

# An Analysis of the Instructors' Effective Feedback in Terms of Its Content and L2 Learners' Improvement



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# Background: To improve L2 learners' English

Quantity

Quality

Meaningful  
context



Classroom  
limitations

Internal  
factors

Time  
requirements

# Background: Learners' internal factors



- L2 research suggests that **anxiety negatively** influences L2 learning/successful development
- L2 **writing and speaking anxieties** have been found to negatively impact L2 writing performance
- Anxiety arises in **a specific context**

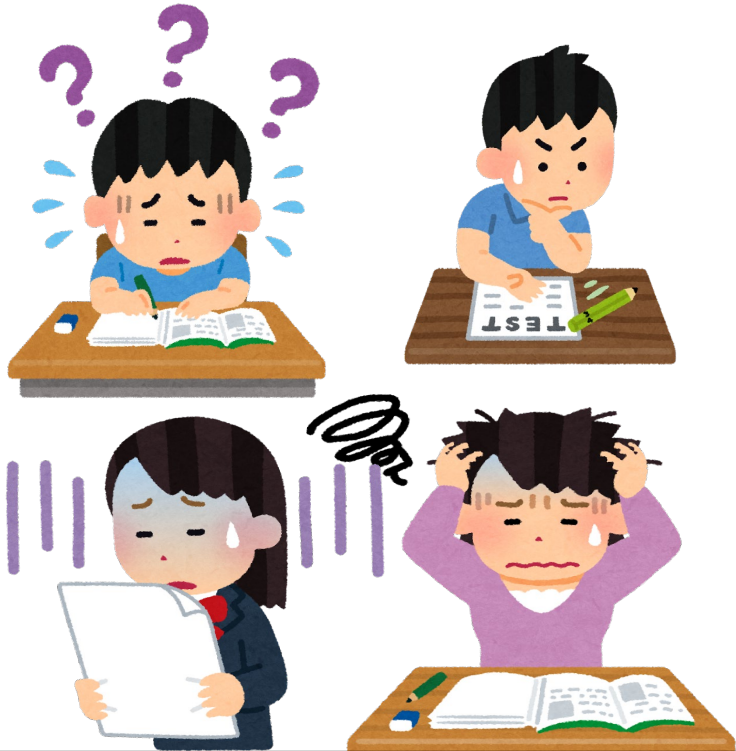
# Background: Learners' positive factors

## Learners' Motivation



- Certain factors **positively** influence L2 learning/successful development (Csizér & Dörnyei, 2005a, b; Gardner, 1985; Gardner & MacIntyre, 1991; Noels et al., 1999; Schmidt & Watanabe, 2001; Tremblay & Gardner, 1995)
- **Motivation** = learners' desires, aspirations, responsibilities, and obligations to learn an L2 (e.g., Dörnyei, 2005, 2009) influence intention to learn and learning effort (Yashima et al., 2017)

# Attempts to reduce anxiety via instruction



**Learning anxiety**



**Positive  
feedback**



**Motivation**

# Feedback model: Hattie and Timperley (2007)



- **Feed up**: comments on goals and students' success in achieving goals
- **Feed forward**: comments on the next step in learning



# Increase the motivation

- The effectiveness of feedback on output skills—**writing and speaking**—is especially understudied

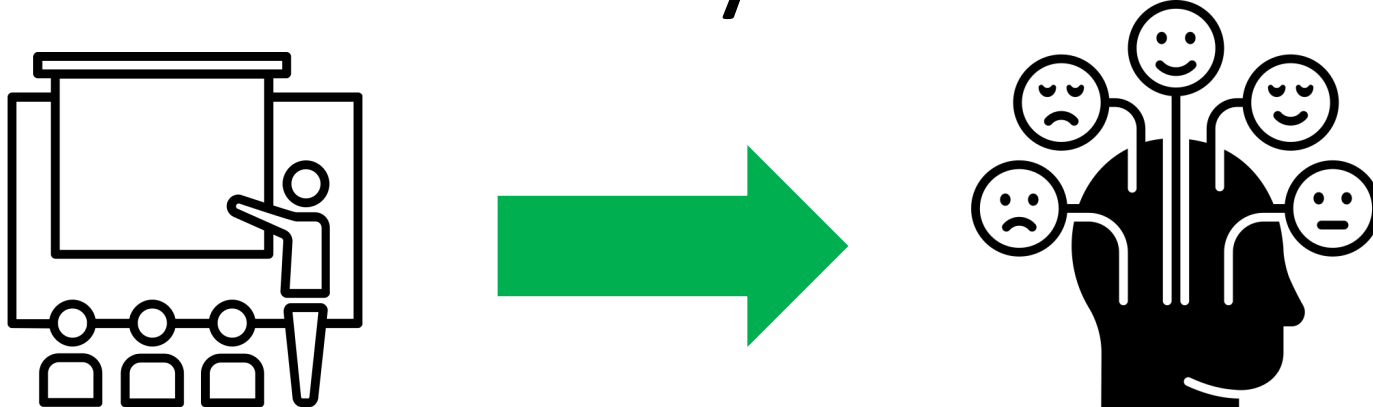




# Research question

👉 Does speaking and writing training coupled with feedback reduce L2 learner anxiety and increase motivation?

👉 If so, what kinds of feedback are effective for L2 Learners? Analysis via text-mining





# Methods: Participants

- N = 130 first-year medical student Japanese learners of English
- Proficiency level: CEFR B1-C1
- Participants were enrolled in TOEFL academic language preparatory courses that focus on developing writing and speaking skills

# Methods: Procedure/Data collection schedule

<b>Week 1</b>	<b>Pre-test: Questionnaire</b>
<b>Week 2</b>	<b>Practice (1): Speaking &amp; Writing</b>
<b>Week 5</b>	<b>Feedback (1)</b>
<b>Week 6</b>	<b>Practice (2): Speaking &amp; Writing</b>
<b>Week 9</b>	<b>Feedback (2)</b>
<b>Week 10</b>	<b>Practice (3): Speaking &amp; Writing</b>
<b>Week 13</b>	<b>Feedback (3)</b>
<b>Week 14</b>	<b>Post-test: Questionnaire</b>

# Methods: Dual scale questionnaire

## Anxiety Scales

- Speaking and pronunciation anxiety (Baran-Łuczak, 2017) (1 = low, 6 = high)
- Writing anxiety (Cheng, 2004) (1 = low, 6 = high)

## Motivation Scales

- Willingness to communicate (Dewaele & Dewaele, 2018) (1 = low, 6 = high)

# Methods:

## TOEFL iBT Independent Speaking and Writing Tasks

### ➤ TOEFL iBT Speaking Independent Task

**E.g.,** What are the advantages and disadvantages of living in a foreign country? Discuss both points and state your preference.

### ➤ TOEFL iBT Writing Independent Task

**E.g.,** Some people think that human needs for farmland, housing, and industry are more important than saving land for endangered animals.

Do you agree or disagree with this point of view? Use specific reasons and examples to support your answer.

# Methods: Evaluators' information

- 10 native English-speaking evaluators (5 male, 5 female)
- Mean age = 36.7, Range 27-43
- At least 4 years English teaching experience
- Background in Applied Linguistics or TESOL
- After a brief training session to understand TOEFL iBT rubric, they evaluated the participants' spoken and written responses on a 6-point scale (1 = poor, 6 = excellent)
- Evaluation included written constructive feedback (e.g., overall impression, things to be improved, positive aspects)
- To avoid bias, evaluators were assigned participant responses at random

# Methods:

## Evaluation text-mining procedures

- The evaluators' feedback comments were used for corpus analysis by an AI text mining platform called "Userlocal" (<https://textmining.userlocal.jp/>)
- The vocabulary from both the Speaking and Writing section feedback comments were analyzed

# Results: Writing and Speaking training

1. Paired-sample T-test (pre- & post-test scores)  
(Table 1)
2. General improvement across groups in both speaking and writing raters' scores  
(Figure 1 & 2)



# Results: Table 2

## Paired-sample T-test (pre- and post-test scores)

Paired Samples T-Test (pre- vs. post-test)

Measure	<i>t</i>	df	<i>p</i>	Cohen's d
Speaking Anxiety	4.129	75	< .001*	.474
Writing Anxiety	2.648	74	.010*	.306
Willingness to Communicate (Motivation)	-2.903	75	.005*	-.333

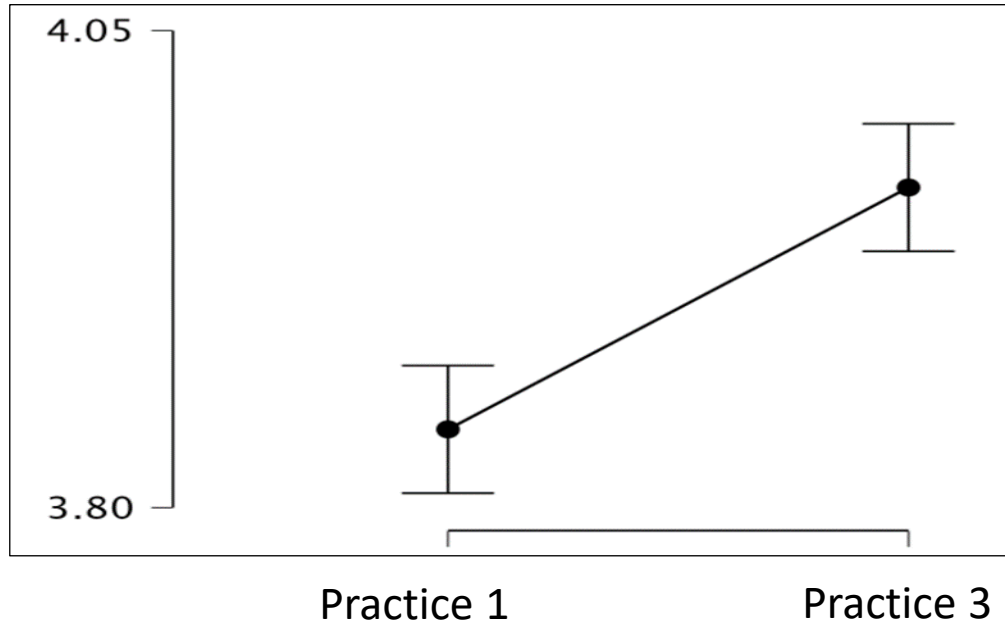
*Note.* Student's t-test. \* = significance level at 0.05

**★Cohen's d is small to medium size**

# Results: Figure 1 & 2

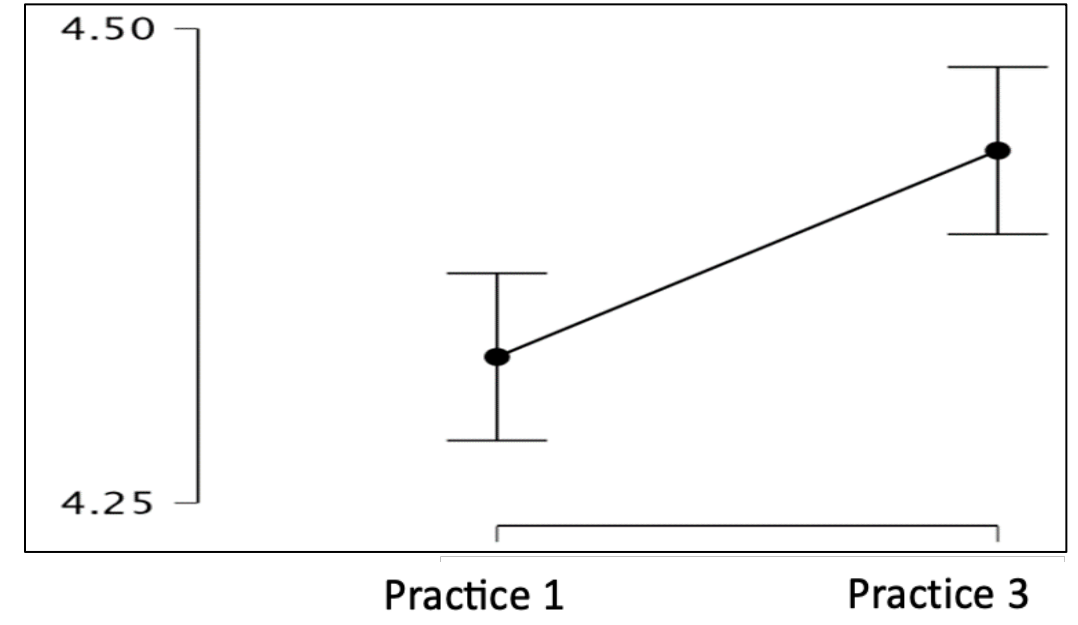
## General improvement across the groups

Overall mock **TOEFL Speaking** scores



Descriptives				
	N	Mean	SD	SE
Practice 1	130	3.841	0.455	0.044
Practice 3	130	3.968	0.418	0.041

Overall mock **TOEFL Writing** scores



Descriptives				
	N	Mean	SD	SE
Practice 1	130	4.327	0.437	0.043
Practice 3	130	4.436	0.438	0.043

# Discussion 1

- Repeated **practice of output skills**
- Providing **detailed feedback**  
(feed up, feed-forward)

a positive influence on  
learners' **affective factors** in  
**both writing and speaking**

Consistent with  
previous studies on  
feedback and its  
positive impact on  
writing performance

Han & Hiver, 2018; Kormos, 2012; Zabihi,  
2018; Zarrinabadi and Rezazadeh, 2020).

# Results: Feedback comments of corpus analysis

1. Fundamental data set information
2. Writing sections: feedback comments text mining
3. Speaking sections: feedback comments text mining
  - 👉 frequency occurrences  
(words, comparison between sections)
  - 👉 part of speech analysis  
(positive/negative word, by differences in student proficiency level)

# Results: Fundamental data set information

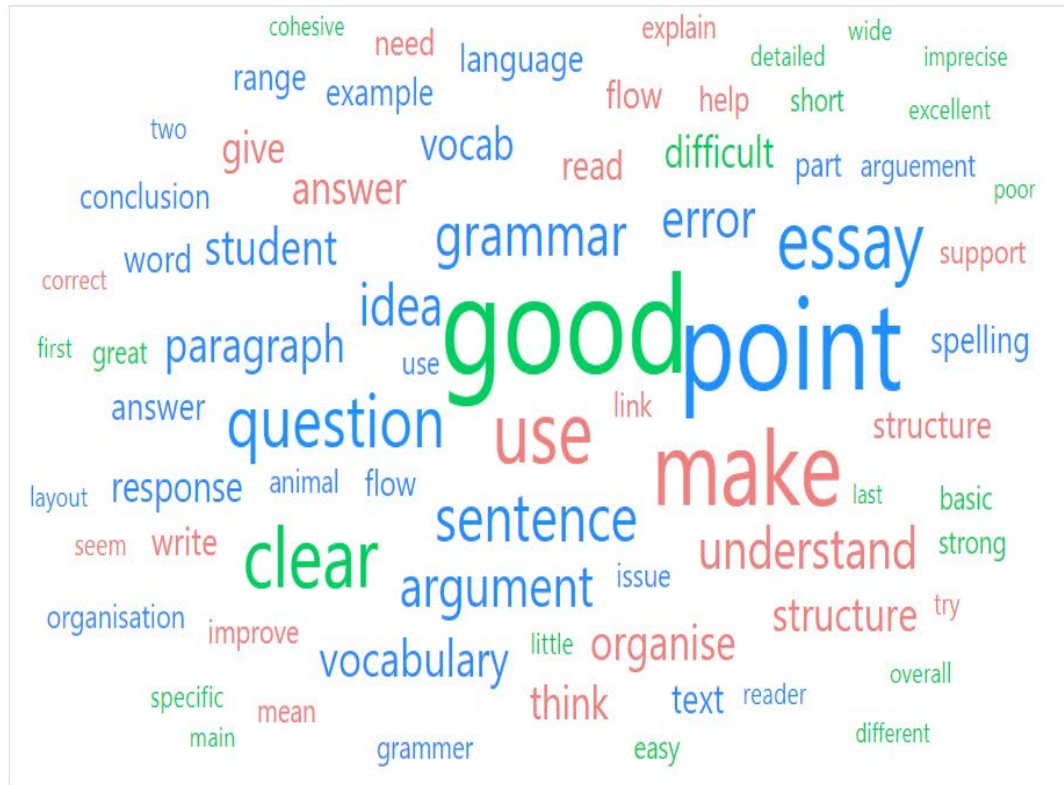
English skills training sections	Total feedback comment words used in text-mining analysis	Total number of students receiving feedback comments
Speaking section 1	13295	133
Speaking section 4	23471	126
Writing section 1	28365	134
Writing section 4	39293	131



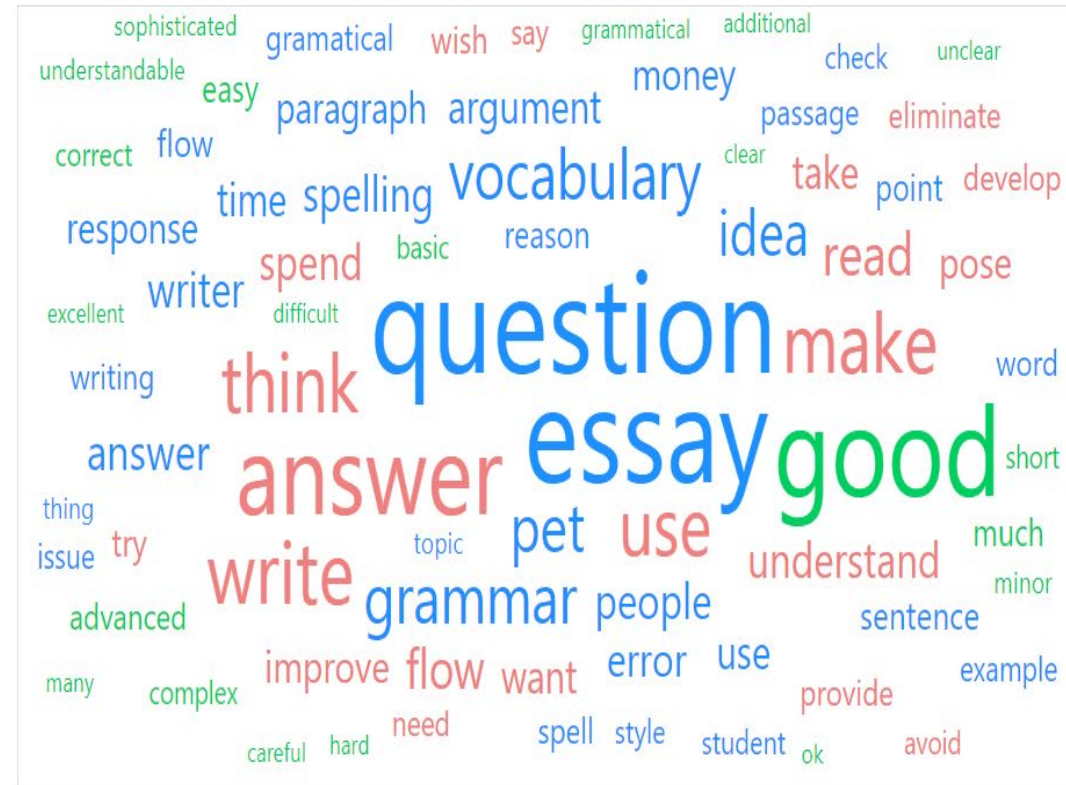


# Results: Overall Writing section 1 and 4, occurrence frequency of words

## Section 1



## Section 4



Verb

Noun

Adjective



# Results:

## Overall Speaking section 1 and 4, occurrence frequency of words

### Section 1

### Section 4

Only used in Section 1	often used	commonly used both	often used	Only used in section 4
difficult issue lot think understandable command comprehensibility comprehension confidence country etc everything flow hesitation hill improved lack mumbled nuance pity preferring speaking tad thought vocabulaty work go try work acceptable	answer hard word seem accent student great slow confused need organisation speed get	good need vocabulary grammar fluency understand bit pronunciation speech point . start speaker improve make pause reason stop give speed disadvantage logic little minor practice pronunciation grasp struggle confusing easy	clear use	grasp fluent answer question use nice clear advanced enough real unable appreciate belong bring brush come compare convey felt lack lose mix play practice start able anecdotal articulate bad basic

Verb

Noun

Adjective

# Results: Overall Writing section 1 and 4, occurrence frequency of words

## Section 1

## Section 4

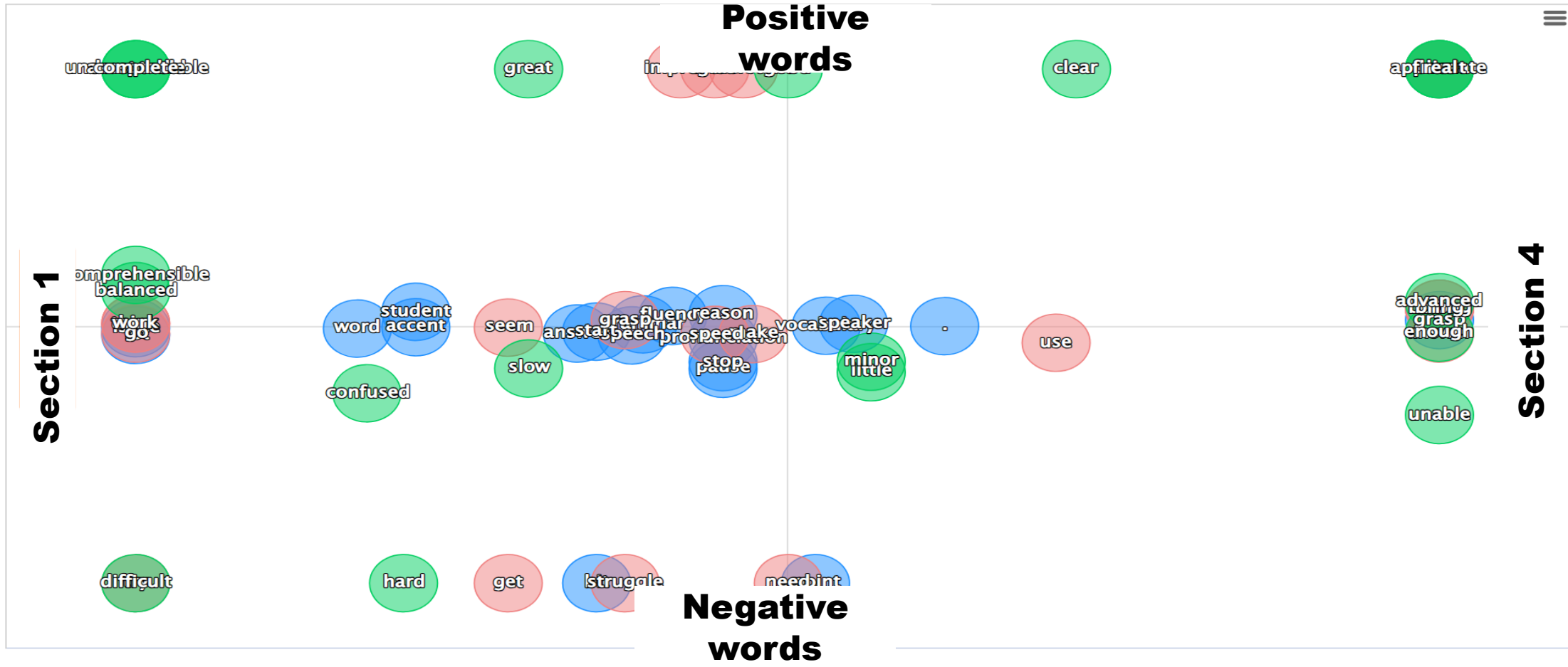
Only used in Section 1	often used	commonly used both	often used	Only used in section 4
vocab language range arguement grammer great layout specific wide consider academic cohesive human imprecise missing relevant balanced disjointed effective endangered incorrect minimal powerful	point sentence clear give student organise structure structure help difficult text support mean conclusion explain part link animal organisation two follow strong back correct go detailed overall little main different	good make essay question use think grammar understand idea vocabulary read flow error argument paragraph answer spelling improve response need word flow example issue basic short seem add mistake show	answer write use try pose writer take want provide easy time reason develop wish much writing say advanced correct topic complex sophisticated additional many ok	pet spend people money eliminate passage spell gramatical avoid check style feel get minor elaborate thing understandable agree organize discuss reason bit conclude weaken careful awkward

Verb

Noun

Adjective

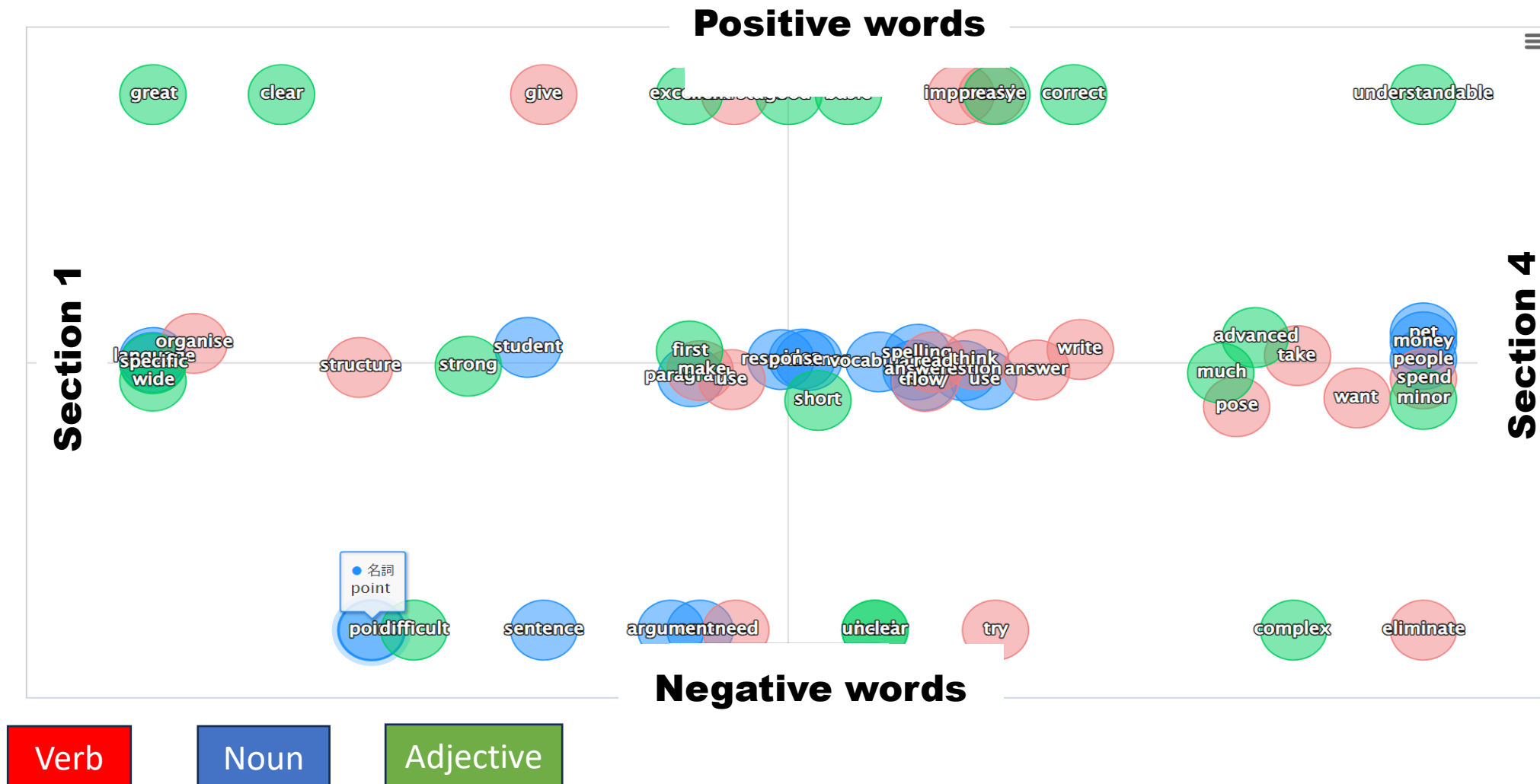
# Results: Overall Speaking section 1 and 4, occurrence of positive and negative words from comments



Verb    Noun    Adjective

# Results:

## Overall Writing section 1 and 4, occurrence of positive and negative words from comments



# Results:

## Overall Speaking section 4, occurrence frequency of words categorized by proficiency level

Noun			Verb			Adjective		
A class		E class	A class		E class	A class		E class
44	vocabulary	56	50	need	50	50	good	50
73	point	27	65	understand	35	100	difficult	0
56	answer	44	78	make	22	100	much	0
56	pronunciation	44	100	think	0	51	clear	49
42	fluency	58	100	manage	0	86	hard	14
23	grammar	77	100	work	0	100	certain	0
100	area	0	68	speed	32	100	complete	0
100	lack	0	81	improve	100	100	disjointed	0
100	one	0	81	get	19	100	else	0
100	second	0	81	say	19	100	excellent	0
76	disadvantage	24	81	start	19	100	first	0
0	bit	100	81	struggle	19	100	long	0
86	argument	14	41	answer	59	100	main	0
35	.	65	100	catch	0	100	many	0
0	grasp	100	100	cover	0	100	silent	0
81	advantage	19	100	fell	0	100	slight	0
81	student	19	100	know	0	100	student's	0
42	speaker	58	100	list	0	100	top	0
42	speech	58	100	pause	0	100	understandable	0
100	culture	0	100	share	0	0	fluent	100
100	drawback	0	100	sound	0	68	great	32
100	enunciation	0	51	use	49	0	nice	100
100	fluid	0	0	clear	100	80	persuasive	20
100	gap	0	0	give	100	80	solid	20
100	hesitation	0	0	seem	100	0	advanced	100
100	language	0	0	appreciate	100	0	enough	100
100	learning	0	0	belong	100	0	little	100
100	lot	0	0	bring	100	0	minor	100
100	mark	0	0	brush	100	0	real	100
100	neither	0	0	come	100	0	slow	100
100	recording	0	0	compare	100	0	unable	100
100	round	0	0	convey	100	0	able	100
100	sore	0	0	felt	100	0	anecdotal	100
100	sound	0	0	grasp	100	0	articulate	100
100	tad	0	0	hear	100	0	bad	100
100	thing	0	0	lack	100	0	basic	100
100	thought	0	0	lose	100	0	confused	100
100	typing	0	0	mix	100	0	confusing	100
100	understand	0	0	play	100	0	different	100
100	understood	0	0	practice	100	0	easy	100
52	pause	48	---	---	---	0	english	100
52	question	48	---	---	---	0	fast	100
52	reason	48	---	---	---	0	fluently	100
52	start	48	---	---	---	0	interesting	100
52	stop	48	---	---	---	0	middle	100
0	logic	100	---	---	---	0	native	100
0	use	100	---	---	---	0	poor	100
68	accent	32	---	---	---	0	several	100
68	organisation	32	---	---	---	0	singular	100
68	struggle	32	---	---	---	0	strong	100

High English Proficiency A Level class

Low English Proficiency E Level class

# Discussion 2

Analysis	Speaking section 1	Speaking section 4	Writing section 1	Writing section 4
Highest frequency word	good (148)			
Each section's high frequency words	Need(54), understand(66)		Point(73), essay (110)	
Part of speech: Noun, Verb, Adjective	Mainly Nouns	Mainly Verbs	Mainly Adjectives	Verbs and Nouns equally prevalent
Part of speech: Positive words	Adjectives	Adjectives	Adjectives, Verbs	Mainly Adjectives
Part of speech: Negative words	Adjectives, Nouns, Verbs	None	Mainly Nouns	Adjectives and Verbs equally prevalent
Part of speech: for High proficiency		Mainly Nouns		
Part of speech: for Low proficiency		Verbs, Adjectives		



# Future studies

- Include a control group ( = participants not receiving any feedback) to better compare changes in L2 learners' affective profile after 14 weeks of output training
- Analyze sentence structure and co-occurrences of words via text-mining analysis



# Acknowledgement

- This work was supported by the Juntendo President-led Project Grant Number R4-02 2022
- Thank you for the great support of the Juntendo University Faculty of Medicine staff



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**Thank you for your listening!**