Relationship between Extensive listening to podcasts and incidental vocabulary

adviser: Dr. Irshat Madyarov

Devoted to the innocent victims of Artsakh War 2

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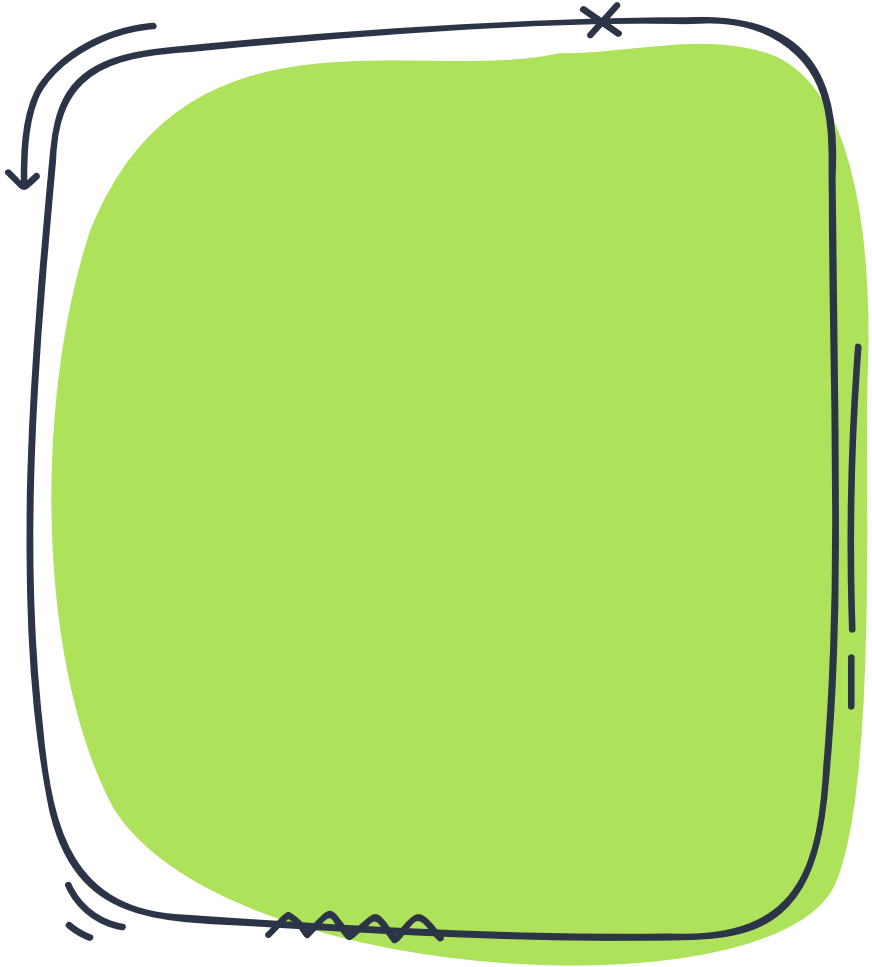


InTRODUCTION

Problem Statement

- a lack of research data on the topic

significance of the study

- contribute to general academic knowledge in the field
- Inform teachers about the use of podcasts for incidental vocabulary acquisition purposes,
- become a shareable data to future podcast creators for instructional purposes.

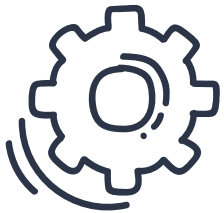
Context: Armenia, private school

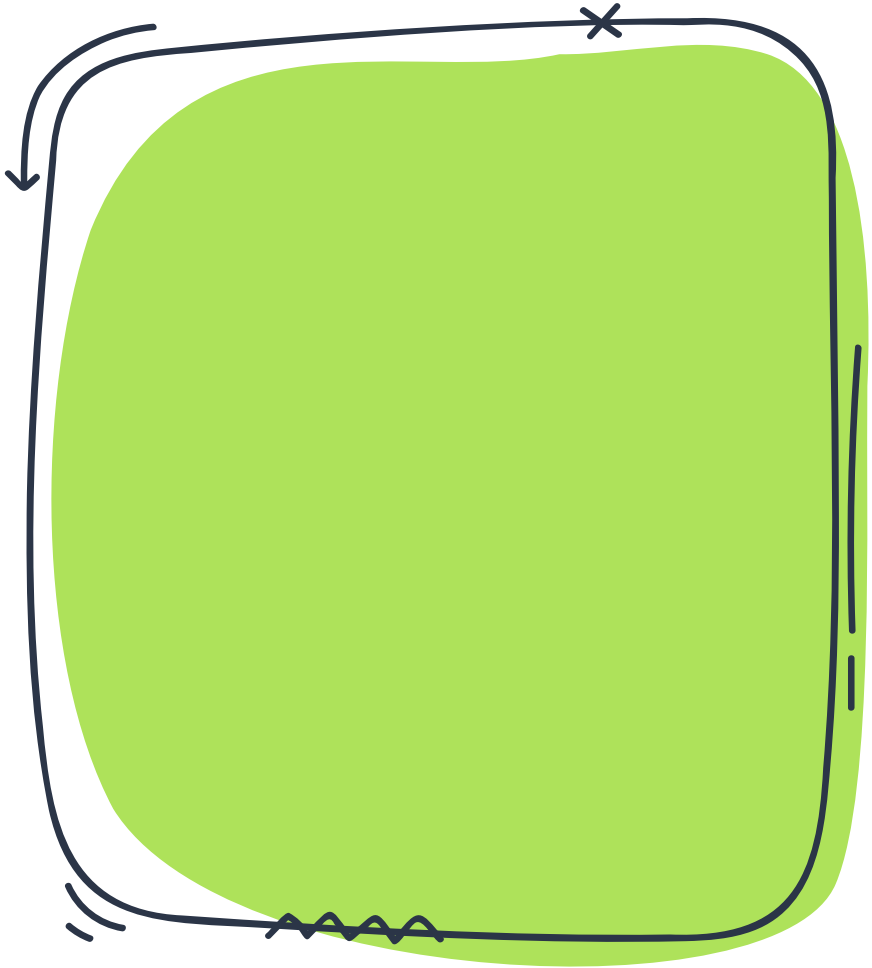
Participants: high-school students, formal

Age: 16-18

Proficiency Level: Intermediate +

Duration: 10 weeks





Literature review

Literature Review

- **Incidental vocabulary acquisition and its role in EFL** (De Riddler, 2003; Ma, 2009; Robinson, 2001; Schmitt, 2000; Nation & Meara, 2010; Singleton, 1999).
- **Receptive vocabulary, form-meaning relation** (Nation, 2013, 1995, 2006; Schmitt, 2000)
- **With the input of**
  - ✗ **graded readers** (Lee, 2007; Horst, 2005; Mechraoui, Mechraoui, & Raffeeq, 2015; Schmitt, 2000; Elley, 1991; Nation & Wang, 1999; Webb & Chang, 2015)
  - ✗ **authentic novels** (Pellicer-Sanchez & Schmitt, 2010)
  - ✗ **lectures** (Chang, 2009; Vidal, 2003)
  - ✗ **graded readers with audios** (Horst, 2005; Lee, 2007; Webb & Chang, 2015)

graded readers as input for incidental vocabulary learning

ADVANTAGES

- ✗ **95-98% vocabulary coverage** (Nation & Meara, 2010),
- ✗ **repetitive exposure to the target vocabulary** (Nation & Wang, 1999; Pellicer-Sanchez & Schmitt, 2010; Rott, 1999; Schmitt, 2008; Waring & Takaki, 2003; Webb, 2007),
- ✗ **vocabulary as a cumulative process** (Nation & Meara, 2010),
- ✗ **clues contributing to guessing** (Elley, 1989; Laufer, 2003; Nation & Wang, 1999; Nation & Meara, 2010; Schmitt, 2000),
- ✗ **retention** (Nagy, 1997).

DISADVANTAGES

- ✗ **the amount of reading** (Nation & Meara, 2010; Nation & Wang, 1999),
- ✗ **missing any clues or those clues being also unfamiliar** (Laufer, 2003),
- ✗ **no guarantee for retention** (Cobb, 2007; Pellicer-Sanchez & Schmitt, 2010; Schmitt, 2008)

Figure 1

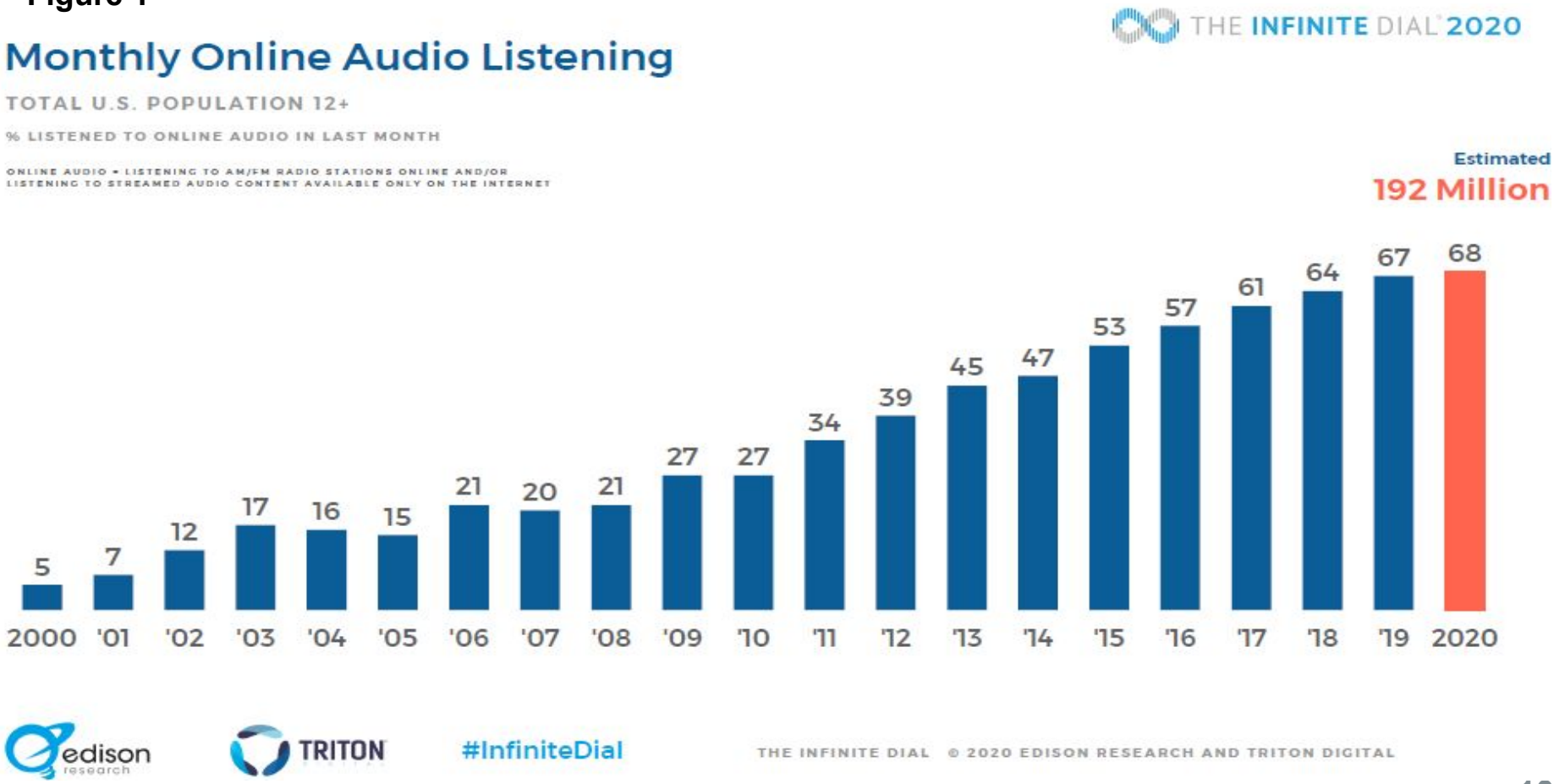

THE INFINITE DIAL 2020
Monthly Online Audio Listening
TOTAL U.S. POPULATION 12+
% LISTENED TO ONLINE AUDIO IN LAST MONTH
ONLINE AUDIO = LISTENING TO AM/FM RADIO STATIONS ONLINE AND/OR LISTENING TO STREAMED AUDIO CONTENT AVAILABLE ONLY ON THE INTERNET
Estimated
192 Million
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Figure 2

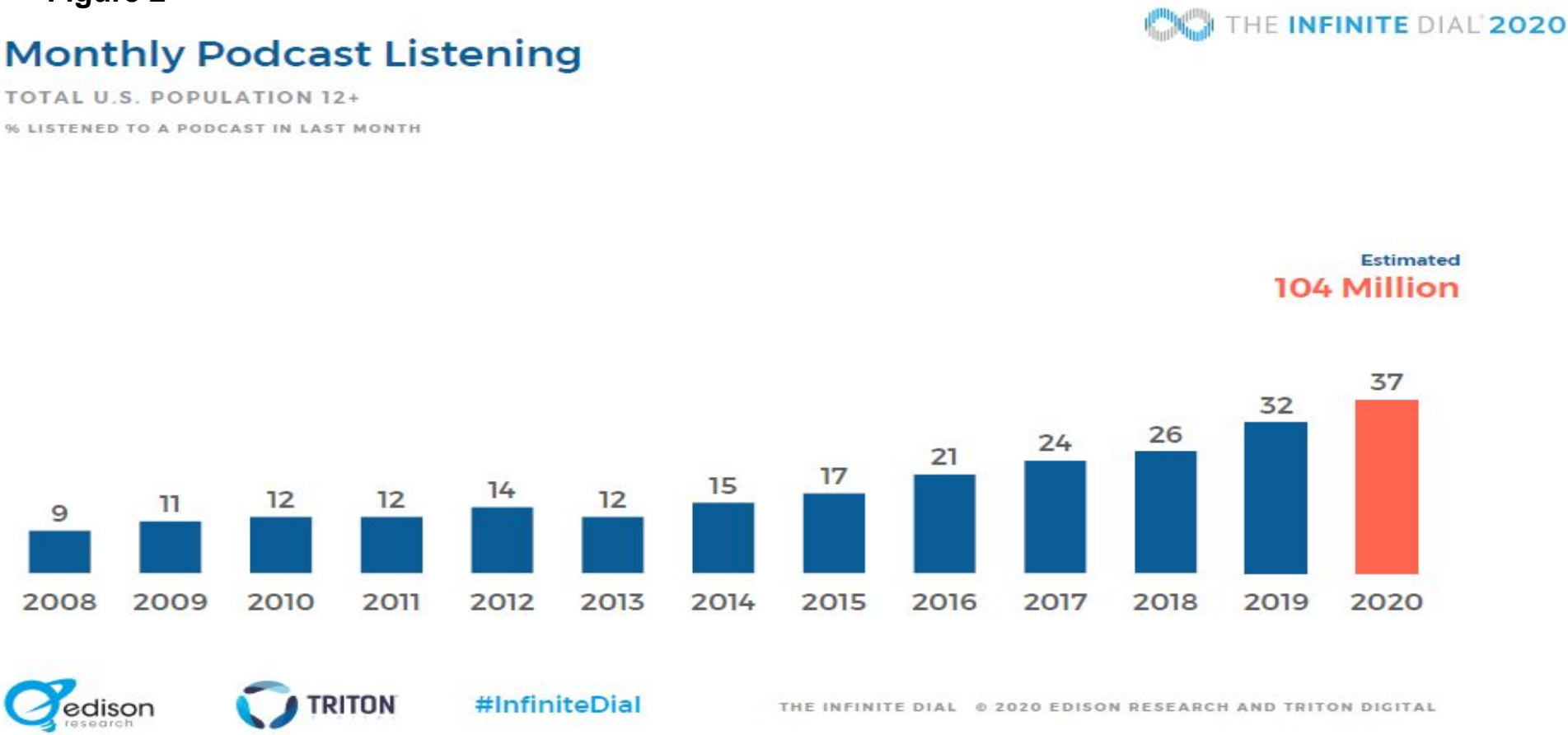
THE INFINITE DIAL 2020
Monthly Podcast Listening
TOTAL U.S. POPULATION 12+
% LISTENED TO A PODCAST IN LAST MONTH
Estimated
104 Million
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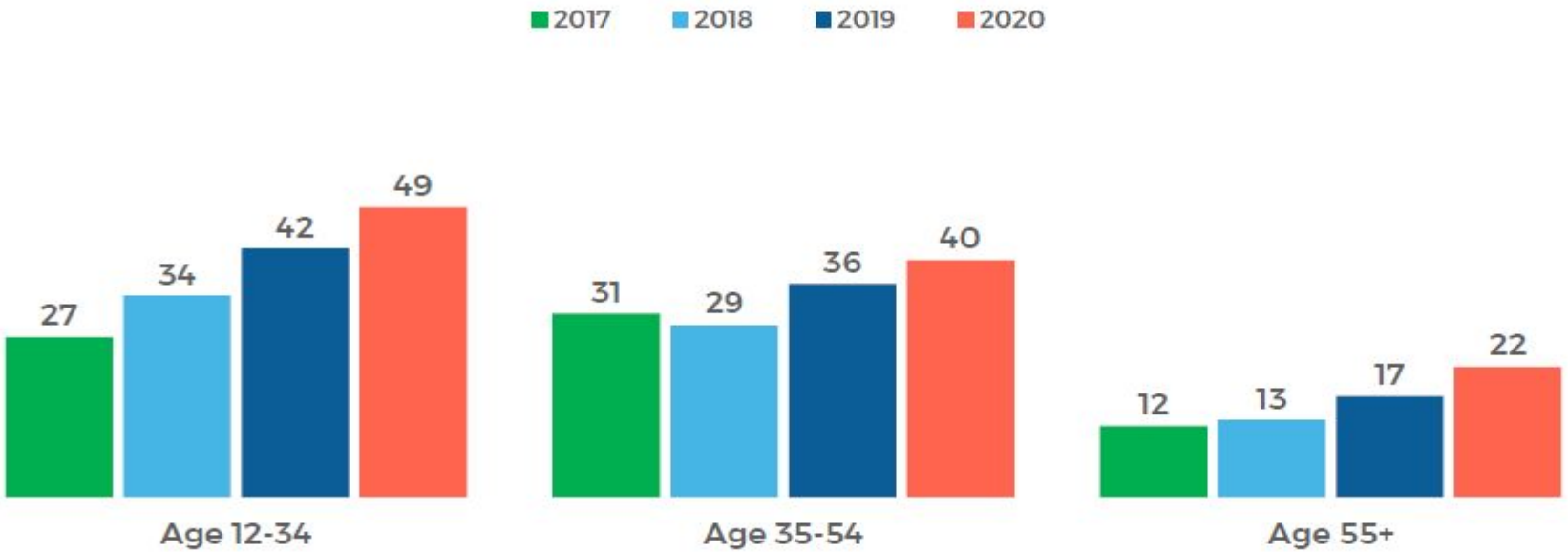
Figure 3

Monthly Podcast Listening

THE INFINITE DIAL 2020

U.S. POPULATION

% LISTENED TO A PODCAST IN LAST MONTH



edison research

TRITON

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Podcasts and incidental vocabulary learning

- Vidal (2003, 2011)
- 14-15 lectures
- 4 weeks
- 30.41 out of 36 vocabulary items within four weeks
- Mechraoui, Mechraoui, and Raffeeq (2015)
- Gholami and Mohammadi (2015)

Research questions

Research question 1: Is there a relationship between listening to podcasts and incidental vocabulary acquisition?

Research question 2: What effect does the amount of time spent on listening to podcasts have on the incidental vocabulary acquisition?

Research question 3: What is the relationship between the frequency of occurrence of the target vocabulary in podcast episodes and incidental vocabulary learning?

Research question 4: What is the relationship between the distribution of occurrence of the target vocabulary across the podcast episodes and incidental vocabulary learning?

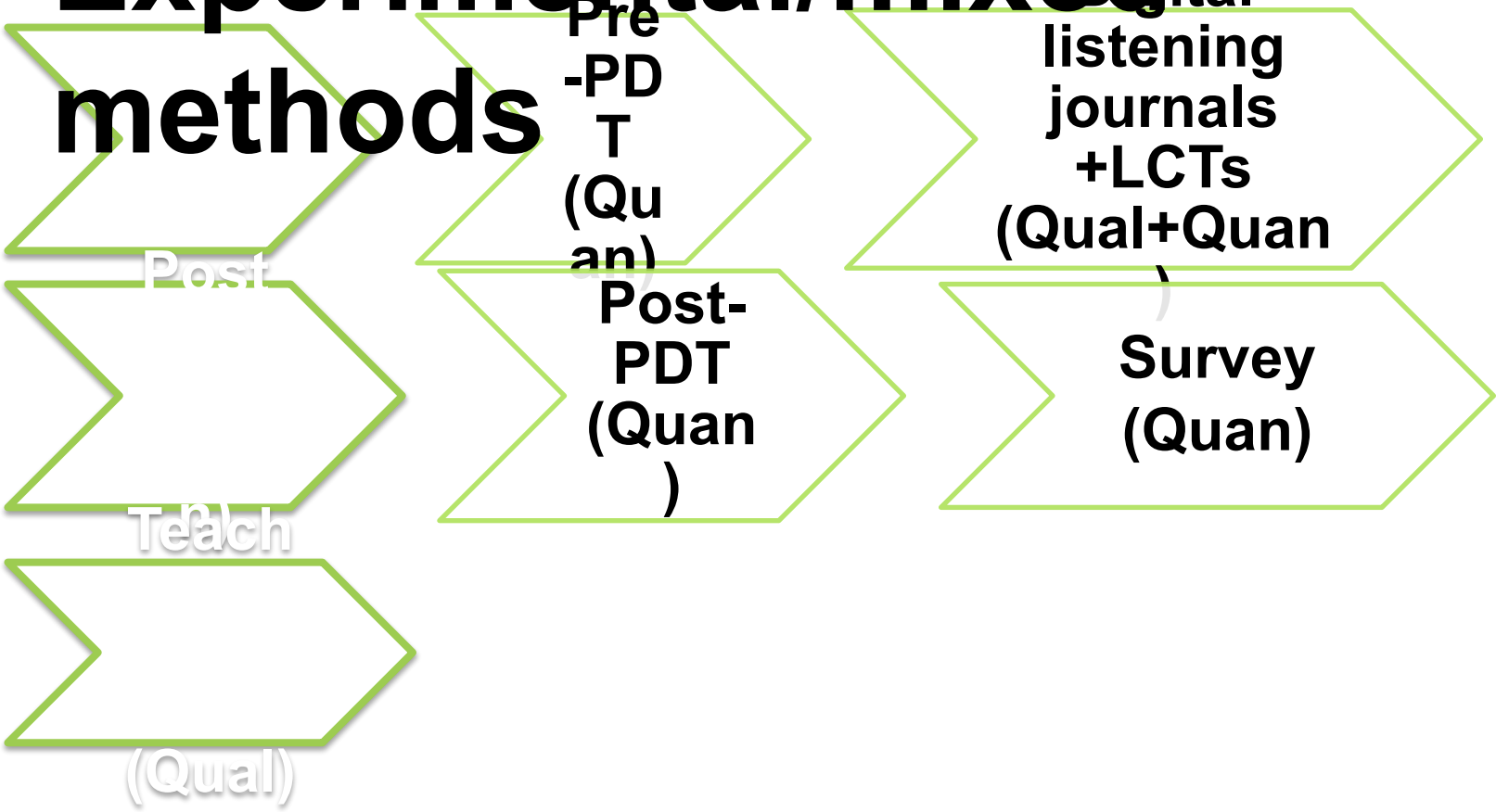
Research question 5: What is learners' attitude to vocabulary acquisition via podcasts?

Abbreviations

- Pre- and Post- UVLT – Ultimate Vocabulary Level pre- and post- Tests
- Pre- and Post- PDT- Project designed pre- and post- tests
- LCTs- Listening comprehension tests

Methodology

Experimental/mixed methods



Methodology-Summary

Research question or Hypothesis	Instruments	Participant/ Source of data	Sample size/ sampling strategy
RQ1: Is there a relationship between listening to podcasts and incidental vocabulary acquisition?	Pre- UVLT-> pre- PDT -> Post- UVLT-> post- PDT-> Teacher interview	Experimental group Control group	22 students 10 students
RQ2: What effect does the amount of time spent on listening to podcasts have on the incidental vocabulary acquisition?	Digital listening journals Survey	Experimental group	22 students
RQ3: What is the relationship between the frequency of occurrence of the target vocabulary in podcast episodes and incidental vocabulary learning?	Pre- PDT -> post- PDT	Experimental group	22 students

Methodology-Summary

Research question or Hypothesis	Instruments	Participant/ Source of data	Sample size/ sampling strategy
RQ4: What is the relationship between the distribution of occurrence of the target vocabulary across the podcast episodes and incidental vocabulary learning?	pre- PDT -> post- PDT	Experimental group	22 students
RQ5: What is learners' attitude to vocabulary acquisition via podcasts?	Survey	Experimental group	22 students

Procedure

Finding and profiling podcasts -> Recruiting volunteers(78)->

Pre-UVLT->Selecting the sample (32) ->

Dividing into experimental and control groups -> Pre- PDT ->

Weekly meeting + Digital listening journals + LCTs->

Post-UVLT-> Post-PDT -> Listening journal analysis ->Survey

->Teacher interview

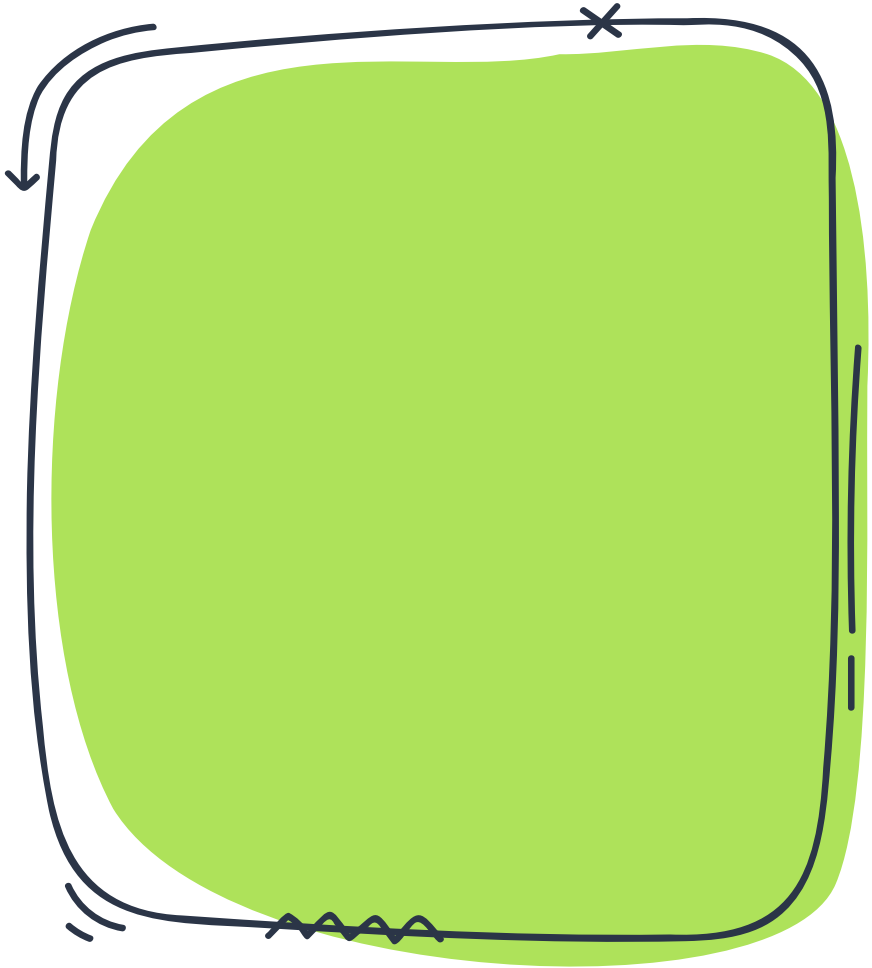
experimental vs. control group

- **Experimental Group**
  - one episode at home per week
  - Weekly meetings
  - Digital listening journals

- **Control Group**
  - School curriculum and course-book
  - Classroom projects (watching TED talks, movies, Vimeo videos, etc.)
  - No episodes the experimental group listened to
  - No digital listening journals

Ethical considerations

- ✗ Confidentiality
- ✗ A parent and teacher permission
- ✗ Voluntary participation



results

RQ1: The relationship between listening to podcasts and incidental vocabulary acquisition

Table 1

Independent Samples T-Test in the Experimental and Control Groups for the PDT

	t	df	p	Mean Difference	SE Difference
Pre- PDT	-0.408	30	0.686	-0.445	1.091
Post-PDT	-10.285	30	< .001	-19.986	1.943

Note. The test scales from 0 to 54

Table 2

Descriptive Statistics for Vocabulary Learning Gains from Pre- and Post- PDTs for the Experimental and Control Groups

	Group	Mean	SD	Minimum	Maximum
Pretest	Experimental	11.05	2. 57	8	15
	Control	10.6	3. 44	6	16
Post-test	Experimental	28.89	5. 97	20	39
	Control	8.9	1. 85	7	12
Absolute gain (pre to post)	Experimental	33.02	7. 65	22.2	46.2
	Control	-2.203	7. 84	-16.65	9.26
Relative gain (pre to post)	Experimental	41.97	11. 25	26	62.5
	Control	-4.07	11. 56	-23.7	14.4

Note. The test scales from 0 to 54

Table 3

Paired Samples T-Test of the Post- PDT for the Experimental and Control Groups

Groups	T	Df	P	Wilcoxon
Experimental	20.22	21	< .001	< .001
Control	1.316	9	.221	.258

Note. The test scales from 0 to 54

Table 4

Descriptive Statistics for the LCTs Per Week

	Week1	Week2	Week3	Week4	Week5	Week6	Week7
Valid	22	22	22	22	22	22	22
Missing	0	0	0	0	0	0	0
Mean	38.6	39.09	40.46	38.18	40	38.63	41.82
Std. Deviation	7.10	6.83	7.85	7.33	6.90	7.10	7.33

Note. The test scales from 0 to 50

- **Cronbach's alpha was 0.78**
- **approximately 79 % of the answers were correct**
- **95.5% affirmed that the texts were easy to understand and contained a decent amount of unfamiliar vocabulary.**

Table 5

Paired Samples T-Test results for the UVLT Test in the Experimental and Control Groups

UVLT pretest	UVLT post-test	Groups	t	df	p	Wilcoxon	Cohen's d
UVLT pretest 1000	UVLT post-test 1000	Experimental	2.45	21	0.023	0.048	-0.523
		Control	2.01	9	0.075	0.100	0.636
UVLT pretest 2000	UVLT post-test 2000	Experimental	2.82	21	0.010	0.018	-0.602
		Control	0.95	9	0.366	0.586	0.301
UVLT pretest 3000	UVLT post-test 3000	Experimental	-5.16	21	< .001	< .001	-1.101
		Control	1.43	9	0.187	0.036	0.451

continued →

UVLT pretest 4000	UVLT post-test 4000	Experimental	-2.68	21	0.014	0.022	-0.571
		Control	2.77	9	0.022	0.036	0.876
UVLT pre-test 5000	UVLT post-test 5000	Experimental	-3.21	21	0.004	0.004	-0.685
		Control	2.94	9	0.016	0.036	0.931

RQ2: The amount of time spent on listening to podcasts have on the incidental vocabulary acquisition

- ✗ The correlation is statistically significant
- ✗ *p*= .021
- ✗ *r*= - .487

RQ3: The frequency of occurrence of the target vocabulary and incidental vocabulary learning

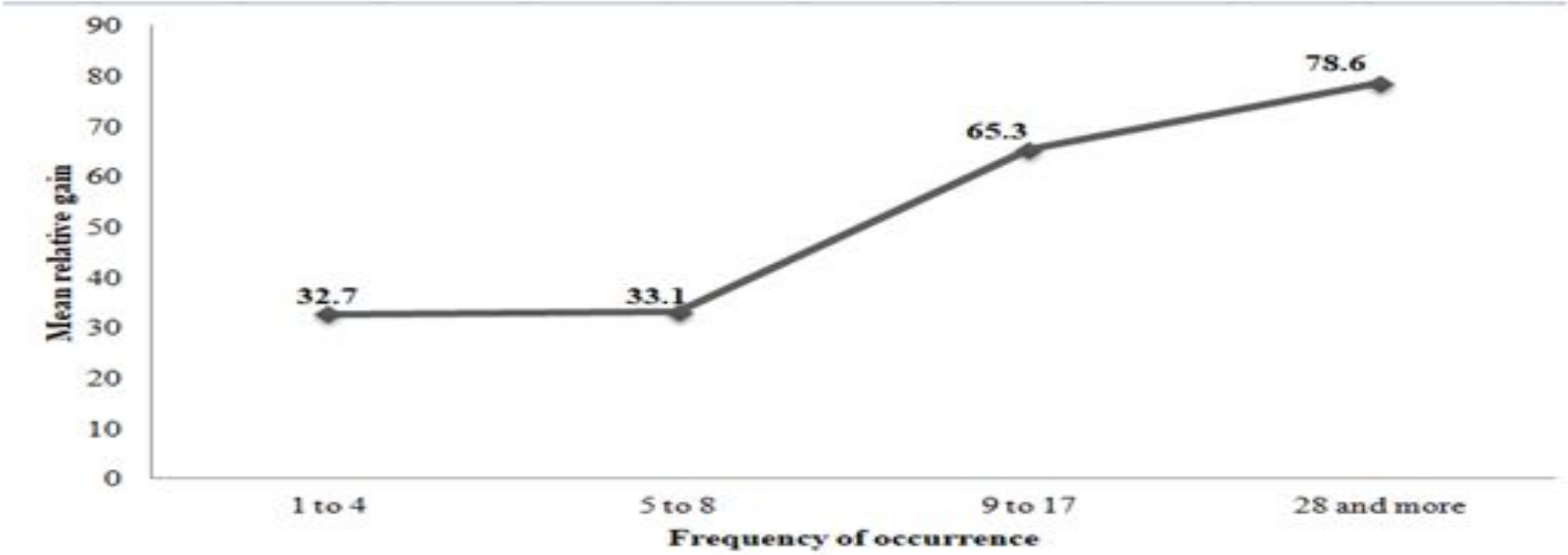
ANOVA: $F(4, 54) = 3.167$, $p = .032$
Correlation analysis: $r = .346$, $p = .01$

Table 6
Frequency of Occurrence and Relative Gain

Frequency of occurrence	Number of words	Mean of relative gain from pre to post-test	Mean of absolute gain from pre to post-test
1-4 (Category 1)	21	32.7	27.8
5-8 (Category 2)	12	33.1	27.9
10-17 (Category 3)	14	65.3	33.7
28 and more (Category 4)	7	78.6	37.4

Figure 4

Mean Relative Gains for the Frequency of Occurrence (from Pre- to Post- PDT)



RQ 4: The distribution of occurrence of the target vocabulary and incidental vocabulary learning

ANOVA: F (5, 54) = 3.167, p= .032.
Correlation analysis: r= .387, p= .004

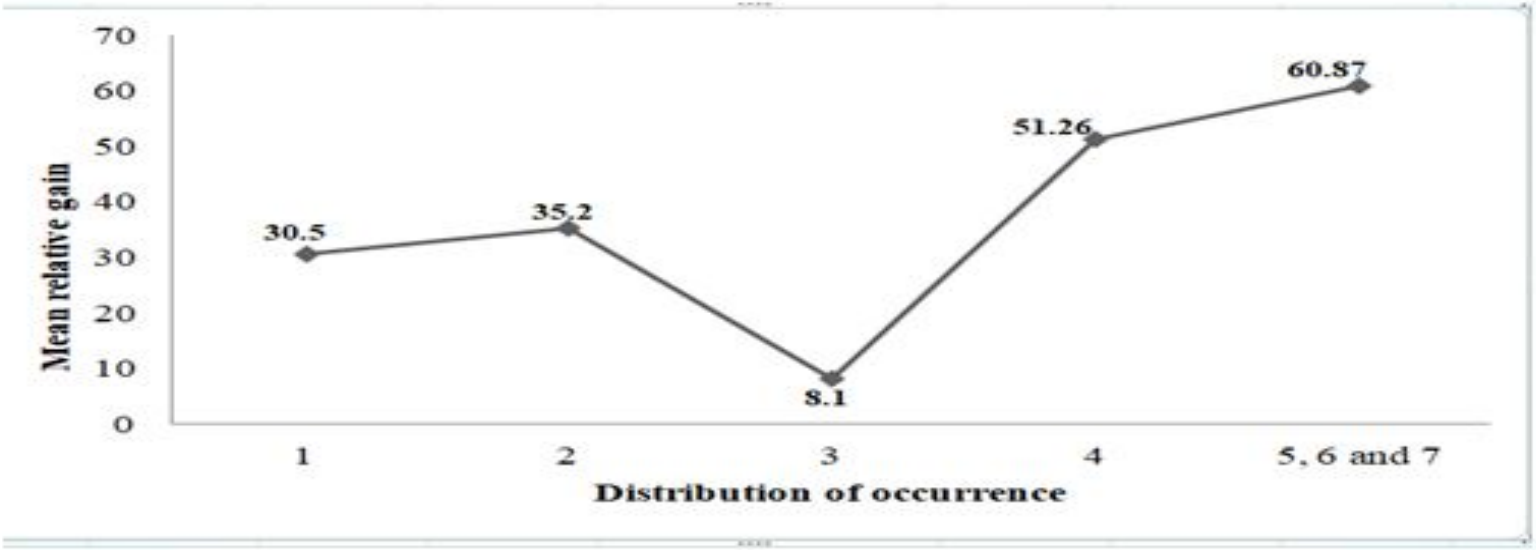
Table 7

Mean of Relative Gains on the Pre-to Post Test According to the Distribution of Analysis

Distribution across episodes	Number of words	Mean of relative gain from pre to post-test	Mean of absolute gain from pre to post-test
1 (Category 1)	18	30.5	26.11
2 (Category 2)	13	35.2	28.4
3 (Category 3)	4	8.1	6.25
4 (Category 4)	14	51.26	43.57
5, 6 and 7 (Category 5)	5	60.87	28

Figure 5

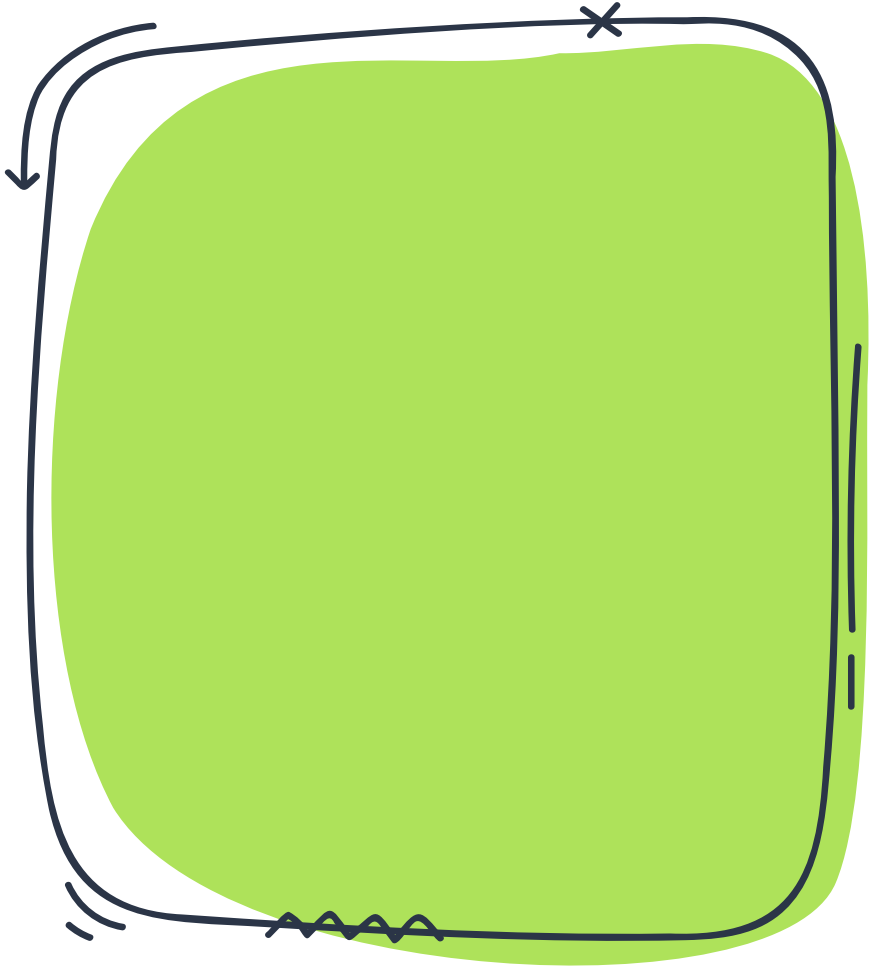
Mean Relative Gains for the Distribution of Occurrence (from pre- to post- PDT)



RQ5: Learners' attitude to vocabulary acquisition via podcasts

Figure 6

Survey responses



Discussion and conclusion

RQ1: The relationship between listening to podcasts and incidental vocabulary acquisition

- Identified/recognized- 11.05 lexical units*
- Acquired- 17.84 lexical units (33%)*
- Not acquired- 25.11 lexical units*

*out of 54 lexical units

- 30.41 lexical units (84.5%) out of 36 vocabulary items for four weeks (Vidal, 2003)
- 19.68 lexical units (19.68%) out of 100 vocabulary items within thirteen weeks (Webb & Chang, 2015)

RQ2: The amount of time spent on listening to podcasts and incidental vocabulary acquisition

- *Spearman's rho* = -. 487
- *p*= .021

Not strong because of

- Easily comprehensible input → 100% (survey)
  on average 79% (LCTs)
- Decent number of unfamiliar words → 86% (survey)
- The length of the episodes → 45.5% (survey)
- The same vocabulary level

RQ3: The relationship between the frequency of occurrence and incidental vocabulary learning

- ✗ the correlation was statistically significant (p= .01) but not strong (r= .346) (Horst, Cobb & Meara,1998; Pellicer-Sanchez & Schmitt, 2010; Vidal, 2011)
- ✗ e.g. “Sheets and Giggles” and “ethical”
- ✗ at all levels but more at 10+ (Pellicer-Sanchez & Schmitt, 2010; Waring and Takaki, 2003)
- ✗ no fixed number of repetition guarantees learning (Nation & Wang, 1999) became disputable

RQ4: The distribution of occurrence of the target vocabulary and incidental vocabulary learning

- The correlation was statistically significant
- r = .387
- p= .004
- ✗ No correlation (Webb and Chang, 2015) because of

- the imbalanced vocabulary distribution,
- the difference of the genres for the selected books, etc.

examples

- **“transparency” -300 % relative gain.**
- low frequency in each episode – 1 in each episode
- high distribution- in 5 episodes from episode 1 to episode 7.

- **“takeaway” - 50% relative gain**
- low frequency- once in each
- high distribution- episodes 1, 3, 6 and 7

RQ5: Learners' attitude to vocabulary acquisition via podcasts

- 95% - improved their listening skills and vocabulary
- 100% - easy to comprehend
- 86% - a decent amount of unfamiliar vocabulary integrated into them.
- 45.5% - length of episodes
- 100% - motivated

Pedagogical implications

- ✗ Share the practice with EFL teachers and students
- ✗ Not demanding in terms of hardware

- ✗ Create podcasts for instructional purposes similar to graded readers

- ✗ Suitable input for auditory learners

Limitations:

- Personal data protection
- Pre-test vocabulary recognition
- Duration of the project

Delimitations:

- Private school students aged 16-18
- Instruments
- Design
- Sample size

New research

- ✗ Retention
- ✗ Audio input with authentically written representation
- ✗ Phrases
- ✗ Treatment of strategies and their impact incidental vocabulary acquisition

REFERENCEs

Chang, C. S. (2009). Gains to L2 listening from reading while listening vs. listening only in comprehending short stories. *System, 37,* 652-663.

Cobb, T. (2007). Computing the vocabulary demands of L2 reading. *Language Learning & Technology, 11*(3), 38-63. Retrieved October 7, 2007 from http://llt.msu.edu/vol11num3/cobb.

De Riddler, I . (2003). *Reading From the Screen in a Second Language.* Apeldoorn: Garant Publishers.

Elley, W. (1989). Vocabulary acquisition from listening to stories. *Reading Research Quarterly* 24 *(2),*174-187.

Elley, W. B. (1991). Acquiring literacy in a second language: The effect of book-based programs. *Language Learning* 41*(3),* 357-411.

Gholami, M., & Mohammadi, M. (2015). Podcast-mediated language learning: levels of podcast integration and developing vocabulary knowledge. In F. Helm, L. Bradley, M. Guarda, & S. Thouësny (Eds), *Critical CALL – Proceedings of the 2015 EUROCALL Conference, Padova, Italy* (pp. 210-214). Dublin: Research-publishing.net. http://dx.doi.org/10.14705/rpnet.2015.000335

Horst, M. (2005). Learning L2 vocabulary through extensive reading: A measurement study. *The Canadian Modern Language Review*, *61*, 355–382.

Horst, M., Cobb, T., & Meara, P. (1998). Beyond a clockwork orange: Acquiring second language vocabulary through reading. *Reading in a Foreign Language, 11*, 207–223

Krashen, S. (1981). *Second language acquisition.* A Survey of Linguistic Science. Ed

Lee, S.-Y. (2007). Revelations from three consecutive studies on extensive reading. *RELC Journal*, *38*, 150–170.

Laufer, B. (2003). Vocabulary acquisition in a second language: Do learners really acquire most vocabulary by reading? *Canadian Modern Language Review*, *59*, 565–585.

Ma, Q. (2009). *Second language vocabulary acquisition*. Bern: Peter Lang.

Mechraoui, K. , Mechraoui, A. & Rafeeq, S. (2015). The effect of listening to podcast on incidental vocabulary acquisition. *International Journal of Humanities and Management Sciences* 3*(1).*

Meier, A. (2015). L2 Incidental Vocabulary Acquisition Through Extensive Listening to Podcasts. *Studies in Applied Linguistics and TESOL*, 15 *(2).*

Nagy, W.E. (1997). On the role of context in first- and second—language vocabulary learning. In N. Schmitt & M. McMcarthy (Eds.), *Vocabulary description, acquisition and pedagogy (64-83).* Cambridge, UK: Cambridge University Press.

Nation, I. S. P (1995). Vocabulary learning through spoken use. *JALL Bulletin*, 9.

Nation, I. S. P. (2006). How large a vocabulary is needed for reading and listening? *Canadian Modern Language Review*, *63*(1), 59-82.

Nation, I.S.P., & Meara, P. (2010). Vocabulary. In N. Schmitt (Ed.), *An introduction to applied linguistics (Second Edition)* (pp. 34-52). London, UK: Edward Arnold.

Nation, I.S.P., & Wang, K.M.-T. (1999). Graded readers and vocabulary. *Reading in a Foreign Language*, *12*, 355–380.

Pellicer-Sanchez, A. & Schmitt. N. (2010). Incidental vocabulary acquisition from an authentic novel: Do things fall apart. *Reading in a Foreign Language* 22*(1),* 31-55

Robinson, (2001). *Cognition and Second Language Instruction*. UK :Cambridge University Press.

Rott, S. (1999). The effect of exposure frequency on intermediate language learners' incidental vocabulary acquisition through reading. *Studies in Second Language Acquisition*, *21*, 589–619.

Schmitt, N. (2000). *Vocabulary in language teaching.* Cambridge: Cambridge University Press. ISBN 9780521669382.

Schmitt, N. (2008). Instructed second language vocabulary learning. *Language Teaching Research, 12*, 329–363.

Singleton, D. (1999). *Exploring the second language mental lexicon*. Cambridge: Cambridge University Press.

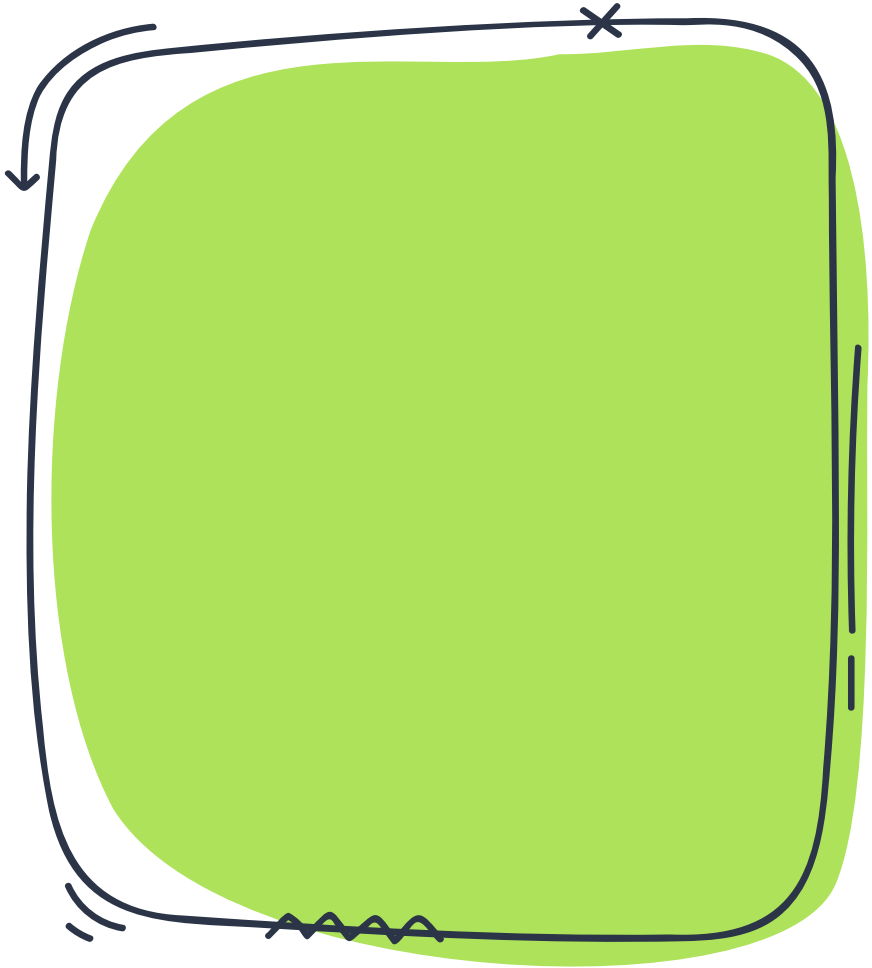
Vidal, K (2003). Academic listening: A source of vocabulary acquisition? *Applied Linguistics, 24* (1)*, pp.* 56-89.

Vidal, K. (2011). A comparison of the effects of reading and listening on incidental vocabulary acquisition. *Language Learning*, *61*, 219–258.

Waring, R., & Takaki, M. (2003). At what rate do learners learn and retain new vocabulary from reading a graded reader? *Reading in a Foreign Language*, *15*, 130–163.

Webb, S. (2007). The effects of repetition on vocabulary knowledge. *Applied Linguistics*, *28*, 46–65.

Webb, S. (2008). The effects of context on incidental vocabulary learning. *Reading in a Foreign Language*, *20*, 232–245.



Questions and comments

THANK YOU FOR YOU ATTENTION!!!