and complain of stomach cramps. They might feel weak or dehydrated, and have loose, watery stools. _____ can be caused by food poisoning or infections.

A ☐ ear pain
B ☒ diarrhea
C ☐ stomachache
D ☐ bleeding

4. The passenger may suddenly begin to convulse or shake uncontrollably. They might lose consciousness, bite their tongue, or have difficulty breathing. Their muscles may stiffen, and they could fall or slump in their seat.

A ☒ seizure
B ☐ stroke
C ☐ stomachache
D ☐ diabetes

5. The passenger might describe a burning sensation in the chest or throat, often after eating or drinking. They could be belching frequently and may feel discomfort when lying down. _____ is often related to acid reflux.

A ☐ vertigo
B ☒ heartburn
C ☐ nosebleeding
D ☐ ear pain

6. The passenger could be hyperventilating, shaking, sweating, and have a rapid heartbeat. They may feel dizzy, disconnected from reality, and have an overwhelming sense of fear._____ is often triggered by anxiety or fear.

A ☒ panic attack
B ☐ jet lag
C ☐ stress
D ☐ hyperventilation

7. The passenger may have slurred speech, weakness or numbness on one side of the body, and difficulty walking or seeing. Their face might droop on one side, and they could suddenly lose coordination or balance

A ☐ acute coronary syndrome
B ☐ asthma
C ☒ stroke
D ☐ hyperglycemia

8. The passenger may feel weak, shaky, or confused. They might sweat excessively, have blurred vision, and feel extremely hungry. In severe cases, they could become irritable or lose consciousness. This is common in diabetic passengers who haven't eaten properly.

A ☐ choking
B ☐ hyperventilation
C ☐ hyperglycemia
D ☒ low blood sugar

9. The passenger might frequently touch or rub their ears, grimace in pain, or complain about a sharp or throbbing sensation in the ears, especially during takeoff or landing. This is often due to changes in cabin pressure.

A ☐ dizziness
B ☐ lightheadedness
C ☐ vertigo
D ☒ earpain

10. The passenger might be holding their stomach, doubled over in pain, or complaining of cramps. They may feel bloated or nauseous and could have difficulty sitting upright. This could be caused by indigestion, gas, or food poisoning.

A ☒ abdominal pain
B ☐ stress
C ☐ body pain
D ☐ exhaustion

For this game, one by one, participants were requested to read out loud the definition and infer the appropriate condition. I made the following fieldnote about their performance:

> *Students initiated playing an online game reading the description of medical manifestation trying to guess for possible options. Students presented some difficulties in pronunciation mostly of not so commonly used words such as:*

uncontrollably, acid reflux, belching, seizure, heartburns, etc. (Observation week 2).

Other phrases the participants had problems with were: “Their face might droop on one side, throbbing sensation, grimace in pain.” Also, they showed mistakes pronouncing the past tense inflection for the regular verbs (-ed) in words such as: slurr**ed** speech, blurr**ed** vision, lighthead**ed**, among others.

The difficulties observed regarding the pronunciation of medical terminology reveals that this weakness is originated from the low frequency of these terms and other related terms in daily communication. Their lack of exposure to these terms in their daily lives, as well as during recurrent training, makes participants struggle when facing a medical situation in English.

5.1.2 Cabin Crew’s Positive Attitudes

Despite the emotional and linguistic challenges that the cabin crew faced, they showed a positive attitude of excitement, interest, and openness. After lesson one, participants were requested to share their thoughts regarding injury-related medical conditions discussed in class. All pointed out the relevance of learning vocabulary and expressed excitement in having the opportunity to learn new vocabulary to face an in-flight medical situation. Ana wrote the following for the assigned journal entry 1:

> *To begin with I am very **excited** to be able to improve my level of English to interact better with a more appropriate vocabulary for the situation that arises, it is already **difficult** to attend medical emergencies in my native language, with this start it makes me increase my **confidence** when speaking.*(Journal Entry 1).

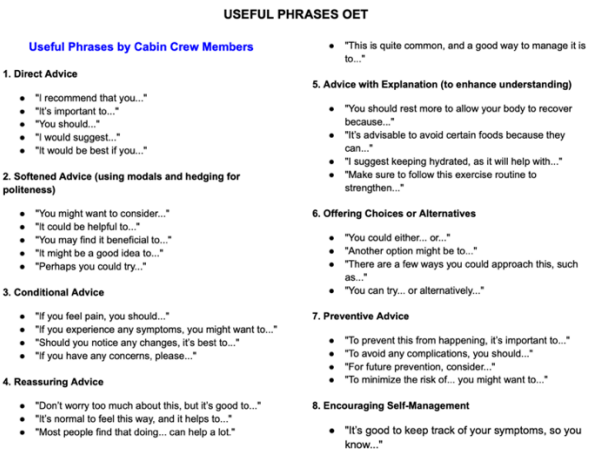
Amidst the emotional turmoil that Ana faces, she tackles the challenge of learning new vocabulary with a constructive attitude that begins to form a sense of confidence. Besides

the experience of learning new vocabulary, Ana's excitement may be the result of the rapport I built with her since lesson one. As the facilitator, I have made her mindful of the significance of addressing in-flight medical emergencies in English. Additionally, designing lesson plan activities that are achievable throughout the lesson seems to have contributed to the level of excitement and emerging confidence that Ana expressed.

In the same manner that Ana expressed her excitement from learning new vocabulary, Diana also expressed her thoughts for lesson 4 while answering the following question for journal 4 "*What are some areas related to in-flight medical emergencies or passenger interactions that you would like to learn more about or practice further?"* During the lesson, Diana practiced the names of symptoms such as chest tightness, tingling, numbness, fullness sensation, restlessness, as well as useful phrases covered in class necessary for providing reassurance (see Figure 4 below).

Figure 4

Useful phrases for providing advice.



USEFUL PHRASES OET

Useful Phrases by Cabin Crew Members

1. Direct Advice

- "I recommend that you..."
- "It's important to..."
- "You should..."
- "I would suggest..."
- "It would be best if you..."

2. Softened Advice (using modals and hedging for politeness)

- "You might want to consider..."
- "It could be helpful to..."
- "You may find it beneficial to..."
- "It might be a good idea to..."
- "Perhaps you could try..."

3. Conditional Advice

- "If you feel pain, you should..."
- "If you experience any symptoms, you might want to..."
- "Should you notice any changes, it's best to..."
- "If you have any concerns, please..."

4. Reassuring Advice

- "Don't worry too much about this, but it's good to..."
- "It's normal to feel this way, and it helps to..."
- "Most people find that doing... can help a lot."
- "This is quite common, and a good way to manage it is to..."

5. Advice with Explanation (to enhance understanding)

- "You should rest more to allow your body to recover because..."
- "It's advisable to avoid certain foods because they can..."
- "I suggest keeping hydrated, as it will help with..."
- "Make sure to follow this exercise routine to strengthen..."

6. Offering Choices or Alternatives

- "You could either... or..."
- "Another option might be to..."
- "There are a few ways you could approach this, such as..."
- "You can try... or alternatively..."

7. Preventive Advice

- "To prevent this from happening, it's important to..."
- "To avoid any complications, you should..."
- "For future prevention, consider..."
- "To minimize the risk of... you might want to..."

8. Encouraging Self-Management

- "It's good to keep track of your symptoms, so you know..."

Diana expressed: *"I would like to know more phrases to help other people, but emotionally."* (Journal entry 4). Diana's response shows her interest in expanding her vocabulary and enhancing her communication skills, particularly in advising during in-flight

medical emergencies. This interest maybe originated from a growing awareness of the importance of being an effective first-aid respondent.

Just like Diana, I observed that the rest of the participants recognized their interest in communicating assertively during a discussion activity on the 5 C's which particularly deals with five principles that contain essential guidelines to ensure passenger's safety (see Figure 5 below). In my observation after the activity on lesson four, I wrote:

> Students showed certain ability to discuss ideas regarding the importance of being mindful of the first-aid respondent competency when assisting a victim on-board in the target language. However, some students showed some level of difficulty when transmitting their ideas. Despite their difficulty, their recognition of the necessity of being mindful when providing medical assistance, created interest on the relevance of communication in an assertive manner as some of they said (Observation week 4).

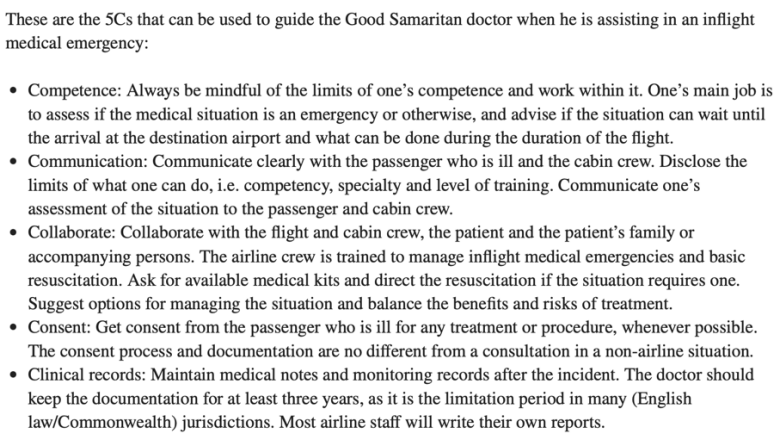
As noted in the observation above, although participants showed a certain level of difficulty when conveying their ideas during the discussion activity. This problem did not keep them from contributing valuable information on the importance of communication and the relevance the training has in favor for of the first-aid respondent role. During the class, I observed that most participants raised their hands waiting eagerly to participate with anecdotes they had experienced in previous interactions with medical professionals on-board. Later in the class, the discussion activity was reinforced by expanding the knowledge of subjective symptoms[1] and other conditions as well as providing reassurance

[1] Subjective symptoms: The manner patients report their symptoms to their medical providers employing their own words. It shows diverse expressions in language and content. Expressions often show a narrative that contains elements of symptom severity. e.g. "It feels like I am being stabbed in the chest by a hot knife" source: "Sitting on Pins and Needles" Characterizations of Symptoms Descriptions in Clinical Notes https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3845746/

to ailing passengers. All these activities produced a highly participative class. The participants' active participation shows that the ESP course is producing a growing interest in communicating effectively as well as turning the mindset toward assertiveness when dealing with passengers and healthcare professionals.

Figure 5

Five principles for passengers' safety.



These are the 5Cs that can be used to guide the Good Samaritan doctor when he is assisting in an inflight medical emergency:

- Competence: Always be mindful of the limits of one's competence and work within it. One's main job is to assess if the medical situation is an emergency or otherwise, and advise if the situation can wait until the arrival at the destination airport and what can be done during the duration of the flight.
- Communication: Communicate clearly with the passenger who is ill and the cabin crew. Disclose the limits of what one can do, i.e. competency, specialty and level of training. Communicate one's assessment of the situation to the passenger and cabin crew.
- Collaborate: Collaborate with the flight and cabin crew, the patient and the patient's family or accompanying persons. The airline crew is trained to manage inflight medical emergencies and basic resuscitation. Ask for available medical kits and direct the resuscitation if the situation requires one. Suggest options for managing the situation and balance the benefits and risks of treatment.
- Consent: Get consent from the passenger who is ill for any treatment or procedure, whenever possible. The consent process and documentation are no different from a consultation in a non-airline situation.
- Clinical records: Maintain medical notes and monitoring records after the incident. The doctor should keep the documentation for at least three years, as it is the limitation period in many (English law/Commonwealth) jurisdictions. Most airline staff will write their own reports.

After lesson four, all participants answered the following question for journal entry four: *"What are some areas related to in-flight medical emergencies or passenger interactions that you would like to learn more about or practice further?"* Specifically, Ana reacted to this question connecting the empathy she feels for senior passengers with her necessity for practicing new expressions to assist them. Ana responded:

> Onboard medical emergencies for me are already stressful because it's usually older adults that I have to deal with and I relate them to my mother, it's hard not to make the connection, but the correct vocabulary, the way to express myself correctly is what I would like to improve and practice more (Journal Entry 4).

Ana understands the necessity to learn new ways to express in English, mainly to help those who are vulnerable, particularly older adults. Besides, the emotional connection Ana

makes with the feeling for her own family motivates her to enhance her communication skills. Essentially, she recognizes that relevance of effective communication to provide the necessary clinical instructions and reassurance

5.1.3 Cabin Crew's Awareness of the Importance of Communication and Cross-cutting Skills

Throughout the course, participants acknowledged the significance that effective communication has for the management of in-flight medical emergencies when collaborating with healthcare volunteers, and when providing clear instructions for advising passengers. Participants recognized that the integration of cross-cutting skills, such as assertiveness and readiness, enhances the ability to provide an effective medical response.

Since lesson one, Patricia—one of the participants who stands out for her advanced English proficiency—shared an interesting comment in journal entry one. She was asked how the "provide advice activity" helped her consider the relevance of effective communication to prevent an in-flight emergency. This activity contained four specific elements within its structure to convey politeness, identify the probable cause and the potential injury, and to assert a command to avoid the injury (see Figure 6 below). This exercise was carried out for participants to exercise effectiveness when relaying, spontaneously, a preventive advice to passengers. Patricia stated:

> *Now I have the ability to let the passenger know why we need to do certain things, not just give them a command but to explain why it's necessary and what it prevents. It helped me a lot with different ways to express our opinion and deal with medical situations* (Journal entry 1).

Figure 6

Elements for providing advice politely to passengers.

Patricia's insight demonstrates that although she has an advanced level of English, there is still room for enhancing the way she expresses to prevent a medical emergency. Lesson one targeted a key factor in reaching competent communication for prevention. This finding is consistent with Kanki and Palmer (1993, as cited in Camocamo et al. 2018, p. 4) that communication is relevant because it ties together efficiency and safety. Besides, communication also implies quality of information. It is worth noting that not only Patricia recognized the value of competent communication, but there was a widespread agreement among all participants when responding the same question in journal entry one.

A recurring theme throughout the writing of journal entries was the relevance of communication for passenger's care. Participants expressed that communication not only prevents injuries but also plays an essential role in reassuring passengers. This sentiment was expressed again by Patricia when she was asked: *What new vocabulary or phrases did you learn in this lesson? How can you incorporate these into your daily work as a cabin crew member?* Patricia replied to this question in journal entry four thusly:

> I learnt that there are better ways to say something when trying to reassure or comfort someone. It could be the same procedures I knew before, but by

> incorporating the techniques learnt I can become better at helping in my work as cabin crew. (Journal entry 4)

This finding suggests that one more time the linguistic competency for medical emergency can be improved. In connection with this, Patricia highlighted the significance of ensuring linguistic precision. In Patricia's words, "different techniques" need to be added to established protocols in the interest of effective communication that provides the passengers with reassurance and comfort. Her view also reflects that communication is not only providing technical information about the flight, but also addressing the passenger's emotions when they really require it. As Driskell and Adams (1992) state, "The effective transfer of information is a complex process, and requires that information be conveyed when needed, transferred clearly, attended to by the receiver, understood and acknowledged by the receiver, and clarified if needed" (p.16). Patricia's words imply a need for precision in words, but also assertiveness when treating emotions of the ailing passengers in her role as a cabin crew member.

Another aspect connected to effective communication is assertiveness in advising. This topic was repeatedly highlighted by the students throughout the course. One example of this was observed during lesson five, when the participants reacted to the question "*Why do you think clear communication is critical in aviation, especially during emergencies?* In my observation I wrote:

> Participants comprehend that an effective linguistic competence in combination with assertiveness is crucial for preparedness to handle an in-flight medical emergency. They recognize that not only providing information to the right people is necessary, but also the way cabin crew members advise and provide instructions is essential (Observation week 5).

This observation highlights that the active role of cabin crews is essential for effective communication. Their role includes the responsibility of producing clear and coherent language for providing clinical instructions and reassurance during an emergency. By integrating cross-cutting skills such as assertiveness, decision-making, and leadership, we improve the cabin crew's ability to use language as a tool for communication, and as a means of action. Gee (2011) explains that:

> Human languages must be both fast and clear. We humans want to be able to communicate without undue slowdowns and yet we also want our communications to be clear. These two demands can come into conflict with each other. If we speak quickly and run our words together, communication can get unclear. If we seek total clarity by spelling everything out explicitly, communication can get too slow. (p. 4)

This is particularly evident in scenarios where crew members must make quick decisions about how to describe a medical situation or decide the most appropriate reassuring words to use with passengers.

Another major theme that emerged throughout the journal entries was the importance of readiness to respond in a medical emergency. An example of this can be found in the following comment written by Lorena in journal three:

> In a real emergency on board, anyone can play any role, whether it is the helper or the victim. It is important to be able to practice all the roles because just as it can happen to a passenger and we must know how to act, it can also happen to us when traveling, that someone has to help us. Being able to practice scenarios makes me feel more comfortable when it comes to experiencing a real situation, I could be less nervous (Journal Entry 3).

Lorena shared this reflection upon being requested to think about how language skills affect the different roles cabin crew member must perform according to aviation regulations. Lorena's reflection suggests that she is aware of the linguistical necessity that the first aid respondent has when handling a medical situation. This indicates that readiness is not only about keeping protocols at hand only, but also having the confidence and the pertinent vocabulary at the moment regardless of your role.

5.2 The Benefits of the ESP Course for Cabin Crew

Participants expressed that the CLIL methodology used for the ESP course helped them to gain confidence and awareness as well as increase their vocabulary knowledge.

5.2.1 Pedagogical Features, Language Content, Activities and Exercises

Integrating knowledge and practice was one of the principles I employed in alignment with the Content and Language Integrated Learning (CLIL) methodology (see Table 2 below). I aimed to integrate the knowledge they had regarding protocols issued by aviation authorities with various ways to collect data and react accordingly during an in-flight emergency.

Table 3

Methodological organization of the lesson plan.

1. **Orientation:** Students are introduced to the topic with the aim of raising the interest on the necessity of addressing the situation appropriately.	2. **Content introduction and interactive activities:** Students activate their underlying knowledge acquired from the manual or specialized sources to carry out sharing of ideas or a short discussion.
3. **Language Integration:** A short master class is employed as an input of structure, vocabulary, pronunciation and in alignment to the CLIL principle.	4. **Application and Practice:** Ss are invited to simulate cabin crew members conducting an assigned situation studied in the language integration phase.
5. **Reflection and Consolidation**: Students are requested to write journal entries and/or short quizzes weekly focused on the lesson previously studied.	

For this ESP training, I considered underscoring the way we ask the right questions to collect pertinent data with the purpose of providing the most appropriate clinical instruction and/or relaying the information collected to healthcare professionals on-board or to on-ground medical consultant services.

After lesson three, Victoria, as well as the rest of the participants, were asked to reflect on the importance of communication when integrating the SAMPLE procedure. SAMPLE is an acronym for the assessment protocol that stands for Signs and Symptoms, Allergies, Medications, Pre-existing conditions, Last meal and Events. This protocol which is widely used as an assessment tool in emergency medical service, helps the first aid respondent to formulate the appropriate questions to conscious victims in the collection of data.

Victoria is known for her ability to formulate pertinent questions in Spanish, as she is a certified nurse. She practiced her profession for several years in a renowned hospital in Costa Rica before becoming a cabin crew member. Victoria shared: "*We learned in class how we can ask the SAMPLE using an advanced vocabulary with different compound verbs, integrating language skills with first aid knowledge enhances my ability to respond competently in emergency situations" (Journal entry 3).* Victoria's comment shows that the pedagogical feature has taken a positive effect. Specifically, the SAMPLE procedure helped her to understand when it needs to be applied and what terminology should be included depending on the situation. As noted by Setyaningsih (2015), "flight attendants having international routes must master effective communicative abilities together with other skills for immediate problem-solving and prompt actions in case problems arise" (p. 119). Victoria's reflection supports this by demonstrating how integrating both the use of language, content, and background knowledge is preparing her for effective communication and problem solving.

Another aspect participants commented on was that the course methodology and lessons were based on their needs. Although participants reacted positively to the exercises and content included in each lesson, I perceived that the methodology still should include modifications to provide meaningful learning for the participants. During an observation on week five in which I assigned participants to carry out a presentation about a common health-related condition occurred in-flight, I wrote:

> About the verbal skills during the presentation, omitting grammatical elements such as subjects and verbs could be a sign of insufficient practice when producing complex sentences, as well as lacking mastery in the use of cohesive devices to make the speech more fluent. Besides, their mispronunciation of medical terminology and formal words such as “prolonged” and “elevated” could be due to unfamiliarity. Students need more explicit ways to immerse themselves in the production of speech through exploration. The teacher needs to provide more variety of exercises to enhance pronunciation, spontaneity and critical thinking. (Observation week 5)

Concerning the methodology implemented, the improvement of the clarity of speech was another element present in the content of the ESP course. Most participants recognized the usefulness of synonyms to strengthen their interactions with passengers. This reaction was expressed by one of the participants, Glenda, who stated the following in journal entry 2: “It opened my mind because I was very limited in my vocabulary, now that I study more vocabulary it makes me more confident. I want to continue learning. I feel more qualified to help a physician in these conditions” (Journal entry 2).

Glenda’s reaction is in response to an exercise carried out with the purpose of giving clinical instructions to peers and/or ailing passengers (see Figure 7 below). Glenda’s initial statement “it opened my mind” suggests that she feels more confident and

ready to express without limited vocabulary. Learning synonyms makes her feel more capable to interact with healthcare professionals.

Figure 7

Steps for responding to a medical emergency.

In like manner, Patricia expressed her perception on using synonyms three weeks later after lesson 5 when she answered the following question: *What aspect of your communication skills do you feel needs further improvement? How will you work on this moving forward?* She expressed:

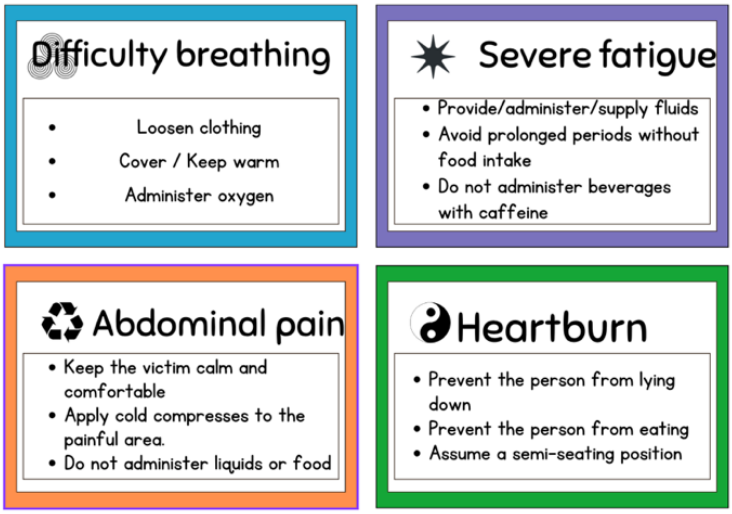
> In my opinion, I lack vocabulary and different ways of expressing, I tend to use the same few phrases for every situation over and over again. I intend to work on it by learning synonyms and reviewing the videos we watch in class and going over the tips gave [sic] by the teacher (Journal entry 5).

As mentioned earlier, Patricia has a high level of English proficiency. Her proficiency level stands out when interacting with passengers in normal situations on the airplane, as well as in this course. However, she still admits needing to enhance her proficiency by using synonyms. Patricia's reflection may indicate that although she is highly proficient in English handling normal situations, she might feel overwhelmed linguistically managing an abnormal scenario.

Participants also commented on the practicality that structured phrases represent. Most agreed that structured phrases enhance clarity when communicating with passengers and healthcare professionals. First, this perception was observed after performing an activity in which they were sent to breakout rooms to impersonate two cabin crew members providing the best clinical advice (see Figure 8 below).

Figure 8

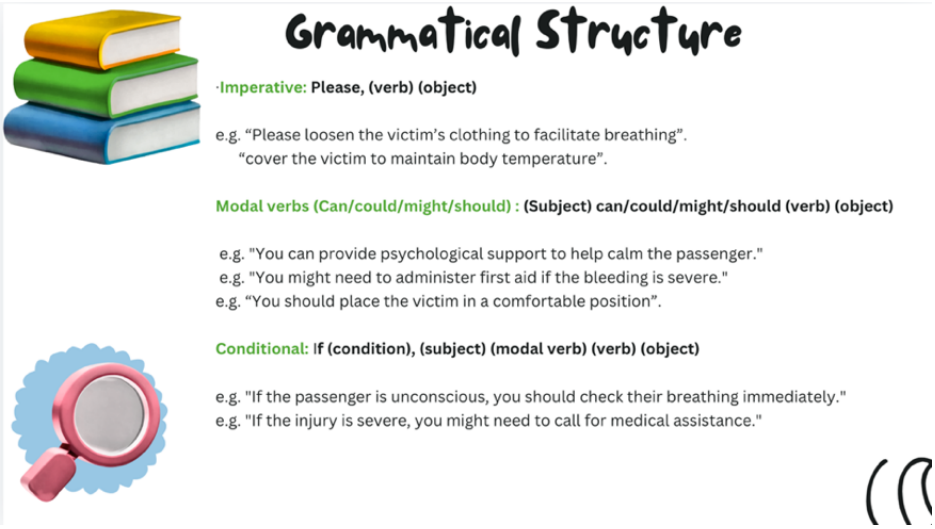
Structured phrases for communicating with ailing passenger and healthcare professional.



I observed that most participants had problems formulating the expressions for which I wrote: “Although students were shown and instructed on three possible ways of providing clinical instructions, students kept using one single form, if-conditionals” (Observation Week 2). For this exercise, students were taught three grammatical structures: use of imperative forms, use of modal verbs, and if-conditionals (see Figure 9 below). Interestingly, participants tended to rely on the use of conditionals, which suggests that exposure to other forms needs to be increased.

Figure 9

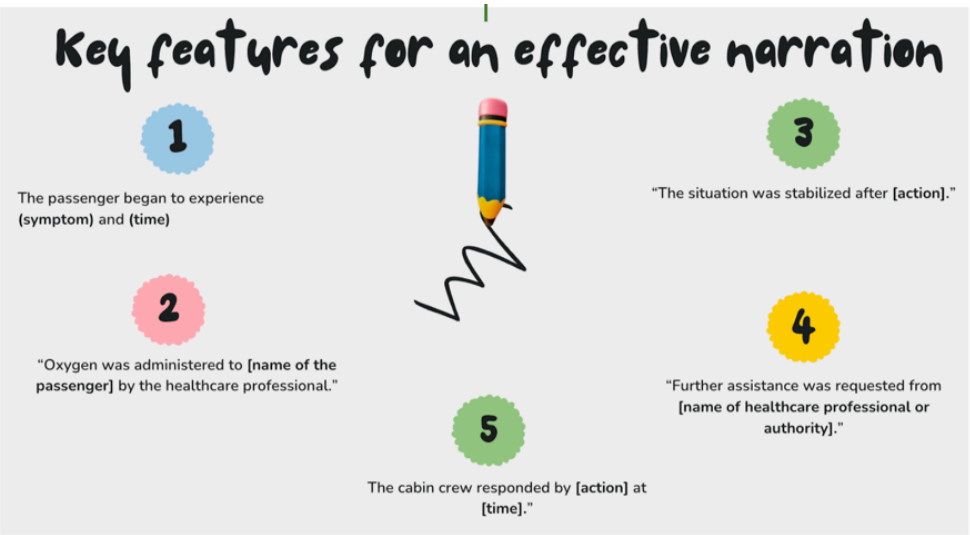
Structures for providing clinical instructions.



A recurring issue was raised by the participants during the course: that cabin crew should learn to adjust their language to the context at hand. For instance, in my observation during week four, I wrote: *"Students mentioned the importance of choosing the right words and adjusting the language according to the situation, as well as to the age and nationality of the passengers"* (Observation Week 4). My observation aligns with Clark's (2012) three purposes for interaction: situated language use, the active role of the speaker who produces the language, and the relationships that the speaker assumes in handling particular events (pp. 41-42). This observation shows that participants comprehend the need to adjust the language to ensure that the message is delivered with accuracy and precision during the narration of events to health professionals, as well as providing medical instructions to passengers. This topic was covered in detail in lesson seven, as can be seen in the following Figure 10. This lesson focused on the aspects that an effective narration comprises.

Figure 10

Key features for effective narrations.



Section I. Sequence the information

1. **Observation**: What was observed initially? (e.g., "The passenger suddenly slumped in their seat.")
2. **Symptoms**: What symptoms are present? (e.g., "They are sweating and unresponsive.")
3. **Actions Taken**: What was done? (e.g., "We elevated the passenger's legs and administered oxygen.")
4. **Current Condition**: What is the passenger's current status? (e.g., "The passenger

Lastly, participants highlighted role plays to be useful. Victoria shared the following in her journal entry three after being asked: *In what ways do you think the language skills are and role-play practice in class will help you in your role as a cabin crew member?*

> During the role-play in class, we were able to talk and share information regarding a medical situation, to learn the structure of the questions we could ask and how can we address the situation in a better way. As cabin crew members we usually have to deal with the whole sic] medical situations when we don't have a doctor on board, o [sic] work with a doctor on board as a translator. So, it's crucial to have this kind of opportunities to practice and avoid fell [sic] intimidating by the situation and the language (Journal Entry 3).

The reflection by Victoria indicates that role-plays were useful techniques for simulating possible scenarios, whether facing the situation with the assistance of a medical professional as well as with the absence of one. Victoria admits that the role-play helped her build the confidence to interact under pressure and be ready for a timely intervention.

5.2.2 Perceived Outcomes

In addition to commenting on methodological aspects of the ESP course, participants also referenced the outcomes they obtained from it regarding awareness and confidence. During observation three, students were assigned to discuss an excerpt from the article “Understanding communications in medical emergency situations”[2] The reading highlights the value of effective communication in the coordination of work and the ways poor communication wastes valuable time. Besides, the paper discusses how communication has been neglected giving space to focus on medical knowledge only. In my observation I wrote:

> Students react positively to the relevance of communication. In fact, most point out the importance of transmitting the message to the right people involved in such a stressful situation. Besides, some students express the crucial role that assertiveness has when advising a passenger in distress, particularly when providing reassurance. Also, students mention that cabin crew members should be able to communicate appropriately with healthcare professional to make good use of the time and assist the victim immediately as time is extremely valuable. (Observation week 3)

Participants understand that maintaining effective communication with ailing passengers requires ability to minimize the emotional distress that most of the passengers show.

Furthermore, participants understand that dealing appropriately with healthcare volunteers is part of teamwork as a strategy to ensure that valuable time is not wasted.

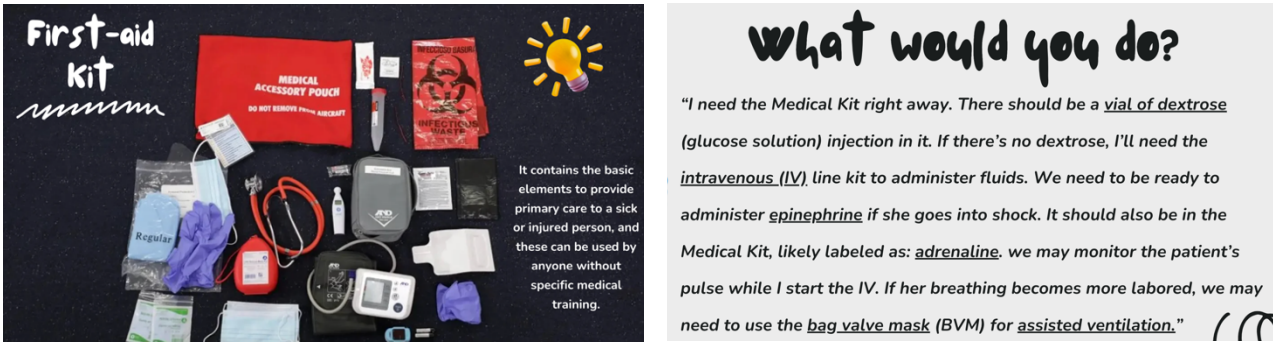
Glenda remarked on the usefulness of expanding the knowledge regarding the location, names, and usage of the medical equipment found on-board the aircraft. Glenda commented on how important it was for her to be familiar with the medical supplies even though cabin crew members are not responsible for using such equipment directly. She stated:

> In my opinion it (learning about the equipment) is critical because we have to assist the doctor inside the plane, so we have to be familiar with the medical equipment in order to minimize the response time for a timely attention to the passenger. In one flight I have to assist a doctor and open a medical kit, and I feel lost, inside the medical kit was so much equipment and messy medication, making it more time consuming for timely attention (Journal entry 6).

During the development of lesson six, Glenda, as well as the rest of the participants, expressed how poorly they performed during the exercises about recognizing medical supplies and the medical terminology a physician on board could employ (see Figure 11 below). Glenda's comment indicates that unfamiliarity with medical equipment and medical terminology leads to confusion, which negatively affects valuable response time.

Figure 11

Recognizing medical supplies and specialized medical terminology



Although there were a few topics throughout the course in which participants felt confused and hesitated when performing some of the activities, all participants shared that their confidence increased. Regarding their journal, four students were requested to share their thoughts about effective and ineffective communication studied in class. Diana, the youngest student of the class and newest hire in the airline shared the following comment: “For me, everything we have seen has seemed interesting and profitable because they are words and phrases that we do not implement daily” (Journal entry 4). Diana’s comment suggests that despite having difficulties during the course and being less experienced in the company, she has noticed the knowledge she has acquired in every lesson. Diana describes the content covered in class as “interesting and profitable,” suggesting that she perceives the content as necessary to build her confidence for an effective interaction.

Connected to the above, participants were asked how they would apply the vocabulary learned in class and which ones they found more useful. Mike answered the question by sharing an anecdote emphasizing how practicing even outside the field of an emergency scenario inside the airplane leads to confidence “A few days ago I had the flu, so I had to go to a JFK pharmacy and explain my symptoms, so I practiced phrases, sentences and vocabulary. You have to be clear and precise when explaining to get a good treatment” (Journal entry 5). Mike shared this anecdote after having participated in a role-play activity in which they had to relay necessary information to a doctor in the following order: Observation of the incident, report of the symptoms, actions taken, and current situation of the passenger. Evidently, Mike’s anecdote practicing the new phrases learnt in class suggests that the necessity of relaying information about health condition is associated not only to emergencies on board, but also to common scenarios outside the airplane to receive appropriate care. Therefore, this anecdote highlights the value of practicing vocabulary for every everyday interaction and the development of communicative skills learned during the course.

The consensus shared by the participants is that vocabulary knowledge leads to confidence. This was expressed by Glenda after reflecting how confident she felt addressing medical emergency. She wrote in journal entry one

> At the moment I feel quite insecure if a situation arises on a flight, but I am already studying and practicing the new phrases I have learned in this lesson, so I am gradually feeling confident I don't feel very confident because I feel like I need to practice more about it to be more confident with it. (Journal entry 1)

Glenda's reflection suggests that the knowledge of vocabulary is part of a transformative process that encompasses confidence building. She emphasizes that although she has learned some vocabulary, she is still "quite insecure". However, she perceives her confidence will **grow gradually** as she practices more vocabulary.

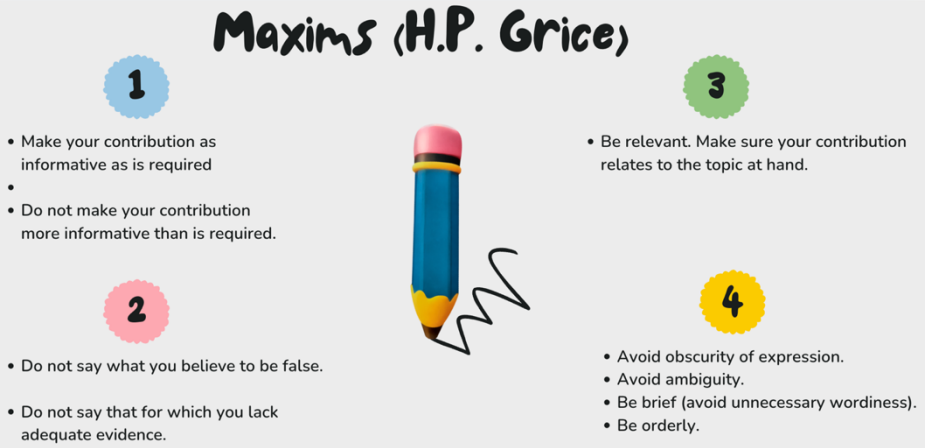
Similarly, two weeks later, Keylin shared her thoughts on how the ESP course had gradually increased her confidence. Essentially, Keylin wrote the following for journal entry three: "I feel much better today, it's the third class and everything that I learned around these weeks helped me during the role-playing activity with all the vocabulary they had seen in class" (Journal entry 3). Comparing Glenda's feeling of being "quite insecure" from lesson one to Keylin's feeling of "I feel much better today" in lesson three illustrates the increased confidence that comes from practicing new vocabulary in the ESP course.

Overall, participants reported that employing the right words would strongly help handling a medical emergency effectively. Specifically, participants learned in class seven about employing the appropriate words and the necessary information to be transmitted in the reassurance of ailing passengers and informing healthcare professionals. During lesson seven, I developed the cooperative principle by Grice, which deals with the quality and quantity of in communicative encounters (see Figure 12 below) Notably, Victoria referred to her understanding about these Maxims in the following comment for journal

seven: “It's essential if we can follow a structured narration process as we learned in class. Including the things we observe, the symptoms, the actions taken, and the current condition of the passenger”. Victoria’s reflection shows her understanding of the importance of relaying information in a logical manner for cabin crew members to interact adequately.

Figure 12

Grice’s maxims.



Lastly, another outcome the participants perceived was learning specialized language. During lesson eight, participants learned some specific terms and how these terms enhance clarity and objectivity. There was consensus among participants that using specialized terms is essential in the aviation field. For journal eight, participants reflected on how the use of these terms enhances the clarity and objectivity of crew members’ speech. Two participants had something to say about this point. Juliet referred to the usefulness of the vocabulary learned in class. She specifically highlighted the use of phrases such as “A healthcare professional administered, the passenger lost consciousness, the cabin crew provided…, the doctor monitored his/her condition, the passenger exhibited symptoms of… among others (Journal entry 8). Ana shared a similar insight about providing narrations following a given structure:

> I learned how to translate informal information into formal information for a better understanding of the situation. And how important is the way I narrate and communicate the facts. For example, how to say the exact parts of the plane (towards the front of the cabin, near the overwing exit) And about medical phrases such as severe pain in... or when someone is experiencing a lack of oxygen. Those phrases will be used in my narration as soon as I can and have the need during an emergency on board. (Journal Entry 8)

Primarily both comments reflect the perceived usefulness of employing specialized and formulaic language to assist a medical scenario. Secondly, these comments suggest the learning of specialized terminology and pre-fixed phrases (e.g., collocations) has had a positive effect in the way that they are now recognizing how objective and precise they need to be when transmitting the message mainly to healthcare professional for a timely intervention.

5.2.3 Perceived Future Needs

Even though participants shared a positive impact of the ESP course, they and the facilitator still found the need for constant language training whether it be programmed within the recurrent annual training period or outside of it. For instance, in journal two, Barbara wrote: “I think that my skills are better but, it’s important to review them more times, because [more training] increases confidence” (Journal entry 2). The need for this training aligns with Santos et al., (2014) "The absence of effective communication training means a high risk for aviation safety because the 'communication process in aviation should be treated professionally” (p. 125). Training in communication promises to mitigate potential risks with the regular operation of an aircraft and its occupants. Other participants shared a similar opinion regarding further training. Ana stated: “I would like to learn more about it and practice it. We never know if tomorrow I’d have an emergency and my

knowledge and confidence it's complementary for the good develop of it" (Journal Entry 1). Later, for journal eight, Ana expressed:

> I think it is vital for us to be constantly reading and improving our skills in the English language, and always keep in mind that being trained for an emergency on board being objective is what is important for the passenger and his health. (Journal entry 8)

Ana agrees on how fundamental vocabulary is to prevent a medical situation. She provided this comment upon participating in an impromptu speech about advising during a medical emergency. In this activity, she tested her background knowledge and speech abilities, which led her to notice that she was not confidence when uttering command or advice. As a product of the exercise, she became mindful of the need for readiness for an unexpected event. Weeks later, in lesson eight, Ana once again reflected on the importance of enhancing communicative skills. After Ana received the lesson, she understood the relevance of conveying information to medical professionals with clarity, objectivity and precision.

Finally, participants expressed a need for more training on medical vocabulary. On lesson four, participants partook in a lesson about acquiring vocabulary related to symptoms, the SAMPLE assessment (formulating questions to collect data from ailing passengers), and narration processes (reports of events). Participants agreed on their necessity to broaden the scope of the content. For example, Barbara shared: "In my opinion, I would like to gain more vocabulary about the names of basic medicines, in case of passengers asks me for medication or a doctor needs to supply it to a passenger" (Journal Entry 4). This comment was made three weeks before the lesson addressing medical equipment. Barbara, as well as the rest of the participants, is aware of cabin

crew's current linguistic necessities and how deepening into this topic would enhance their performance when facing an in-flight medical emergency.

Additionally, I reflected on the need for expanding the training scope. In the development of the ESP course, I realized that there are still topics such as narration (a more connected speech), pronunciation, collocations and useful phrases to be used within the field of medical emergencies, that participants need further training on. All these need to be further reinforced not only for the understanding of the participants, but also for their adequate application in a real emergency scenario on-board. Regarding this necessity, I wrote a memo in which I state that the whole ESP program needs a more focused alignment and constant revision from the facilitator or from a board of instructors. Ultimately, to further refine my practice, I plan to organize the sequence and transition between activities and phases of the lesson plan to create a smoother learning experience in each phase of the lesson.

VI. Discussion and Conclusion

In this section, I show the contributions of this research that the ESP course generated in light from the literature review and the findings obtained from the data collected. The discussion of the contributions comprises training, linguistic and cross-cutting skills improvements observed by the researcher along with the impact that the ESP curriculum caused in the participants' abilities and confidence. Additionally, I discuss the limitations of this research. Finally, I offer some suggestions for future exploration regarding ESP training for cabin crew members.

This research was motivated by a need for cabin crew members from a Latin American airline to develop more assertive and efficient communication in English during in-flight medical emergencies. This need was detected via a preliminary needs analysis study revealing that there is a lack of clear guidelines addressing linguistic preparedness and that the participants felt linguistically unprepared for effectively assisting ailing passengers as well as interacting with healthcare volunteers.

Based on these results, I designed an ESP curriculum that integrates enhanced language proficiency and cross-cutting skills to improve participating cabin crew member's capacity to efficiently handle in-flight medical emergencies. During the implementation of said ESP curriculum, I collected data via classroom observations, journal entries, and artifacts to conduct the present study. The primary goal of this exploratory case study research was to examine the impact of the ESP curriculum. The study was guided by the question: How does an ESP curriculum that integrates cross-cutting skills and enhanced language proficiency influence cabin crew members' perceptions of their capacity to efficiently manage medical emergency on-board?

In summary, over the development of the ESP course, participants faced linguistic (e.g., pronunciation and vocabulary) and emotional challenges (e.g., nervousness). However, participants maintained a positive attitude of excitement, openness and interest

during the training since they recognized the importance of clear communication for passenger's care and the relevance of developing assertiveness in advising and readiness for medical response.

On the other hand, participants expressed that the methodology employed, specifically, Content and Language Integrating Learning (CLIL) helped them to gain increased confidence and gain knowledge on specialized terminology that would help them to perform better during in-flight medical emergencies. Despite these gains from the ESP curriculum, they still perceive a necessity regarding more training, essentially widening the scope and the frequency of the ESP-oriented training.

6.1 Contributions to ESP Practice

Throughout the development of the ESP course, participants advocated for the readiness of the cabin crew member in terms of competent communication for passenger's care and effective interaction with medical practitioners. They also suggested that there is a necessity for expanding the training scope and its frequency to prevent serious medical complications on-board. Both these findings are in line with previous studies, such as Setyaningsih (2015), who suggests that speaking and listening abilities are essential to flight attendants having international routes to enhance their performance during a flight. The work of Setyaningsih also highlights that training is necessary for the effective acquisition and development of specialized knowledge relevant to cabin crew's established protocols (p.114). Nonetheless, while agreeing with Setyaningsih's conclusions regarding mastery of a second language and necessity for an ongoing training to handle passengers' regular demands, my research provides a more detailed understanding of cabin crew members' needs for addressing medical emergency on board. This research revealed the significance of two aspects: assertiveness in communication to address emotions of

passengers in distress and the ability to provide effective clinical instructions in connection with effective reporting abilities to medical practitioners.

Besides, my research adds to the ESP literature (Kanki & Palmer 1993; Yu & Liang 2021; Han 2019; Setyaningsih 2015; Ho et al., 2017; Krivonos 2005; Nevile 2006; Driskell & Adams 1992) regarding perceived outcomes that participants experienced during the development of the ESP course. Mainly, this research identified that participants became aware of the significance that specialized medical terminology has within commercial aviation. Specifically, they agree that learning this specialized terminology reduces response times when assisting passengers and enhances preciseness when relaying information to medical practitioners on board.

Although my findings go beyond the literature regarding communication solely. There is certain overlap with the conclusions of Kanki and Palmer (1993) as well as Flannagan in (ICAO Journal 2013), in which both authors address the relevance of effective communication to perform better during an unexpected event even how effective communication ties together efficiency and safety for the overall operation during a flight.

Furthermore, my findings are aligned with Viera and Santos (2010), in which they explain that an assertive behavior will help individual gain confidence when dealing with stressful scenarios. In a similar manner, my analysis indicates that participants reported an increased confidence after the 10 lessons. This finding indicates that an ESP curriculum that integrates specialized language leads to confidence building for interacting with ailing passengers and medical practitioners. This is a contribution that was not previously documented in the literature found.

Finally, this research makes a unique contribution by uncovering additional elements regarding management of emotional and linguistic challenges. Specifically, these ESP course's participants confronted residual nervousness and pronunciation difficulties during the roleplays and discussions. However, participants maintained a positive attitude

delineated by openness, excitement and interest. This new finding diverges from the established literature as it demonstrated that how maintaining a positive attitude can impact cabin crew members' learning progress positively.

6.2 Limitations of the Study

While this research provides valuable insights on the positive impact that an ESP curriculum represented for 10 cabin crew participants, it was constrained by the schedule availability with some of them. Cabin crew members were always travelling as well as I did as part of the cabin crew staff. Such conflict made it difficult to coordinate regular and consistent sessions simultaneously every week. In connection with that, the impact to training effectiveness was negatively affected in terms of the planned collaborative learning activities. Such constraint affected the continuity of the learning process and the pace of data collection for the research.

Another significant limitation encountered was the quality of participants' journal entries, which was one of the primary methods of data collection. Every week, participants were provided with guiding questions with a dual intention. Firstly, the questions were meant to encourage the participants to share their thoughts on each of the lessons. Secondly, they were meant to collect their experiences to feed this research to understand the impact of the course in each lesson. Although I provided them with guiding questions so that they could elaborate their responses, some participants kept their responses brief. The lack of details in participants responses somewhat hampered the understanding of how the ESP course influenced the participants. Nonetheless, I still obtained valuable insights that allowed partial understanding of the ESP course effectiveness.

Additionally, due to the scheduling conflict reflected in participants being in different times and at different locations, this research was unable to utilize interviews as a

complimentary collection of data. The employment of interviews would have provided deeper perceptions from participants' experience in the ESP course. In like manner, individual interviews would have served to expand the brief responses provided by the participants in the journal entries with the purpose of triangulating the data more effectively.

6.3 Suggestions for Future Research

A fruitful avenue for further research could be the employment of a longitudinal study for the minimum time of six months, to allow for the identification of changes over the course of the implementation of an ESP curriculum. A longitudinal study would allow the researcher to determine the strengths and weaknesses that the participants could have incorporating cross-cutting skills into the improvement of linguistic skills.

Besides, future investigation could address the limitations I had regarding applying interviews. Hence, I suggest incorporating interviews to gain a deeper comprehension of participants' perceptions regarding challenges and overall experience during a training program. I consider that including interviews within the data collection methods may help better triangulate findings from class and role-plays observations and obtain deeper understanding of the effectiveness of an ESP program.

Additionally, I suggest that further research should be carried out regarding the impact of diverse teaching techniques to assess the learning experience of the cabin crew members. This study could follow up on these participants' linguistic improvements and increased confidence more closely, since the ESP curriculum implementation was limited to 10 weeks.

6.4 Conclusion

This research explored the impact of an ESP curriculum using a CLIL methodology focused on in-flight medical emergencies and the ways it could enhance cabin crew's

linguistic and cross-cutting skills. This study showed that the integration of both skills raised the levels of confidence, readiness and communication efficacy of the participants. As this study suggested, combining instruction on specialized terminology and cross-cutting skills positively impacted the cabin crews' preparedness levels for effective communication during medical events. Therefore, this ESP curriculum has the potential to be replicated or adapted in the same field with other airlines. If this curriculum is adapted and consistently implemented, I foresee the potential for a standardized ESP training that would promote safety across the aviation industry. Moreover, the application of this type of training would help aviation schools to prepare better future cabin crew members.

Additionally, this research showed the necessity to widen the scope to address other common conditions such as passenger going into labor while on a flight and stress episodes that were not included during the delivery of the training. Also, future implementations of similar courses should be increased in frequency to reinforce linguistic and cross-cutting skills. I expect that this research not only pave the way for an enhanced instruction for cabin crew members, but also for a crucial shift in the use of English during stressful situations that occur on-board an aircraft.

VII. References

Ahmed, S. K. (2024b). The pillars of trustworthiness in Qualitative research. *Journal of Medicine, Surgery, and Public Health*, *2*, 100051. https://doi.org/10.1016/j.glmedi.2024.100051

Aiguo, W. (2008). Reassessing the position of aviation English: From a special language to English for specific purposes. *Ibérica: Asociación Europea De Lenguas Para Fines Específicos*, *15*, 151–163. https://www.redalyc.org/pdf/2870/287024060009.pdf

Aydiner, C., Corbin, T. B., & Tan, C. (2022). Developing critical thinking and effective communication skills in the future aviation workforce. In *Scholarly Commons*. Bridging the Gap. Retrieved July 4, 2024, from https://commons.erau.edu/ntas/2022/presentation/37

Ayton, D., & Tsindos, T. (2023, March 21). *Chapter 2: Foundations of qualitative research – paradigms, philosophical underpinnings*. Pressbooks. https://oercollective.caul.edu.au/qualitative-research/chapter/__unknown__-2/

Barney, J. (2015, September 28). In-flight medical emergencies: What doctors and travelers must know. *news.virginia.edu*. Retrieved April 13, 2024, from https://news.virginia.edu/content/flight-medical-emergencies-what-doctors-and-travelers-must-know

Barry, M. (2007). *Feminity in flight: A history of flight attendants*. Duke University Press.

Camocamo, I. S., Celosía, M. A., Godines, R., Rivas, N. D., & Veros, C. J. (2018). The flight attendant communication during in flight emergencies [Indiana Aerospace University]. https://www.academia.edu/39639546/the_flight_attendant_communication_during_in_flight_emergencies_repaired20190619_35091_1yvfja7

Centre for Clinical Interventions. (n.d.). Assertive communication. *cci.health*. Retrieved April 13, 2024, from https://www.cci.health.wa.gov.au/~/media/CCI/Mental-Health-Professionals/Interpersonal/Interpersonal---Information-Sheets/Interpersonal-Information-Sheet---03---Assertive-Communication.pdf

Chandra, A., & Conry, S. (2013). In-flight medical emergencies. *Western Journal of Emergency Medicine*, *14*(5), 499–504. https://doi.org/10.5811/westjem.2013.4.16052

Clark, B. (2012). *Safety Talk and Service Culture: Flight Attendant Discourse in Commercial Aviation*. Queen Mary University of London. https://core.ac.uk/download/pdf/77038587.pdf

Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). SAGE Publications INC.

Creswell, W., & Creswell, J. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.) SAGE publications INC.

Driskell, E., & Adams, J. (1992). Crew Resource management: An introductory book. In *https://www.tc.faa.gov/*. US Department of Transportation Federal Aviation Administration. Retrieved April 7, 2024, from https://www.tc.faa.gov/its/worldpac/techrpt/rd92-26.pdf

FAA [FAA safety]. (2012). *Avoid the dirty dozen* [Press release]. Retrieved April 13, 2024, from https://www.faasafety.gov/files/gslac/library/documents/2012/nov/71574/dirtydozenweb3.pdf

FAA. (2024, March 21). *Phraseology FAA Order JO 7110.10DD - Flight Services* [Press release]. Retrieved April 13, 2024, from https://www.faa.gov/air_traffic/publications/atpubs/fs_html/chap11_section_1.html

Gee, J. P. (2011). How to do Discourse Analysis: A Toolkit. In *Routledge eBooks*. https://doi.org/10.4324/9780203850992

Glesne, C. (2016). *Qualitative researchers: An introduction* (5th ed.) Pearson.

Gollin-kies, S., Moore, H., & Hall, R. (2015). *Language for specific purposes: Research and Practice in Applied Linguistics* (1st ed.). Palgrave Macmillan London.

Grice, H. p. (1975). Logic and conversation. London's Global University. Retrieved Sep 18, 2023, from https://www.ucl.ac.uk/ls/studypacks/Grice-Logic.pdf

Han, D. (2019). Needs analysis of ESP courses for pre-service flight attendants. *Hyeondae Yeong'eo Gyoyug/Hyeondae Yeongeo Gyoyuk*, *20*(3), 91–103. https://doi.org/10.18095/meeso.2019.20.3.91

Hatch, J. A. (2002). *Doing qualitative research in education settings*. https://doi.org/10.1353/book4583

Hesse-Biber, S. (2017). *The practice of qualitative research: Engaging students in the research process* (3rd ed.). SAGE Publications INC.

Ho, S. F., Thirumoorthy, T., & Ng, B. (2017). What to do during inflight medical emergencies? Practice pointers from a medical ethicist and an aviation medicine specialist. *Singapore Medical Journal/Singapore Medical Journal*, *58*(1), 14–17. https://doi.org/10.11622/smedj.2016145

Hu, J. S., & Smith, J. K. (2021, May 1). *In-flight medical emergencies*. AAFP. https://www.aafp.org/pubs/afp/issues/2021/0501/p547.html

IATA. (2024, January 31). *Global air travel demand continued its bounce back in 2023* [Press release]. Retrieved April 9, 2024, from https://www.iata.org/en/pressroom/2024-releases/2024-01-31-02/

ICAO Journal. (2013). Language proficiency requirements. *Critical to Aviation Safety*, *5*, 64. https://www.icao.int/safety/lpr/ArticlesPublications/Language%20Proficiency%20Requirements%20Critical%20to%20Aviation%20Safety.pdf

ICAO. (2018). Presentation of 2018 Air Transport Statistical Results: World Total Revenue traffic — international and domestic. In *www.icao.int*. International Civil Aviation Organization. Retrieved March 12, 2024, from https://www.icao.int/sustainability/WorldofAirTransport/Pages/presentation-of-2021-air-transport-statistical-results.aspx

ICAO. (n.d.). *Future of aviation* [Press release]. Retrieved April 9, 2024, from https://www.icao.int/Meetings/FutureOfAviation/Pages/default.aspx

International Civil Aviation Organization. (2007). *Manual of radiotelephony: DOC 9432 (4th ed.).* International Civil Aviation Organization ICAO. https://www.ealts.com/documents/ICAO%20Doc%209432%20Manual%20of%20Radiotelephony%20(4th%20ed.%202007).pdf

International Civil Aviation Organization. (2010). *Manual of the Implementation of ICAO Language Proficiency Requirements: DOC 9835* (2nd ed.). International Civil Aviation Organization ICAO. https://skybrary.aero/sites/default/files/bookshelf/2497.pdf

Irimiea, S. (2018). The survival of interactional sociolinguistics in the 21st century. *European Journal of Multidisciplinary Studies*, *3*(4), 61–69. https://revistia.com/files/articles/ejms_v3_i4_18/Irimiea.pdf

Kodama, D., Yanagawa, B., Chung, J., Fryatt, K., & Ackery, A. (2018). “Is there a doctor on board?”: Practical recommendations for managing in-flight medical emergencies. *CMAJ. Canadian Medical Association Journal*, *190*(8), E217–E222. https://doi.org/10.1503/cmaj.170601

Krivonos, D. (2005). Communication in aircraft cabin safety: Lessons learned and lessons required. In *ukfsc.co.uk*. 22nd Annual International Cabin Safety Symposium, Universal city, California, United States of America. United Kingdom

Flight Safety Committee. https://www.ukfsc.co.uk/wp-content/uploads/public_pdfs/Cabin-Comms-in-Aircraft-Cabin-Safety-Oct-2011.pdf

Krivonos, D. (2007). Communication in aviation safety: Lessons learned and lessons required [Conference]. *asasi.org*. Regional Seminar of the Australia and New Zealand Societies of Air Safety Investigators, New Zealand. https://asasi.org/wp-content/uploads/2021/05/Communication_in_Aviation_Safety_Paul_Krivonos.pdf

Lufthansa Aviation Training. (n.d.). *Human factors training for cabin crews*. Retrieved April 14, 2024, from https://www.lufthansa-aviation-training.com/human-factors-cabin-crews

Nevile, M. (2006). Communication in context: A conversation analysis tool for examining recorded voice data in investigations of aviation occurrences. In *atsb.gov.au*. Australian Government Australian Transport Safety Bureau. Retrieved April 6, 2024, from https://www.atsb.gov.au/sites/default/files/media/36112/b20050118.pdf

Noble, H., & Heale, R. (2019). Triangulation in research, with examples. *Evidence Based Nursing/Evidence-based Nursing*, *22*(3), 67–68. https://doi.org/10.1136/ebnurs-2019-103145

Pipaş, M. D., & Jaradat, M. A. (2010). Assertive communication skills. *Annales Universitatis Apulensis*, *2*(12), 649–656. https://doi.org/10.29302/oeconomica.2010.12.2.17

Pruchnicki, S., Key, K., & Rao, A. (2019). Problem solving/Decision making and procedures for unexpected events: A literature review. In *https://libraryonline.erau.edu/* (DOT/FAA/AM-20/01). Federal Aviation Administration. Retrieved July 4, 2024, from https://libraryonline.erau.edu/online-full-text/faa-aviation-medicine-reports/AM20-01.pdf

Santos, I. C. D., Vieira, A. M., & De Morais, P. R. (2014). Poor communication skills means high risk for aviation safety. *Gestão & Regionalidade (Impresso)*, *30*(88). https://doi.org/10.13037/gr.vol30n88.2541

Seidman, I. (2019). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (5th ed.). Teachers College Press.

Setyaningsih, Y. (2015). Language use and communication skills for flight attendants. *Lingua Scientia*, *7*(2), 113–120. https://www.academia.edu/109756211/Language_Use_and_Communication_Skills_for_Flight_Attendants

Simmons, J. (1974). Efficient conversation: The talk between pilots and air traffic controllers. *ERIC*, 1. https://files.eric.ed.gov/fulltext/ED088296.pdf

Spencer-Oatey, H., & Stadler, S. (2009). The global people competency framework: Competencies for effective intercultural interaction. *Global People*, 1–25. https://wrap.warwick.ac.uk/3272/1/WRAP_Spencer_Oatey_gp_competency_framework.pdf

The European Commission. (2012). Regulations: Commission regulation (EU) no 965/2012. *Journal of the European Union*, 42;64. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0965

The Human Factor "The Dirty Dozen." (n.d.). Retrieved April 12, 2024, from https://skybrary.aero/articles/human-factors-dirty-dozen#cite_note-2

together4safety. (2023, September 23). *Conversation aviation: Language proficiency* [Video]. YouTube. Retrieved April 14, 2024, from https://www.youtube.com/watch?v=ogJ8bGuXhOI&t=68s

Toomaneejinda, A., & Saengboon, S. (2021). Interactional sociolinguistics: The Theoretical Framework and Methodological Approach to ELF Interaction

Research. *LEARN Journal*, *15*(1), 156–179. https://files.eric.ed.gov/fulltext/EJ1336147.pdf

Touiserkani, F., & Hazrati, A. (2020). Analysis of Aviation Miscommunications based on Grice's Conversational Maxims: The Case of Iranian Aviators. *Journal of Foreign Language Teaching and Translation Studies*, *5*(2), 119–134. https://doi.org/10.22034/efl.2020.238101.1048

Wray, A., & Perkins, R. (2000). The functions of formulaic language: An integrated model. *Pergamon*, 1–28. https://www.academia.edu/7772936/The_functions_of_formulaic_language_an_integrated_model

Xu, W., Nasri, N. M., Jamaludin, K. A., & Jin, K. S. (2023). Cabin crew aero medicine and first aid training in China. *Cogent Education*, *10*(2).

Yu, Y. C., & Liang, J. C. (2021). Relationships among Affect, Hardiness and Self-Efficacy in First Aid Provision by Airline Cabin Crew. *International Journal of Environmental Research and Public Health/International Journal of Environmental Research and Public Health*, *18*(4), 2108. https://doi.org/10.3390/ijerph18042108

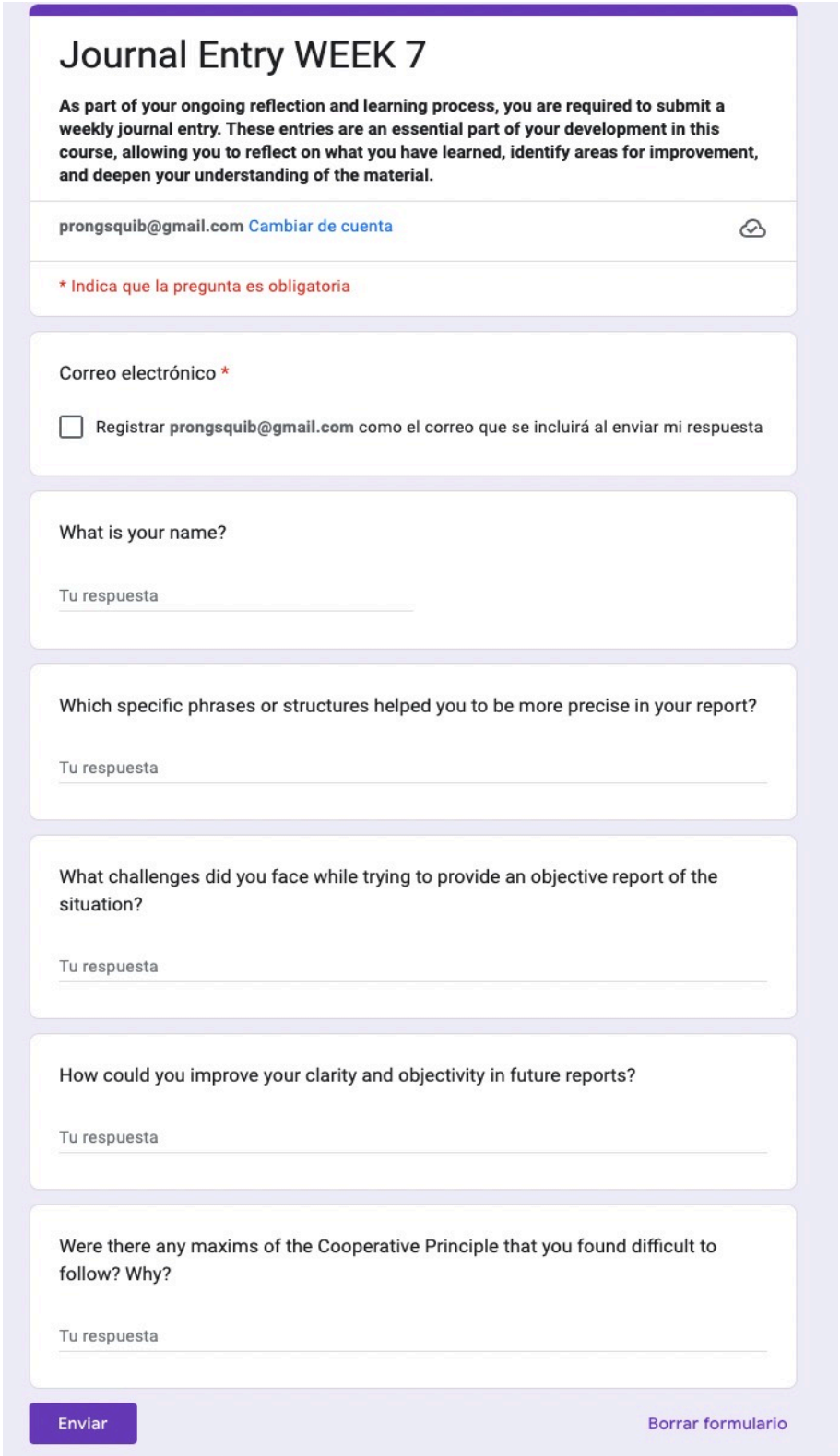
VIII. Timeline of the Study

Year		2024								
Months		**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**
Tasks										
Delimitation Of the Study	Assertiveness in English Communication: Effective Interaction Among Cabin Crew, Passengers, and On-board Healthcare Professionals During Medical Emergencies in a Latin American Airline	**X**								
Research Question	How does an ESP curriculum that integrates cross-cutting skills and enhanced language proficiency influence cabin crew members' perceptions of their capacity to efficiently manage medical emergencies on-board	**X**								
Proposal Development **1. Introduction**		**X**	**X**							

2. Theoretical Framework	Interactional Sociolinguistics (Gumperz,1982), Cooperative Principle (Grice,1975), Intercultural Communication Competence, Cross-cutting Skills		**X**							
3. Literature Review			**X**							
4. Methodology Framework				**X**	**X**					
ESP practice						**X**	**X**	**X**		
5. Data Collection Process • **Journals** • **Observations** • **Artifacts**						**X**	**X**	**X**	**X**	
6. Data Analysis: coding process: **(Inductive, Axial, Deductive)**						**X**	**X**	**X**	**X**	
7. Findings **8. Trustworthiness** • **Triangulation** • **Member checking** • **Clarification of research bias**									**X**	**X**
Conclusions										**X**

IX. Appendixes

Appendix A : Journal Entry week 7



Journal Entry WEEK 7

As part of your ongoing reflection and learning process, you are required to submit a weekly journal entry. These entries are an essential part of your development in this course, allowing you to reflect on what you have learned, identify areas for improvement, and deepen your understanding of the material.

prongsquib@gmail.com Cambiar de cuenta

* Indica que la pregunta es obligatoria

Correo electrónico *

Registrar prongsquib@gmail.com como el correo que se incluirá al enviar mi respuesta

What is your name?

Tu respuesta

Which specific phrases or structures helped you to be more precise in your report?

Tu respuesta

What challenges did you face while trying to provide an objective report of the situation?

Tu respuesta

How could you improve your clarity and objectivity in future reports?

Tu respuesta

Were there any maxims of the Cooperative Principle that you found difficult to follow? Why?

Tu respuesta

Enviar

Borrar formulario

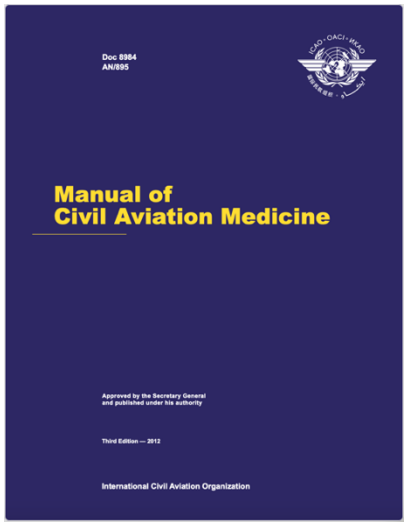
Appendix B : Observation Protocol

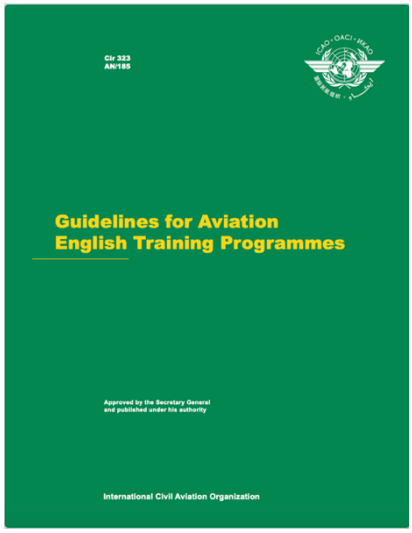
Participant Observational Notes

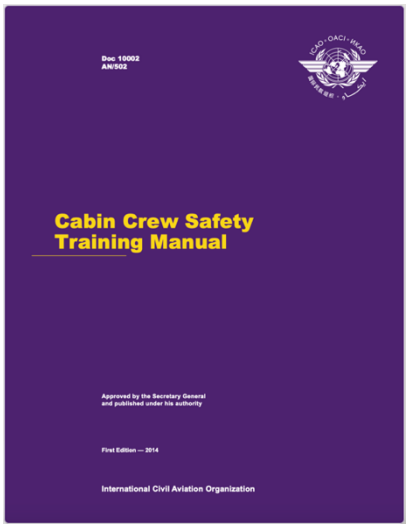
Researcher:	**Location:**
Date:	**Setting:**
Schedule:	**Case scenario:**

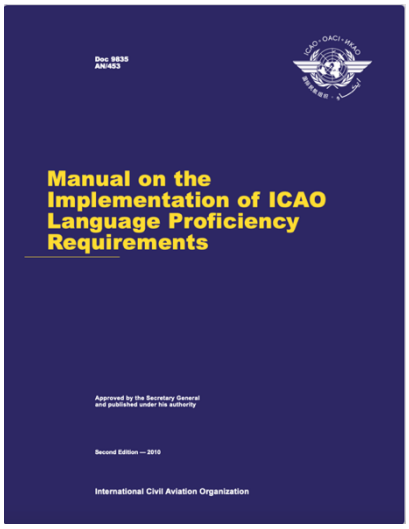
Observation	Brief comments
Expanded comments	
Reflections	

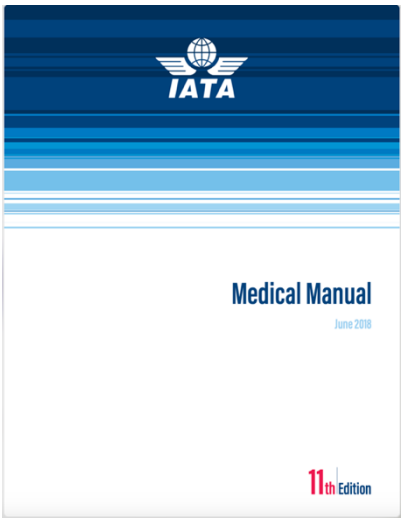
Appendix C: Artifacts











Appendix D: Consent Form

Howard Lubín González Martínez

Applied Linguistics master's degree student.

Universidad Nacional de Costa Rica

Consent for Participation in Research Study

Dear Crew member:

I hope this letter finds you well. You have been selected to participate in a research study titled "Assertiveness in English Communication: Effective Interaction Among Cabin Crew, Passengers, and On-board medical Practitioners During Medical Emergencies" which aims to gather insights into communication challenges during medical emergencies among cabin crew members. The focus is to enhance flight attendant's communication and language skills during medical emergency events.

I would like to ensure that you have a clear understanding of the study and your role in it. Your participation in this research is voluntary, and you have the right to withdraw at any time without facing any consequences.

By signing this consent letter, you acknowledge that:

1. You have read and understood the purpose of the study.
2. You are aware that your participation involves:

- Observations: These will take place during two scheduled training sessions
- Reflective Journals: You will be asked to write two reflective journals of your experiences and reflections on your practice before and after the course implementation.
- English Assessment Tasks: These will be taken during specific assessment sessions, scheduled at the beginning, middle, and end of the three-month period.

observations, reflective journals, and photographs of English assessments tasks.
3. Your responses and any information shared will be kept confidential and used solely for the purpose of this research.
4. You understand that your participation is anonymous, and your personal information will be treated with confidentiality.
5. You are aware that your participation will contribute to advancing knowledge in the field of aviation and enhancing safety measures.

Your participation in this research is relevant and your insights are highly valuable in improving the training and preparedness of cabin crew members during medical emergencies.

Please read this letter carefully, and if you agree to participate, sign and date below. If you have any questions or concerns, please feel free to contact me at: howardgm14@gmail.com / 8843-9714. Also you may contact Professor Ph.D. Christian Fallas Escobar at : christian.fallas.escobar@una.cr

Thank you for your willingness to contribute to this important research. Sincerely,

Howard González Martínez.
ID 701430769
Applied Linguistics master's degree student.