

An overview of the English language performance of *ab initio* military air traffic controllers: a learner-corpora-driven study

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Objectives

- To identify some characteristics of the ICAO linguistic descriptors in the oral production of *ab initio* air traffic controllers; and
- To present an overview of the *ab initio* ATCOs' English performance



Topics

1. Introduction
2. Theoretical framework
3. Methodology
4. Discussion



1. Introduction
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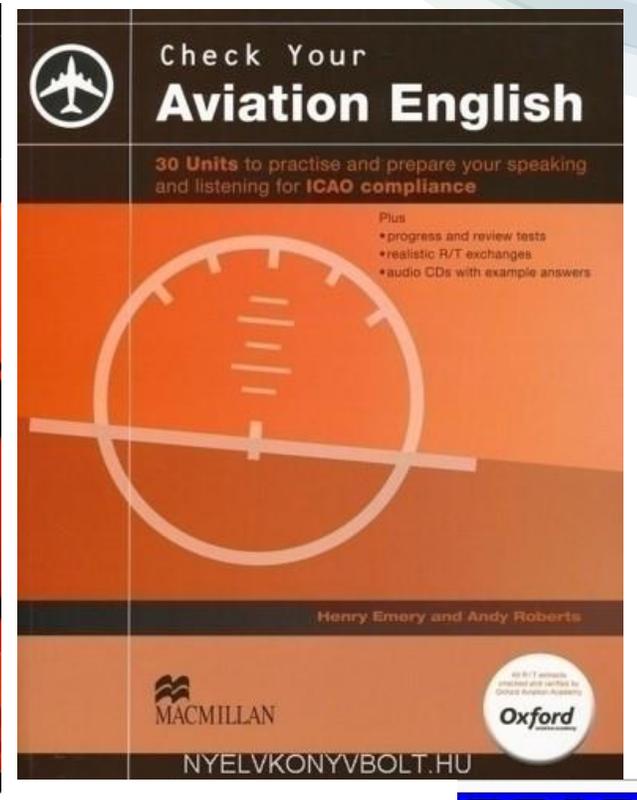
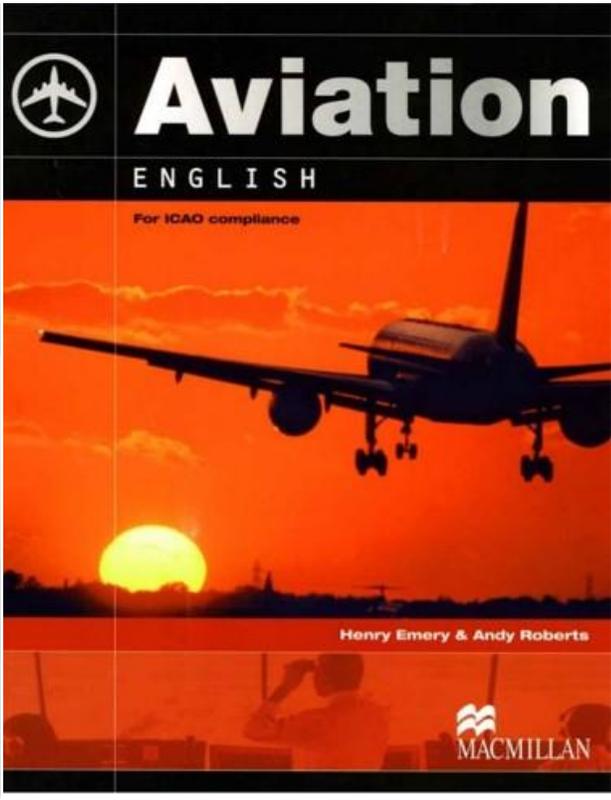
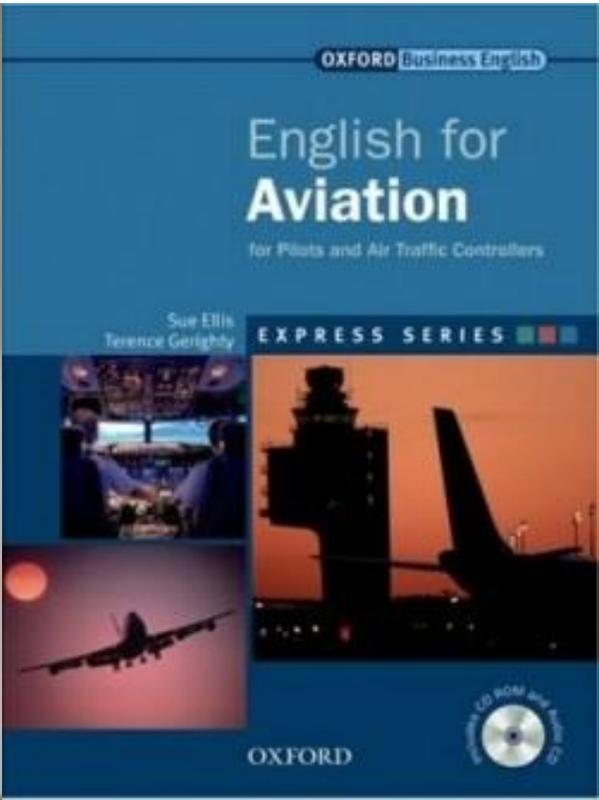
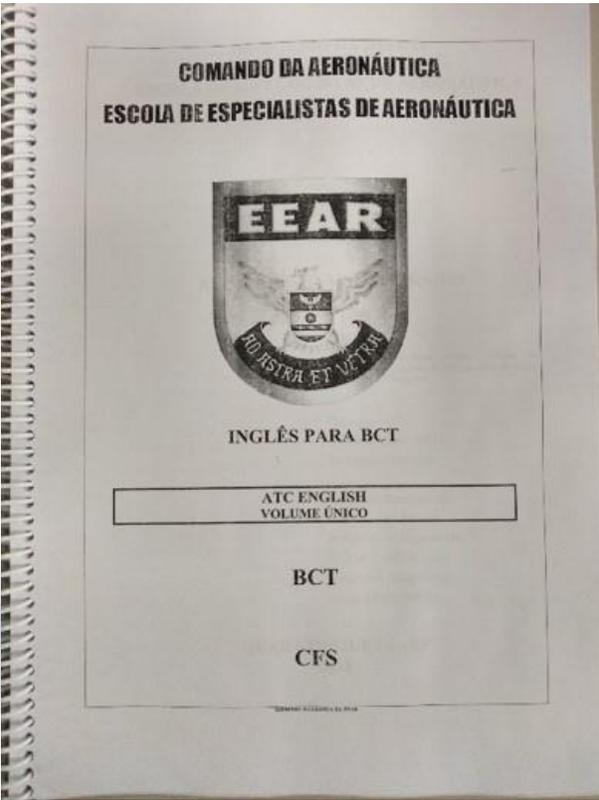


Sgt Batista / Força Aérea Brasileira

- The School of Aeronautics Specialists (EEAR) – Brazilian Air Force
- Military Air Traffic Controller – Basic Training – 2 Years
- 1st semester students: 1st graders...
- 420 English classes of 45 minutes = 315 hours
- Students' English proficiency required



1. Introduction
2. Theoretical framework
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1. **Introduction**
2. Theoretical framework
3. Methodology
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- Aviation English Proficiency Exam (EPLIS)





	TOTAL	1ª FASE	2ª FASE	% 1ª FASE	% 2ª FASE	
2015.1	100	80	19	80	23,75	
2015.2	40	32	13	80	40,625	
2016.1	35	6	3	17,142857	50	
2016.2	48	20	11	41,666667	55	
2017.1	113	51	26	45,132743	50,980392	
2017.2	114	81	47	71,052632	58,024691	
2018.1	115	33	16	28,695652	48,484848	
2018.2	116	49	30	42,241379	61,22449	
2019.1	121	83	42	68,595041	50,60241	
2019.2	125	94	51	75,2	54,255319	
2020.1	121	81	48	66,942149	59,259259	
2020.2	125	95	55	76	57,894737	
2021.1	132	64	40	48,484848	62,5	
2021.2	115	46	26	40	56,521739	
2022.1	124	46	28	37,096774	60,869565	
2022.2	107	38	20	35,514019	52,631579	
2023.1	121	53	26	43,801653	49,056604	
2023.2	79	41	29	51,898734	70,731707	
TOTAL	1851	993	530	53,646677	53,373615	

1. Introduction
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Research Questions

- How do the English classes at EEAR help the students to succeed in EPLIS?
 - What are the students' language lacks?
 - How are the ICAO language descriptors identified on the students' performance?
 - How can the students' language lacks be addressed in classroom?

1. Introduction
2. **Theoretical framework**
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4. Discussion

Spoken Learner Corpus

Granger; Gilquin; Meunier, 2015;
Friginal; Lee; Polat; Roberson,
2017.

Corpus-driven Study

McCarthy, 2006; Viana; Tagnin, 2010;
Scott, 2010; Viana, 2010, Berber-
Sardinha, 2010.

Specialized Learner Corpus

Tagnin; Fromm, 2008; Dayrell,
2010; Alizieri, 2010; Lopez;
Condamines; Josselin, 2013; Prado,
2019.

Transcription and Edition Criteria

Transkriptor, 2021; Creer; Thompson,
2013; Caines; Nicholls; Buttery, 2017;
Caines; Bentz; Knill; Rei; Buttery,
2020; Jurafsky; Martin, 2023.



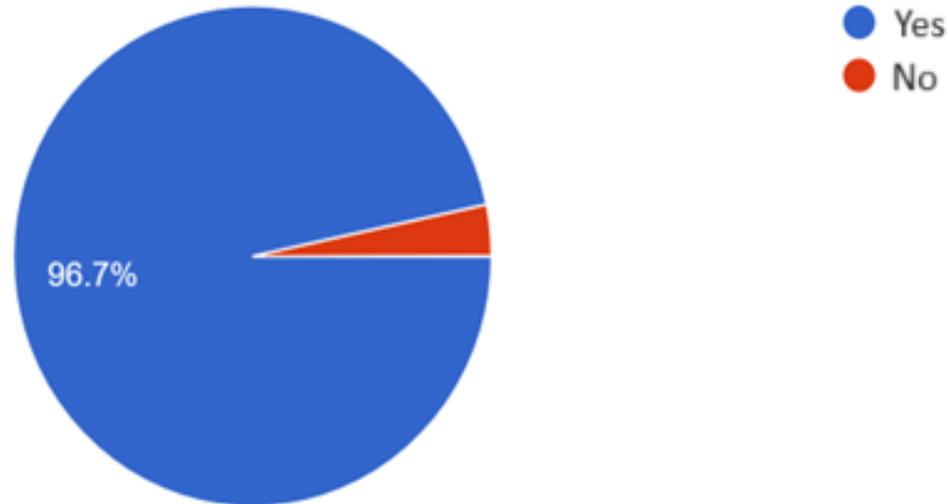
- Questionnaire

Sent to 198 ATCO who got at least level 4;
they graduated in 2020.1, 2020.2, 2021.1,
2021.2, 2022.1, and 2022.2.

1. Introduction
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- 3. Methodology**
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Do you think that the English classes at EEAR helped you in your EPLIS performance?

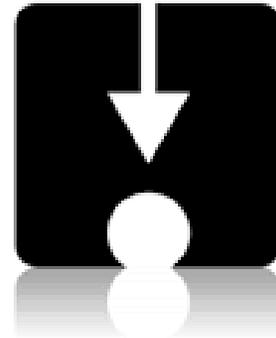
60 responses



Tool for analysis

1. Introduction
2. Theoretical framework
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#LancsBox 6.0



Brezina; Weill-Tessier; McEnery, 2021.



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KWIC GraphColl Whelk Words

Corpora KWIC: compreensão X Words: Corpus 6 X

Search

▼ Corpus	Corpus 6	▼ Frequency	▼ Dispersion	▼ Type
Type	Frequency: 01 - Freq	Dispersion: 01_CV		
de	94.000000	0.000000		
a	86.000000	0.000000		
o	80.000000	0.000000		
e	69.000000	0.000000		
que	62.000000	0.000000		
para	51.000000	0.000000		
do	44.000000	0.000000		
em	36.000000	0.000000		
as	34.000000	0.000000		
inglês	32.000000	0.000000		
eplis	32.000000	0.000000		
da	30.000000	0.000000		
com	30.000000	0.000000		
no	29.000000	0.000000		
na	24.000000	0.000000		
os	22.000000	0.000000		
vocabulário	22.000000	0.000000		
avição	21.000000	0.000000		
como	19.000000	0.000000		
aulas	17.000000	0.000000		
instrutores	16.000000	0.000000		
meu	16.000000	0.000000		
ao	15.000000	0.000000		
um	15.000000	0.000000		
ear	14.000000	0.000000		
dos	14.000000	0.000000		
mais	13.000000	0.000000		
formação	13.000000	0.000000		
acredito	12.000000	0.000000		
não	12.000000	0.000000		

1. Introduction
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- 3. Methodology**
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1. Introduction
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KWIC GraphColl Whelk Words Ngrams Text Wizard

Corpora Ngrams: Corpus 4 X KWIC X Words: Corpus 6 X KWIC: vocabulário X

Search

Search vocabulário Occurrences 22 (97.60) Texts 1 ▼ Corpus Corpus 6 ▼ Context 7 ▼ Display Text

Index	File	Left	Node	Right
1	Depoimentos	a realização do EPLIS. Sempre trouxeram muito	vocabulário.	Sim, a cobrança do speaking, o contato
2	Depoimentos	em inglês" e, conseqüentemente, expandir o nosso	vocabulário	relacionado à aviação e ao inglês geral.
3	Depoimentos	me ensinaram através de muita didática o	vocabulário	específico da aviação, assim ajudaram na pronúncia(conver
4	Depoimentos	dos professores e a grande quantidade de	vocabulário	passada. Conteúdos específicos sobre aviação em geral
5	Depoimentos	bem como o estímulo ao desenvolvimento de	vocabulário	e integração proporcionados pelos instrutores em sala
6	Depoimentos	para a área da aviação. Introdução ao	vocabulário	aeronáutico, fluência e pronúncia. A abordagem de
7	Depoimentos	adicionar inúmeros termos e expressões ao meu	vocabulário.	As diversas atividades e o método de
8	Depoimentos	fornecidos dão base para a formação de	vocabulário	específico para o eplis. Acredito também que
9	Depoimentos	prévios conhecimentos acerca da gramática e do	vocabulário	em língua inglesa, quanto pra aprofundar nas
10	Depoimentos	além de ter sido imerso em um	vocabulário	relativamente novo, que seria o da aviação.
11	Depoimentos	do material didático que completaram muito meu	vocabulário	Forneceu um preparo psicológico e técnico para
12	Depoimentos	o objetivo de expandiir não só o	vocabulário	mas como também desenvolver confiança e as
13	Depoimentos	no EPLIS (nível 5) foi introduzindo o	vocabulário	de inglês de aviação ao meu cotidiano.
14	Depoimentos	sim à cursos externos que realizei. O	vocabulário	da aviação é muito específico de modo
15	Depoimentos	introduzindo e ampliando meus conhecimentos sobre o	vocabulário	específico da aviação.. Acredito que a proatividade
16	Depoimentos	por cursinhos, onde os livros ensinavam o	vocabulário	"regular" do inglês. Acredito que a carga
17	Depoimentos	tipo de emergência) Dando conhecimento sobre o	vocabulário	aeronáutico e também dando a oportunidade de
18	Depoimentos	sala aprendi melhor esses assuntos. Auxiliou em	vocabulário	específico de trafego aereo O suficiente para
19	Depoimentos	como a Élide. Me ajudou muito com	vocabulário	em relação a aviação e tambem em
20	Depoimentos	o foco principal, que é o Eplis	Vocabulário	técnico Melhor vocabulário e maior autonomia gramatical
21	Depoimentos	que é o Eplis Vocabulário técnico Melhor	vocabulário	e maior autonomia gramatical para melhor uso
22	Depoimentos	a serem ditas oralmente As instruções de	vocabulário	específico aeronáutico ajudaram no meu desempenho. Ajuc

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2. Theoretical framework
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KWIC GraphColl Wheelk Words Ngrams Text Wizard

Corpora KWIC: fluência ✕

Search

Search fluência Occurrences 3 (13.31) Texts 1 ▼ Corpus Corpus 6 ▼ Context 7 ▼ Display Text

Index	File	Left	Node	Right
1	Depoimentos	área da aviação. Introdução ao vocabulário aeronáutico,	fluência	e pronúncia. A abordagem de temas diversos
2	Depoimentos	atividades do eplis bem como praticar a	fluência	e adequação do inglês à aviação. As
3	Depoimentos	aprendizado da Língua Inglesa. No desenvolvimento da	fluência	da fala da língua inglesa. Colaborou pois

1. Introduction
2. Theoretical framework
- 3. Methodology**
4. Discussion

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KWIC GraphColl Whelk Words Ngrams Text Wizard

Corpora KWIC: pronúncia X

Search

Search pronúncia Occurrences 3 (13.31) Texts 1 ▼ Corpus Corpus 6 ▼ Context 7 ▼ Display Text

Index	File	Left	Node	Right
1	Depoimentos	também ajudaram muito. Colaborou tanto para a	pronúncia	quanto para a elaboração de frases em
2	Depoimentos	aviação. Introdução ao vocabulário aeronáutico, fluência e	pronúncia.	A abordagem de temas diversos sobre tráfego
3	Depoimentos	diferentes formas para que possamos treinar a	pronúncia	e outros aspectos relevantes. Com as dinâmicas



1. Introduction
2. Theoretical framework
- 3. Methodology**
4. Discussion

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KWIC GraphColl Whelk Words Ngrams Text Wizard

Corpora KWIC: interação X

Search

Search	interação	Occurrences 2 (8.87)	Texts 1	▼ Corpus	Corpus 6	▼ Context 7	▼ Display Text
Index	File	Left		Node	Right		
1	Depoimentos	língua inglesa, tanto como vocabulários diferentes e		interação	contribuíram bastante para meu desempenho no EPLIS		
2	Depoimentos	o maior aproveitamento é na hora da		interação	entre alunos e instrutores. A formação em		



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2. Theoretical framework
- 3. Methodology**
4. Discussion

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KWIC GraphColl Whelk Words Ngrams Text Wizard

Corpora KWIC: gramática X

Search

Search gramática Occurrences 2 (8.87) Texts 1 ▼ Corpus Corpus 6 ▼ Context 7 ▼ Display Text

Index	File	Left	Node	Right
1	Depoimentos	Colaborou com um aumento significativo na minha	gramática	e conhecimentos específicos sobre aviação. O estudo
2	Depoimentos	solidificar os meus prévios conhecimentos acerca da	gramática	e do vocabulário em língua inglesa, quanto

1. Introduction
2. Theoretical framework
- 3. Methodology**
4. Discussion

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KWIC GraphColl Wheelk Words Ngrams Text Wizard

Corpora KWIC: compreensão X

Search

Search compreensão Occurrences 1 (4.44) Texts 1 ▼ Corpus Corpus 6 ▼ Context 7 ▼ Display Text

Index	File	Left	Node	Right
1	Depoimentos	interpretação e ainda com a parte de	compreensão	do ingles, permite aos alunos a prática

1. Introduction
2. Theoretical framework
- 3. Methodology**
4. Discussion

Data collection Corpus of study

- Oral test recordings
- 1st graders 2023.1 (two oral tests) – 88 out of 95 students authorized
- 4th graders 2023.1 (two oral tests) – 93 out of 127 students authorized
- 170 recordings: 1st graders
- 145 recordings: 4th graders
 - 315 recordings

Task (EPLIS-like)

10 instructors – SME and ELE

Data for this presentation

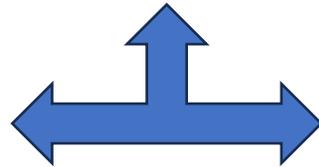
1. Introduction
2. Theoretical framework
- 3. Methodology**
4. Discussion

1st graders

- 6h 45m
- 31 recordings
- 2 subcorpora

Subcorpus 1
B1 students

- 41,630 tokens
- 1,650 types



Subcorpus 2
A1 students

- 20,462 tokens
- 1,764 types

Data for this presentation

1. Introduction
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4. Discussion

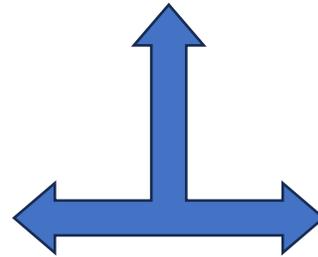
4th graders

- 5h 30m
- 27 recordings
- 2 subcorpora

Subcorpus 3

B1 students

- 21,770 tokens
- 1,595 types



Subcorpus 4

A1 students

- 13,360 tokens
- 1,226 types

1. Introduction
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4. Discussion

Transcriptions



- Transkriptor, 2021

Editing the transcriptions

1. Introduction
2. Theoretical framework
- 3. Methodology**
4. Discussion

Prosody

/ rising intonation
// falling intonation
(end of sentences)

Vocalization

<laughter>

Grammar error (local or global)

<sic>

Hesitations

<uh> <eh>

Backchanneling

<aham> <hmm>

Expressions in Portuguese

pista <code switching>

Word creation

adaptated <word coinage>

Turns overlapping

[[I think
[[Do you?



Pronunciation error

ARPABET

Advanced Research Projects Agency (ARPA)

		IPA Symbol	ARPA bet (SV)	ARPA bet (UV)	Examples	
Vowels	Front	i	i	IY	beat	
		I	I	IH	bit	
		e	e	EY	bait	
		ɛ	E	EH	bet	
			æ	@	AE	bat
	Back	ɑ	a	AA	Bob	
		ɔ	c	AO	bought	
		o	o	OW	boat	
		U	U	UH	book	
			u	UW	boot	
Mid	ɜ	R	ER	bird		
	ə	x	AX	ago		
	ʌ	A	AH	but		
Diphthongs		aI	Y	AY	buy	
		aU	W	AW	down	
		ɔI	O	OY	boy	
		i	X	IX	roses	
Stop Consonants	Voiced	b	b	B	bat	
		d	d	D	deep	
		g	g	G	go	
	Unvoiced	p	p	P	pea	
		t	t	T	tea	
		k	k	K	kick	
Fricatives	Voiced	v	v	V	vice	
		ð	D	DH	then	
		z	z	Z	zebra	
		ʒ	Z	ZH	measure	
	Unvoiced	f	f	F	five	
		θ	T	TH	thing	
s		s	S	so		
	ʃ	S	SH	show		
Semivowels	Liquids	l	l	L	love	
		l	L	EL	cattle	
		r	r	R	race	
	Glides	w	w	W	want	
		ʌ	H	WH	when	
		j	y	Y	yard	
Nasal	Non vocalic	m	m	M	mom	
		n	n	N	noon	
		ŋ	G	NX	sing	
	Vocalic	m	M	EM	some	
		n	N	EN	son	
Affricates		tʃ	C	CH	church	
		dʒ	J	JH	just	
Others	Whisper	h	h	HH	help	
	Vocalic	f	F	DX	batter	
	Glottal stop	ʔ	Q	Q		

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2. Theoretical framework
- 3. Methodology**
4. Discussion

Jurafsky; Martin, 2023



Editing the transcriptions

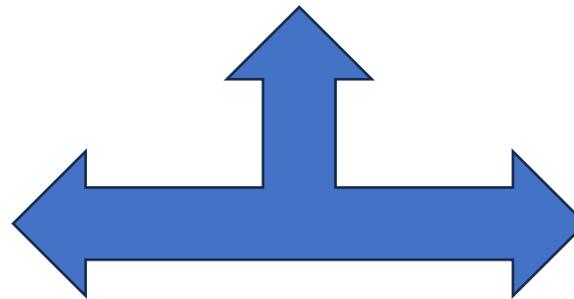
1. Introduction
2. Theoretical framework
3. **Methodology**
4. Discussion

Pronunciation error ARPABET

Advanced Research Projects Agency (ARPA)

Phonemes

AEHHKRAEFCH <pr>
(aircraft)



Stress

PAX0SEHEN1JHAXR
<pr> (passenger)

Editing the transcriptions

1. Introduction
2. Theoretical framework
- 3. Methodology**
4. Discussion

Pause >2sec
<5sec
<pause>

Pause >5sec
<long pause>

Truncated words
contr <trunc>

KWIC	
Corpora	Words: Corpus 1 X
▼ Corpus	▼ Frequency
Type	▼ Frequency: 0
have	186.000000
that	173.000000
we	170.000000
was	161.000000
so	157.000000
it's	153.000000
what	148.000000
pilot	146.000000
it	142.000000
can	138.000000
this	137.000000
part	134.000000
one	130.000000
are	125.000000
be	124.000000
air	120.000000
they	119.000000
eh	118.000000
like	115.000000
there	112.000000
think	106.000000
traffic	105.000000
very	104.000000
about	95.000000
question	90.000000
three	82.000000
because	82.000000
with	81.000000
he	81.000000
do	80.000000
controller	77.000000
don't	76.000000
ok	76.000000
aircraft	74.000000
an	74.000000
but	71.000000
plane	66.000000
need	65.000000

KWIC	
Corpora	Words: Corpus 1 X Words: Corpus 2
▼ Corpus	▼ Frequency
Type	▼ Frequency: 0
/	2878.000000
//	1488.000000
the	1275.000000
inst1	664.000000
and	481.000000
i	359.000000
eh	335.000000
a	326.000000
is	286.000000
to	267.000000
ok	260.000000
in	244.000000
uh	244.000000
you	196.000000
of	194.000000
pilot	169.000000
can	163.000000
switching	162.000000
code	161.000000
this	140.000000
aircraft	139.000000
what	135.000000
situation	126.000000
okay	121.000000
aham	117.000000
air	115.000000
it	103.000000
was	102.000000
very	102.000000
have	101.000000
that	97.000000
traffic	90.000000
1s1f1	90.000000
don't	89.000000
for	86.000000
aeendih	85.000000
with	84.000000
how	84.000000

KWIC	
Corpora	Words: Corpus 1 X Words: Corpus 2
▼ Corpus	▼ Frequency
Type	▼ Frequency: 0
/	1996.000000
the	1180.000000
//	1127.000000
to	727.000000
i	633.000000
a	475.000000
and	418.000000
you	335.000000
that	296.000000
in	289.000000
ok	279.000000
is	275.000000
inst6	272.000000
of	240.000000
uh	227.000000
so	221.000000
was	199.000000
have	175.000000
it	173.000000
can	165.000000
think	135.000000
on	132.000000
it's	119.000000
what	118.000000
if	118.000000
aircraft	116.000000
we	116.000000
this	114.000000
like	113.000000
because	112.000000
an	112.000000
about	109.000000
be	105.000000
would	99.000000
inst7	93.000000
but	92.000000
picture	89.000000
do	88.000000

KWIC	
Corpora	Words: Corpus 1 X Words: Corpus 2
▼ Corpus	▼ Frequency
Type	▼ Frequency: 0
/	1226.000000
//	1049.000000
the	769.000000
inst4	317.000000
you	301.000000
to	271.000000
and	261.000000
i	216.000000
is	212.000000
a	203.000000
in	175.000000
uh	153.000000
ok	145.000000
situation	121.000000
aircraft	112.000000
for	111.000000
of	106.000000
can	100.000000
one	90.000000
do	87.000000
this	87.000000
three	86.000000
your	83.000000
two	82.000000
part	81.000000
now	76.000000
please	76.000000
have	71.000000
what's	71.000000
pilot	68.000000
traffic	68.000000
think	68.000000
eh	68.000000
question	66.000000
repeat	65.000000
picture	63.000000
air	61.000000
so	60.000000

network
ly



Subcorpus 1

1st graders – B1 Vocabulary

1. Introduction
2. Theoretical framework
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- 4. Discussion**

Content Word	Frequency
pilot	146
air	120
traffic	105
controller	77
aircraft	74
plane	66
control	63
military	63
English	62
picture	43
passenger	43
people	40

Content Word	Frequency
student	39
flying	38
sentence	38
technology	38
story	37
aviation	36
test	36
airplane	36
course	36
flight	34
things	34
difficult	34

Content Word	Frequency
number	34
everything	33
technical	32
time	31
remember	29
conditions	29
operations	28
person	28
ATCO	27
Chinese	26
repeat	26
describe	26

Subcorpus 1

1st graders – B1 Vocabulary

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Content Word	Frequency
understand	25
name	25
help	24
questions	23
fire	23
communication	23
land	22
situation	22
tell	22
guess	22
affect	22
class	22

Content Word	Frequency
scenario	21
weather	21
American	20
something	20
expectation	20
exercise	20

Subcorpus 1

1st graders – B1 Vocabulary

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3. Methodology
- 4. Discussion**

Occurrences 26 (12.28)	Texts 7/22	▼ Corpus Corpus 1	▼ Context 7	▼ Display Te
Left	Node	Right		
ourself and calm and the others né	<code switching>	/ and I think that we need		
the pilot / that / uh levou	<code switching>	that have brought? / no // that		
and it's a part of the PPM	<code switching>	too / so maybe they are practicing		
all eh / in all areas né	<code switching>	uh in all areas We need uh		
Air Force uh prof (como é profissões)	<code switching>	is prof professions <word coinage> INST5: proficience		
it's the runway / the runway? pista	<code switching>	// INST5: yeah // 1S12A1: Yeahc /		
the the aircraft cannot / may né	<code switching>	/ may not take off / or		
/ and To the the ray né	<code switching>	and the sun rays get in the		
and like to go call you bisonho	<code switching>	/ this kind of things // INST5:		
don't know how can I say mosquetão	<code switching>	// INST5: Alright // 1S13A1: we will		
he Presented me the (DTCEA Campo Grande)	<code switching>	in (Mato Grosso do Sul) <code switching>		
<code switching> in (Mato Grosso do Sul)	<code switching>	and I s / I saw the		
(Campo Grande / Mato Grosso do Sul)	<code switching>	is a place that doesn't have a		
more places like / (Rio de Janeiro)	<code switching>	has a lot of traffic / but		
don't know how can I say milhão	<code switching>	/ but the the number of all		
is commanded the troops is the (suboficial)	<code switching>	and he's calling my friend bisonho <code		
switching> and he's calling my friend bisonho	<code switching>	/ because he is / he is		
picking the the gun / the mosquetão	<code switching>	I don't know the name / the		
fly because of technology / so cem	<code switching>	one hundred per cent // INST5: Question		
don't know how to say eh alfândega	<code switching>	/ Or the / I don't /		
saw my mom at (Banho do Bicho)	<code switching>	// INST5: Question three // what are		
like we are going to the galpão	<code switching>	I don't know how to say that		
want to be the zero one BCT	<code switching>	// This is my my highest expectation		
In meteorology test / the CB né?	<code switching>	KUHMAXLAXSHNIHEMBAXSH (cumulunimbus) né <code switching>? / it's		
CB né? <code switching> KUHMAXLAXSHNIHEMBAXSH (cumulunimbus) né	<code switching>?	/ it's a a big clownd <word		
they they saw a big clown né	<code switching>	/ A big clownd <word coinage> /		

Subcorpus 1

1st graders – B1 Vocabulary

1. Introduction
2. Theoretical framework
3. Methodology
4. **Discussion**

Occurrences 27 (12.76)	Texts 9/22	▼ Corpus	Corpus 1	▼ Context	7
Left		Node			Right
responsible for controlling the AEHH (air) traffical		<word coinage>	In general / uh we have a		
responsible for take care of the tripulation		<word coinage>	/ and we have the baggage handler		
control operations? // 1S10A1: Uh Meteorologist condicions		<word coinage>	Affect the the AEHH (air) traffic like		
/ oh so / it's a untypical		<word coinage>	situation / We can't carry the pets		
know one / like / a padron		<word coinage>	padron <word coinage> padron <word coinage> language		
like / a padron <word coinage> padron		<word coinage>	padron <word coinage> language to uh to		
padron <word coinage> padron <word coinage> padron		<word coinage>	language to uh to communicate with uh		
é profissões) <code switching> is prof profissions		<word coinage>	INST5: proficience <word coinage>? // 1S12A1: proficience		
is prof profissions <word coinage> INST5: proficience		<word coinage>?	// 1S12A1: proficience <word coinage> / yes		
INST5: proficience <word coinage>? // 1S12A1: proficience		<word coinage>	/ yes // INST5: Question four //		
ha / it's / it's a profission		<word coinage>	/ proficience <word coinage> that has a		
it's a profission <word coinage> / proficience		<word coinage>	that has a lot of responsibility /		
too / We need to be proative		<word coinage>	/ because uh we're gonna have to		
a theater thing / and like encenation		<word coinage>	and The the the character of died		
plane will crash / So the metheoro		<word coinage>	/ MAXTHAXRAOLAXJH (meteorology) condicions are very important		
I had my my pack / Backpatch		<word coinage>	/ And uh / I put it		
// 1S5A1: It has to be voluntary		<word coinage>	/ it needs to be older than		
/ and it can alter the Electral		<word coinage>	system of a plane / and the		
scarf / So she's Probably a voluntary		<word coinage>	in / to a mission / so		
OK / the Marshaller is the balizator		<word coinage>	/ he's the one who Keeps the		
routine / I was eh tolding		<word coinage>	you about eh last day I I		
eh / me mechanicals / eh electricist		<word coinage>	it is // INST5: Alright / Part		
uh copilot / yes copilot / assessorates		<word coinage>	the the pilots with the the flight		
switching>? / it's a a big clownd		<word coinage>	with uh / eh lightning storms and		
né <code switching> / A big clownd		<word coinage>	/ And they they was like /		
/ deviate / Deviated eh the clownds		<word coinage>	and eh makes the flight safety //		
it's a a clean sky without clownds		<word coinage>	/ This is interesting / And it		

Subcorpus 1

1st graders – B1 Pronunciation

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Mispronounced words	Frequency
IHSCHUDAXENT student	18
PAARTIH part	14
KAXENJHIHSHAXENS conditions	9
NEYMIH name	7
NIHDIH need	5
SAXB0JHEHKTS1 subject	4
THRUHTH through	4
MEYEN0TEH1NAXENS maintenance	4
LAESTIH last	4



Subcorpus 1

**1st graders – B1
Structure**

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Number of errors (local and global)

397



Subcorpus 1

1st graders – B1 Comprehension

1. Introduction
2. Theoretical framework
3. Methodology
4. **Discussion**

Occurrences 13 (6.14)	Texts 7/22	▼ Corpus	Corpus 1	▼ Context	7
Left		Node			Right
They are UAV flying around on /		Can you repeat		please? // INST5: There is a UAV	
There is an UVE flying around /		Can you repeat		please? // INST5: There is a UAV	
an UV I didn't understand yet //		Can you repeat		please? // INST5: There is a UAV	
I didn't got that / yet /		Can you repeat		please? // INST5: There is a UAV	
aircraft // 1S12A1: The pilot of /		can you repeat		please? just to // INST5: The pilot	
I didn't / I didn't understand //		Can you repeat		please? // INST5: An American pilot couldn't	
the passenger / oh I forgot /		Can you repeat		please? // INST5: The pilot of a	
develop the spirit the course // 1S1A1:		Can you repeat		the first part? // INST5: Yes //	
said the English? / the other /		can you repeat		Please? INST5: an American pilot / 1S1A1:	
English in air traffic control? // 1S7A1:		Can you repeat		please? // INST5: What is the importance	
the technical subjects? // 1S8A1: Can /		Can you repeat		the question? // INST5: What are your	
helps eh people to to uh /		can you repeat?		// INST5: Yes // the military environment	
while preparing to take off // 1S8A1:		Can you repeat		please? // INST5: An American pilot couldn't	

Occurrences 1 (0.47)	Texts 1/22	▼ Corpus	Corpus 1	▼ Context
Left		Node		
		well eh / in more busy eh	what is the meaning?	Can we go to the next question



Subcorpus 1

1st graders – B1 Fluency and interaction

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Interaction / fluency	Frequency
Long pause	2
Pause	45
Hesitation (uh)	238
Hesitation (eh)	118
Hmm	12

Subcorpus 2

1st graders – A1 Vocabulary

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Content Word	Frequency
pilot	169
aircraft	139
situation	126
air	115
traffic	90
controller	84
repeat	64
control	59
passenger	57
English	51
communication	45
aviation	44

Content Word	Frequency
flight	43
picture	43
course	42
dog	39
ATCO	38
important	37
suggestion	37
land	34
difficult	34
military	33
name	31
fighter	31

Content Word	Frequency
second	31
understand	30
airplane	30
part	29
flying	27
plane	27
technology	27
pilots	26
lost	26
question	25
word	25
lightning	25



Subcorpus 2

1st graders – A1 Vocabulary

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Content Word	Frequency
fly	23
student	22
strike	21
help	21
opinion	20
affect	20



Subcorpus 2

1st graders – A1 Vocabulary

1. Introduction
2. Theoretical framework
3. Methodology
4. **Discussion**

Occurrences 24 (11.73)	Texts 8/12	▼ Corpus	Corpus 2	▼ Context 7	▼ Display Text
Left	Node	Right			
eh / experiente <code switching>? / experient	<word coinage>	/ // INST1: Uh / Next situation			
control and / The AEHH (air) mesh	<word coinage>	/ AEHH (air) meshall <word coinage> /			
mesh <word coinage> / AEHH (air) meshall	<word coinage>	/ INST1: air marshal // IS10F1: AEHH			
air marshal // IS10F1: AEHH (air) meshall	<word coinage>	balizar <code switching>? // INST1: Yeah /			
/ engin Engineer / Engineer / consert	<word coinage>	// INST1: Fix? // IS10F1: Help /			
I say WAATIH (what) TIHS (this) serve	<word coinage>?	// INST1: Yes // IS10F1: Tanker uh			
Yes // IS10F1: Tanker uh / serve	<word coinage>	to abastecer <word coinage> // INST1: Fuel			
uh / serve <word coinage> to abastecer	<word coinage>	// INST1: Fuel // IS10F1: fuel uh			
school? // 1S11F1: I think the pressions	<word coinage>	/ pressions <word coinage> AEENDIH (and) uh			
think the pressions <word coinage> / pressions	<word coinage>	AEENDIH (and) uh / short time //			
in this moment the / the employeds	<word coinage>	let the cigarettes down in the FUHAXW			
Ago né <code switching> all is adaptated	<word coinage>	(adapted) OK? // INST1: Aham / ok			
I DIHDAHENTIHI (did n't) GEHDXIH (get) exit	<word coinage>	é êxito né <code switching>? // INST1:			
// AEENDI (and) too have a appromation	<word coinage>	(approach) / have a SEHKSAXEN (sector) appromation			
(approach) / have a SEHKSAXEN (sector) appromation	<word coinage>	(approach) / he is / there is			
/ a / so AXBAWDXIH (about) viabilation	<word coinage>	and / // INST1: That's it //			
ah / to MEHENSHAXR (measure) the pression	<word coinage>	/ OK? / the altitudes ah /			
air traffic controller // 1S7F1: An Americ	<word coinage>	/ eh / an Americ <word coinage>			
<word coinage> / eh / an Americ	<word coinage>	pilot / eh / can you HHIHPIHT			
Hmm / the airplane is is preparated	<word coinage>	to this / então <code switching> /			
uh the passenger need have in conscient	<word coinage>	to this and get the flight attendant			
situations / in the army / firefighters	<word coinage>	are important to defense of nation /			
1S8F1: In the the aviation the maority	<word coinage>	/ INST1: The majority // 1S8F1: The			
form in the school as a firefighter	<word coinage>	/ travel to Natal to get a			

Subcorpus 2

1st graders – A1 Vocabulary

1. Introduction
2. Theoretical framework
3. Methodology
4. **Discussion**

Occurrences 161 (78.68)	Texts 12	▼ Corpus	Corpus 2	▼ Context	7	▼ Display Text
Left	Node	Right				
(important) AEENDIH (and) very uh / admirada	<code switching>	// INST1: admired // IS10F1: AXJHMAYRAXJH (Admired)				
AEENDIH (and) TIHS (this) hmm (trabalhou para)	<code switching>	// INST1: Uh / this work //				
Uh / this work // IS10F1: Influenciou	<code switching>	// INST1: oh / influenced // IS10F1:				
// IS10F1: AXENFLUHAXENSIH (influenced) in this decisão	<code switching>	// INST1: ok / And uh /				
Level / Yes / LIHVEL (level) acima	<code switching>	// INST1: Uh / above // 1S10F1:				
Is very AXEMPAOHHTAXENTIH (important) because is Lingua	<code switching>	universe / AEENDIH (and) / eh /				
better communication and pilot of (de outros)	<code switching>	INST1: of other // IS10F1: of others				
Drill instruction // IS10F1: AEENJHIH (And) engraxar	<code switching>	boots // INST1: Polish / polish the				
AEENDIH (and) he try / to resolver	<code switching>	// INST1: to solve // IS10F1: to				
it is DIHFAXKAXLCH (difficult) eh / entendimento	<code switching>	/ they kind / INST1: understanding //				
the people more expe eh / experiente	<code switching> ? /	experient <word coinage> / // INST1:				
(and) I TRAYAXDIH (tried) uh / encontrar	<code switching>	/ INST1: to find // IS10F1: to				
to FAYENDIH (find) / uh / através	<code switching>	/ INST1: Through // IS10F1: TRUH (through)				
/ to LIYVIH (leave) KOWPAYLAXCHIH (copilot) assumir	<code switching>	/ INST1: to take over // 1S10F1:				
IS10F1: AEHH (air) meshall <word coinage> balizar	<code switching> ? /	INST1: Yeah / to guide the				
(and) BOWEMBER (bomber) / hmm / atira	<code switching>	// INST1: They shoot // IS10F1: They				
IS10F1: They shoot / hmm / proeminentes	<code switching>	/ uh // INST1: They shoot uh				
the LAEENDIH (land) / AEHHKWAFIHCHIH (aircraft) bateu	<code switching>	// INST1: crashed // IS10F1: crash AEENDIH				
n) KAXENTAKTIH (contact) / so he ou	<code switching>	she uh / or she KAXENTAKTIH (contact)				
the word? // 1S11F1: Eh / conseguir	<code switching>	// INST1: Can // the pilot can				
the airplane and the The airplanes também	<code switching>	/ oh também <code switching> sorry //				
airplanes também <code switching> / oh também	<code switching>	sorry // INST1: don't worry // 1S11F1:				
eh / I don't say uh carcaça	<code switching>	// INST1: The fuselage // 1S11F1: the				
eh / how do you say vistoria	<code switching> ? /	INST1: Inspection // 1S11F1: Inspection //				
/ oh (esqueci a palavra de novo)	<code switching>	/ how do you say vistoria <code				



Subcorpus 2

**1st graders – A1
Pronunciation**

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Mispronounced words	Frequency
AEENDIH and	85
PAYLAXTIH pilot	22
AEHH air	17
AEHHKRAEFTIH aircraft	12
LAEENDIH land	11
HHAETVIH have	11
BAHDXIH but	11
DAETIH that	10
AEHHKRAEFT aircraft	10
BAXKAWZIH because	8
DAOGIH dog	8

Mispronounced words	Frequency
WIHFIH with	7
PAYLAXCHIH pilot	7
MAHSTIH must	6
FAOHH for	6
KAXENTRAOLAXR controller	5
AXBAWDXIH about	5
AXTEHENDAXENTIH attendant	5
HHIHPIHT repeat	5
PAESAXENZHAX passenger	5
UHZIH use	5
RAHEN0WEY1 runway	5

Mispronounced words	Frequency
WIHTHIH with	5
WIHDHAXHH weather	4
TRAEFAXKIH traffic	4
IHSPIYKIH speak	4
THIHENKIH think	4
BAHTIH but	4
FERSTIH first	4
FLAYTIH flight	4
AXPROWSHIHNX approachin	4
HHAXSPAHN0SAH1BAXLAXT responsibility	4
WAHHHKIH work	4
DIH0FIH1KUHT	4





Subcorpus 2

1st graders – A1
STRUCTURE

1. Introduction
2. Theoretical framework
3. Methodology
4. **Discussion**

Number of errors (local and global)

330



Subcorpus 2

1st graders – A1
COMPREHENSION

1. Introduction
2. Theoretical framework
3. Methodology
4. **Discussion**

Occurrences 37 (18.08)	Texts 9/12	▼ Corpus	Corpus 2	▼ Context 7	▼ Display Text
Left		Node		Right	
for? // IS10F1: I don't understand /		can you repeat?		// INST1: Of course / can you	
I no / I not understand //		Can you repeat		/ please? // INST1: Of course //	
pilot // What's the situation? // 1S12F1:		Can you repeat		please? // INST1: Or course // the	
fighter pilot // 1S12F1: Fighter pilot //		can you repeat		please? // INST1: Of course // the	
how does technology help aviation? // 1S12F1:		Can you repeat		please? // INST1: In your opinion /	
strike // What's the situation? // 1S1F1:		Can you repeat		please? // INST1: Of course // The	
make a suggestion // 1S1F1: Suggest? /		can you repeat		the question? // INST1: Yes / the	
had to land the aircraft // 1S1F1:		[[Can you repeat		please? // INST1: [[What's the situation? /	
become an air traffic controller? // 1S2F1:		Can you repeat		please? // INST1: Of Course // why	
aircraft suffered a lightning strike // 1S2F1:		Can you repeat		please? // INST1: Of course // the	
/ it's one of them // 1S2F1:		Can you repeat		please the question? // INST1: Aham /	
repeat please? // INST1: Of course /		Can you repeat?		// 1S3F1: Can you repeat? // INST1:	
course / Can you repeat? // 1S3F1:		Can you repeat?		// INST1: ok / How does technology	
How was your boot camp? // IS4F1:		Can you repeat?		INST1: How was your boot camp? //	
far about air traffic control? // IS4F1:		Can you repeat?		// INST1: Of course // what have	
develop the Esprit de corps // IS4F1:		Can you repeat?		// INST1: Of Course // the military	
departure // What's the situation? // IS4F1:		Can you repeat?		// INST1: Of course // the pilot	
UAV flying around the airdrome // IS4F1:		Can you repeat		// INST1: There is a UAV /	
/ flying around the airdrome // IS4F1:		Can you repeat		/ the / the // INST1: UAV?	
this situation that I read? // IS4F1:		Can you repeat		this? // INST1: Of course // There	
technology contribute to aviation operations? // IS4F1:		Can you repeat?		// INST1: Of course // how does	
technology contributes to aviation operations? // IS4F1:		Can you repeat?		// INST1: Of course // how does	
what they are used for // IS4F1:		Can you repeat?		// INST1: Of course // name two	
tell a story / OK // IS4F1:		Can you repeat?		// INST1: You are going to tell	



Subcorpus 2

1st graders – A1
COMPREHENSION

1. Introduction
2. Theoretical framework
3. Methodology
4. **Discussion**

Occurrences 6 (2.93)	Texts 5/12	▼ Corpus	Corpus 2	▼ Context	7	▼ Display
Left		Node				Right
far about air traffic control? // 1S10F1:		I don't understand		// Can I / can you speak		
what they are used for? // IS10F1:		I don't understand		/ can you repeat? // INST1: Of		
/ and the passenger / /		I don't understand		/ Repeat please // INST1: Yes /		
1S5F1: Okay / ah / okay /		I don't understand		// INST1: You don't understand? // 1S5F1:		
had to land the aircraft // 1S6F1:		I don't understand		// INST1: You don't understand? / Okay		
1S8F1: Or I get the subject or		I don't understand		the subject // INST1: Aham // 1S8F1:		



Subcorpus 2

**1st graders – A1
COMPREHENSION**

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

11
occurrences

Occurrences 23 (11.24)	Texts 8/12	▼ Corpus	Corpus 2	▼ Context 7	▼ Display Text
Left	Node	Right			
air traffic controller? <bell rings> // 1S11F1:	Repeat please	// INST1: Why did you decide to			
air traffic controller? // 1S11F1: I/	repeat please	// INST1: Of course // Why did			
be an air traffic controller? // 1S11F1:	Repeat please	// INST1: What are the requirements to			
had to land the aircraft // 1S11F1:	Repeat please?	// INST1: A pilot of a small			
to land the aircraft // 1S11F1: RIHPHTIH	(Repeat) please	// INST1: Of course / the pilot			
/ / / I don't understand /	Repeat please	// INST1: Yes / The pilot of			
what they are used for? // 1S11F1:	Repeat please?	// INST1: Can you name two types			
they are used for? // 1S11F1: HHIHPHT	(Repeat) please	// INST1: Can you name two types			
What's the situation? // 1S12F1: Can you	repeat please?	// INST1: Or course // the controller			
// 1S12F1: Fighter pilot // can you	repeat please?	// INST1: Of course // the controller			
technology help aviation? // 1S12F1: Can you	repeat please?	// INST1: In your opinion / how			
What's the situation? // 1S1F1: Can you	repeat please?	// INST1: Of course // The pilot			
land the aircraft // 1S1F1: [Can you	repeat please?	// INST1: [[What's the situation? / Of			
air traffic controller? // 1S2F1: Can you	repeat please?	// INST1: Of Course // why did			
a lightning strike // 1S2F1: Can you	repeat please?	// INST1: Of course // the pilot			
one of them // 1S2F1: Can you	repeat please	the question? // INST1: Aham / What			
far about air traffic control? // 1S3F1:	Repeat please	// INST1: Of course // what have			
operations? // 1S3F1: They / Did you	repeat please?	// INST1: Of course / Can you			
situation? // 1S5F1: Okay / can you	repeat please?	// INST1: Of course // the pilot			
/ and / Okay / can you	repeat please?	// INST1: Of course / the pilot			
affect the / Okay / can you	repeat please?	// INST1: How do meteorological conditions affect			
are used for? // 1S6F1: Can you	repeat please?	INST1: Can you name two types of			
uh / eh / can I HHIHPHT	(repeat) please?	// INST1: Of course // The controller			



Subcorpus 2

**1st graders – A1
FLUENCY AND
INTERACTION**

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Interaction / fluency	Frequency
Long pause	0
Pause	195
Hesitation (uh)	244
Hesitation (eh)	335
Hmm	50





Subcorpus 3

4st graders – B1
VOCABULARY

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Content Word	Frequency	Content Word	Frequency	Content Word	Frequency
aircraft	116	ATCO	51	instructions	27
picture	89	airport	48	beacon	26
pilot	81	runway	46	closed	26
seconds	78	land	40	want	25
air	75	aviation	39	due	25
situation	66	working	37	tell	24
know	59	say	37	please	24
traffic	58	test	33	opinion	24
right	58	story	33	control	24
give	57	people	32	help	24
airdrome	54	stopped	32	day	23
suggestion	52	repeat	29	flight	23
controller	51	landing	29	English	23





Subcorpus 3

4st graders – B1
VOCABULARY

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Content Word	Frequency
suddenly	23
requested	23
tower	23
training	22
temporarily	22
contact	22
problem	22
incursion	21
code	20





Subcorpus 3

4st graders – B1
VOCABULARY

1. Introduction
2. Theoretical framework
3. Methodology
4. **Discussion**

Occurrences 3 (1.38)	Texts 3/20	▼ Corpus	Corpus 3	▼ Context	7
Left		Node			Right
inform all the aircrafts in the vicinity <word coinage> / so they would be able to that in order to avoid any confliction <word coinage> mid / mid air uh collisions or a patient that had car car cardiacal <word coinage> problems // INST6: OK / give a					



Subcorpus 3

4st graders – B1
VOCABULARY

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Occurrences	20 (9.19)	Texts	12/20	▼ Corpus	Corpus 3	▼ Context	7	▼ Display
	Left		Node				Right	
	10>> <<Class A>> <<Activity 1>> INST7: Aí		<code switching>		first question // Uh Why did you			
	OK 4S10A1: I would contact the IBAMA		<code switching>		you know / and for remove the			
	ver / tudo bem / pode ir?)		<code switching>		// INST7: Yes / go on //			
	I took the test for for EEAR		<code switching>		/ I studied by myself at home			
	/ the controller who said (vai ladrão)		<code switching>		// About Lula's plan / I think			
	not supposed to say to the Papa		<code switching>		plane // and Ivete <code switching> Things			
	Papa <code switching> plane // and Ivete		<code switching>		Things like that // INST7: How important			
	uh / 20 Januaryth 2023 / Aluno		<code switching>		/ uh Again / what is your			
	January twentieth twenty twenty three // Aluno		<code switching>		// So how are you? // 4S2A1:			
	1>> INST6: EPLIS test simulation // aluna		<code switching>		/ uh / State your full name			
	Januaryth twentieth twenty twenty three // aluna		<code switching>		how are you? // 4S4A1: I'm fine			
	twentieth on twenty twenty three / aluna		<code switching>		// Uh / This is an EPLIS			
	twenty / twenty twenty three / aluno		<code switching>		// How are you man? // 4S6A1:			
	Brazil / like in the / CINDACTA		<code switching>		four / So uh / And this			
	On the organization of the space do		<code switching>		of the uh / Specifically of the			
	<<Activity 1>> INST6: EPLIS test / Aluno		<code switching>		On January twentieth twenty twenty three /			
	number? // 4S8A1: INST6: Alright / Aluna		<code switching>		Let's start the test // So the			
	the college / to STAHD (study) Letras		<code switching>		/ And maybe traveling uh to another			
	twenty on twenty twenty three // Aluno		<code switching>		// Are you OK? // 4S9A1: Yes			
	ATC training here in (Escola de Especialistas)		<code switching>		/ you don't need to lie //			





Subcorpus 3

4st graders – B1
PRONUNCIATION

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Mispronounced words	Frequency
STAOPAXD	5
RAXSPEHK0TIHV1LIH	2





Subcorpus 3

4st graders – B1
STRUCTURE

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Number of errors (local and global)

270



Subcorpus 3

4st graders – B1
COMPREHENSION

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Occurrences 9 (4.13)	Texts 7/20	▼ Corpus	Corpus 3	▼ Context	7	▼ Display Text
Left		Node		Right		
Uh Can I repeat the question? // requested Light signals for landing // airdrome beacon suddenly stopped working // requested light signals for landing // to aviation? // 4S14A1: Uh Sorry / The radar system blacked out // 4S1A1: // What is the situation? // 4S5A1: is the situation? // 4S6A1: Uh / the terminal area // 4S8A1: Uh /		Can you repeat Can you repeat Can you repeat Can you repeat? can you repeat? Can you repeat Can you repeat Can you repeat Can you repeat		the question please? // INST7: You have please? // INST7: The pilot was unsure that please? INST7: the airdrome beacon suddenly // INST7: The pilot was unsure of // INST7: Have you heard about any please? // INST6: Ok / the screen please? // INST6; yes // the medevac please? // INST6: Yes / I can please? // INST6: OK // the Air		

Occurrences 2 (0.92)	Texts 1/20	▼ Corpus	Corpus 3	▼ Context	7
Left		Node		Right	
is the situation? // 4S1A1: Uh / / And something about a screen and		I didn't understand I didn't understand		this sentence too much / but I the other word // INST6: OK /	

Occurrences 2 (0.92)	Texts 2/20	▼ Corpus	Corpus 3	▼ Context	7
Left		Node		Right	
the airdrome was temporarily closed // 4S13A1: / What is the situation? // 4S9A1:		Could you repeat Could you repeat		please? // INST7: Due to a runway please? // INST6: Yes / the screen	



Subcorpus 3

4st graders – B1
FLUENCY AND INTERACTION

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Interaction / fluency	Frequency
Long pause	26
Pause	69
Hesitation (uh)	227
Hesitation (eh)	14
Hmm	19





Subcorpus 4

4st graders – A1
VOCABULARY

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Content Word	Frequency
situation	121
aircraft	112
part	81
pilot	68
traffic	68
think	68
question	66
repeat	65
picture	63
air	61
suggestion	59
aviation	52
controller	51

Content Word	Frequency
runway	47
important	47
land	43
airport	33
landng	31
communication	26
story	26
number	25
describe	25
problems	25
due	25
world	24
small	23

Content Word	Frequency
ground	23
difficult	22
development	21





Subcorpus 4

4st graders – A1
VOCABULARY

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Occurrences 9 (6.74)	Texts 4/26	▼ Corpus	Corpus 4	▼ Context	7	▼ Display Text
Left			Node			Right
for av aviation BIHKAHZIH (because) / aprimore			<word coinage>	more The WERKIH (work) // INST4: OK		
there is a car and the florist			<word coinage>	/ There is a fog / low		
There is a fog / low visibily			<word coinage>	/ (é só) <code switching> // INST4:		
4S12H2: Uh / Because Hmm / evitate			<word coinage>	Mistakes in communication / misunderstanding // IN		
control eh NIHJHIHS (needs) to / leady			<word coinage>	with the / eh poor communications /		
AEHHKRAEFCHIH (aircraft) is flying and the landy			<word coinage>	/ and the landy <word coinage> uh		
landy <word coinage> / and the landy			<word coinage>	uh on the ground / and thanks		
fire bombers was / working / worky			<word coinage>	/ WERKYEHD (worked) to s / to		
a small / an AERKRAEFTIH (aircraft) fronting			<word coinage>	/ GRAWENDIH (ground) this PIHKTAXRIH (picture) a		



Subcorpus 4

4st graders – A1
VOCABULARY

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Occurrences 32 (23.95)	Texts 9/26	▼ Corpus	Corpus 4	▼ Context	7	▼ Display Text
Left		Node		Right		
do it // 4S10H2: (Pode ficar olhando?)		<code switching>		// INST4: Yes // 4S10H2: Uh /		
low visibily <word coinage> / (é só)		<code switching>		// INST4: That's it? // 4S10H2: Aham		
TEYKIH (take) DAXBRIS (debris) / (é só)		<code switching>		// INST4: Hmm? // 4S10H2: (é só		
INST4: Hmm? // 4S10H2: (é só isso)		<code switching>		// INST4: Oh / that's OK //		
to / To (como é que é)		<code switching>		to time on the / on the		
/ não sei essa palavra em inglês)		<code switching>		/ eh / I think IHSTAHDIH (study)		
// 4S11H2: Development is eh / melhorar?		<code switching>		// INST4: Developments means improvement // 4S11H2:		
means improvement // 4S11H2: Improvement (é verdade)		<code switching>		// INST4: Something good / something that		
// 4S11H2: Repeat please // (Pode repetir?)		<code switching>		// INST4: Sure / Question one /		
/ Or AXEMPRUHVH (improve) English / só		<code switching>		// INST4: Can you can you tell		
TEYKIH (take) decision very fast / só		<code switching>		// INST4: OK / part two /		
seven AM and (ah não sei essa)		<code switching>		// next please // INST4: Ah /		
/ Because / Because / (não sei)		<code switching>		/ next // INST4: Question three //		
rain and eh / the rain ou		<code switching>		the one / one for / FAORMAXIXIH		
you make a suggestion? // 4S5H2: Seria		<code switching>		expect / expect the runway dry or		
/ so now / 4S5H2: (Eu escrevo)		<code switching>		// INST4: yes // 4S5H2: I write		

Subcorpus 4

4st graders – A1
PRONUNCIATION

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Mispronounced words	Frequency
AEENDIH and	47
AERKRAEFTIH aircraft	17
PAYLAXTIH pilot	14
THIHENKIH think	13
AEHHKRAEFT aircraft	9
PAYLAXCHIH pilot	9
NIHDIH need	9
AEHH air	8
LAEENDIH land	8
AEHHKRAEFTIH aircraft	8
PIHKTAXRIH picture	7

Mispronounced words	Frequency
IHFH if	7
PAYLAXCH pilot	7
AOFIH of	7
AERKRAEFCH aircraft	7
WUHJHIH would	5
GRAWENDIH ground	5
AERKRAEFCHIH aircraft	5
IHSMAAL small	5
DAXBRIHS debris	5
WERKIH work	4
IHSTAHDIH study	4

Mispronounced words	Frequency
IHSLIHPIH sleep	4
AEKRAEFCHIH aircraft	4
BAXKAHZIH because	4
MEYKIH make	4
AEHHKRAEFCHICH aircraft	4
BAHTIH but	4



Subcorpus 4

4st graders – A1
STRUCTURE

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Number of errors (local and global)

369



Subcorpus 4

4st graders – A1
COMPREHENSION

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Occurrences 20 (14.97)	Texts 6/26	▼ Corpus	Corpus 4	▼ Context	7	▼ Dis
Left	Node					
away // What's the situation? // 4S12H2:	Can you repeat?	// INST4: Yes / Number three /				
you handle problems in communication? // 4S12H2:	Can you repeat	please? // INST4: Sure / One //				
aviation for the world development? // 4S12H2:	Can you repeat	please? // INST4: Yes / Question two				
by computers in the future? // 4S12H2:	Can you repeat	please? // INST4: Sure / Question three				
a better air traffic controller? // 4S2H2:	Can you repeat	please? // INST4: Sure / Number three				
the situation? // 4S2H2: (Meu Deus) /	Can you repeat	please? // INST4: Sure / Number two				
airplanes // What's the situation? // 4S4H2:	Can you repeat	please? // INST4: Sure / number three				
to study law and regulations? // 4S5H2:	Can you repeat	please // INST4: Sure // One //				
AEHHKRAEFTS (aircraft) // I don't understand /	Can you repeat	please? // INST4: Sure // the aircraft				
situation? // 4S5H2: I don't understand //	Can you repeat	please? // INST4: Sure / two /				
contaminated // What's the situation // 4S5H2:	Can you repeat	please? // INST4: Sure / Number three				
as an air traffic controller // 4S6H2:	Can you repeat	please? // INST4: Sure / number three				
board / What's the situation? // 4S6H2:	Can you repeat	please? // INST4: Sure / number uh				
debris // What's the situation? // 4S6H2:	Can you repeat	please? // INST4: Sure / Number three				
about the picture // 4S6H2: Ah /	Can you repeat	please? // INST4: Sure // Question one				
by computers in the future? // 4S6H2:	Can you repeat	please? // INST4: Sure / Question three				
a better air traffic controller? // 4S7H2:	Can you repeat	please? // INST4: Yes // number one				
// 4S7H2: The MOWSCHIH (most) eh /	Can you repeat	please? // INST4: Sure // number three				
What's the situation? // 4S7H2: eh /	Can you repeat	please? // INST4: Yes // number one				
decreased to three thousand meters // 4S7H2:	Can you repeat	please? // INST4: Aham / Situation two				

Subcorpus 4

4st graders – A1
COMPREHENSION

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Occurrences 40 (29.94)	Texts 11/26	▼ Corpus	Corpus 4	▼ Context 7	▼ Display Text
Left	Node	Right			
a better air traffic controller? // 4S11H2:	Repeat please	// INST4: Sure // Question three /			
meters // What's the situation? // 4S11H2:	Repeat please	// INST4: Sure / number two //			
aviation for the world development? // 4S11H2:	Repeat please	// INST4: Sure / Number one //			
is making progress / right? // 4S11H2:	Repeat please	// (Pode repetir?) <code switching> // INST4:			
a better air traffic controller? // 4S12H2:	Repeat please	// INST4: Sure / number two //			
airplanes // What's the situation? // 4S12H2:	Repeat please	// INST4: Sure / number two //			
problems in communication? // 4S12H2: Can you	repeat please?	// INST4: Sure / One // how			
the world development? // 4S12H2: Can you	repeat please?	// INST4: Yes / Question two //			
in the future? // 4S12H2: Can you	repeat please?	// INST4: Sure / Question three /			
air traffic controller? // 4S2H2: Can you	repeat please?	// INST4 Sure / Number three /			
// 4S2H2: (Meu Deus) / Can you	repeat please?	// INST4: Sure / Number two /			
you handle problems in communication? // 4S3H2:	Repeat please?	// INST4: Sure // Question three /			
What's the situation? // 4S4H2: Can you	repeat please?	// INST4: Sure / number three //			
law and regulations? // 4S5H2: Can you	repeat please	// INST4: Sure // One // how			
// I don't understand / Can you	repeat please?	// INST4: Sure // the aircraft needs			
4S5H2: I don't understand // Can you	repeat please?	// INST4: Sure / two / the			
What's the situation // 4S5H2: Can you	repeat please?	// INST4: Sure / Number three //			
// 4S6H2: Uh / can you RIHPIHCH	(repeat) please?	// INST4: Sure / One / how			
air traffic controller // 4S6H2: Can you	repeat please?	// INST4: Sure / number three /			
the situation? // 4S6H2: Can you RIHPIHCH	(repeat) please?	// INST4: Sure / number one //			
birds away // 4S7H2: Can you RIHPLIHT	(repeat) please?	// INST4: Yes // Question / uh			
world development // 4S7H2: Can you RIHPLIHT	(repeat) please?	INST4: Yes / number one // how			
in communication? // 4S7H2: Can you RIHPLIHT	(repeat) please?	// INST4: Aham / Question two //			
meters // What's the situation? // 4S8H2:	Repeat please?	// INST4: Sure // The pilot was			
contaminated // What's the situation? // 4S8H2:	Repeat please?	// INST4: Sure / Number two //			
want me to repeat? // 4S8H2: Uh	repeat please?	// INST4: Sure // Situation three //			
to study law and regulations? // 4S9H2:	Repeat please	// INST4: Sure // two // how			
a better air traffic controller? // 4S9H2:	Repeat please	// INST4: Sure // number three //			
board // What's the situation? // 4S9H2:	Repeat please?	// INST4: Sure // Number one //			
airplanes // What's the situation? // 4S9H2:	Repeat please	// INST4: Sure // Number two //			
the runway lights were working // 4S9H2:	Repeat please	// INST4: Sure // Situation three //			
aviation for the world development? // 4S9H2:	Repeat please	// INST4: Sure // number two //			

21 occurrences



Subcorpus 4

4st graders – A1
COMPREHENSION

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Occurrences 9 (6.74)	Texts 4/26	▼ Corpus	Corpus 4	▼ Context	7	▼ Disj
Left	Node	Right				
by computers in the future? // 4S12H2:	I don't understand	this // INST4: Ok / So part				
Make a suggestion // 4S1H2: Uh /	I don't understand	the final part / IHSTAOPHEN (stopped) re:				
to study law and regulations? // 4S5H2:	I don't understand	law // INST4: Law? / for example				
me to plane small AEHHKRAEFTS (aircraft) //	I don't understand	/ Can you repeat please? // INST4:				
away // What's the situation? // 4S5H2:	I don't understand	// Can you repeat please? // INST4:				
// 4S5H2: So yeah / uh /	I don't understand	// INST4: Yeah / because / yeah				
// INST4: OK? // 4S5H2: OK /	I don't understand	eh the situation // INST4: Aham //				
you handle problems in communication? // 4S5H2:	I don't understand	/ Please / eh any problems //				
board // What's the situation // 4S9H2:	I don't understand	Have attack // INST4: Yeah / in				





Subcorpus 4

4st graders – A1
FLUENCY AND INTERACTION

1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

Interaction / fluency	Frequency
Long pause	5
Pause	209
Hesitation (uh)	153
Hesitation (eh)	68
Hmm	39



1. Introduction
2. Theoretical framework
3. Methodology
- 4. Discussion**

To do list

- To finish the transcripts edition
- To analyse the rest of the corpus in depth
- To develop teaching materials to meet the students' language needs and fill their language gaps (lacks) based on the spoken learner corpus

10 YEARS

