

# Development of Vocabulary Using Ladder Snake Game

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## ABSTRACT

Vocabulary is the necessary foundation of a language. The introduction of vocabulary has been practiced since children learn to speak. Some new words are then known and used to enrich speech and convey their intentions. Vocabulary development becomes an essential part of language learning, besides reading and writing. Vocabulary learning, including other knowledge, is constrained by the Covid-19 pandemic. Children at home need to learn and to play fun. Therefore, the development of the ladder snake game for learning vocabulary is essential. This ladder snake game can be used at home with family and at school later. This study aims to develop a ladder snake game for learning vocabulary. This study also seeks to increase vocabulary by using the ladder snake game. Snake ladders will contain the initial letters from A to Z that need to be developed by the player into a word. The method used is development research with 4D: define, design, develop, and disseminate. In this case, the results of the development are validated and limited testing The ladder snake game was developed with a game guide. Besides, the ladder snake game can improve the player's vocabulary with several additional variations. This game is expected to be developed into a medium of learning in schools.

**Keywords:** *Development of vocabulary, vocabulary, ladder snake, game*

## 1. INTRODUCTION

This Games have been a part of learning for quite some time. It can be seen in research conducted in the late 1990s and early 2000s, such as in the study of Bruckman [1], Dede [2], and Rieber [4] which ushered in a new era of research with the use of educational games in learning [5]. It also applies to language learning. Through games, language learning—especially in primary education—becomes more fun. One of the language learning that can use games is vocabulary development. Learning and developing vocabulary using pictures, games, and songs in an integrated manner is more effective in teaching vocabulary to children. It is because pictures, games, and songs can encourage children to enjoy learning and learn a language more quickly.

It is especially true in online learning conditions. Covid-19 pandemic causes children to study at home.

That means children do not have the opportunity to interact directly with friends and teachers. Learning tends to be done through assignments given by the teacher. Therefore, games can help children to learn without feeling stressed, and children can feel happy when learning.

The use of the game can be done in learning foreign languages and Indonesian. Moreover, Indonesian tends to be a second language, which means that Indonesian is not obtained through the acquisition process but rather the language learning process.

The use of media, especially games, provides benefits in the learning process to layout concrete basics for thinking to reduce verbalism, increase children's attention, lay an essential foundation for learning development, and provide real experiences [7]. The use of instructional media also aims to make teaching and learning more effective and efficient as well as to foster children's fun and curiosity about a concept and can increase children's learning motivation,

and develop aspects of language, one of which is to recite the words heard [7]. Through games, children can get more information so that their knowledge and understanding are broader and more in-depth [6]. That means games in language learning play an important role, especially for developing children's vocabulary. It is supported by previous studies [3], [9], [11].

Games to develop language intelligence in children include:

1. Games to stimulate reading and writing interest such as *huruf punggung berantai*, *acak nama* games
2. Games to boost structural skills, such as games of *tata huruf dan silabel*
3. Games to develop vocabulary such as *tebak nama* games
4. Games to build literature such as *drama jari-jari* games [10].

Based on this, the language ladder game or *Ular Tangga Bahasa (UTB)* can be used to develop children's vocabulary at the age of primary education. Through the language ladder snake (UTB), children are stimulated to read, interpret, and produce vocabulary. Thus, this study aims to develop children's vocabulary through language ladder snake game.

2. METHOD

The research data were obtained using observation techniques that consisted of observation during the game and observation of the language. Observations on the ladder snake game's language are carried out by linguists and graphic experts to determine the resulting game's feasibility, weaknesses, and strengths. Observations when playing the game are carried out by the respondent's parents to determine what vocabulary the children produce when playing the game. It was done because the Covid-19 pandemic caused workers and students to work and study from home so that direct observation by researchers could not be carried out. The observation uses the observation sheet instrument to record the child's vocabulary and the child's ability to answer questions in the game. The data obtained were analyzed descriptively and qualitatively.

3. RESULT AND DISCUSSION

3.1 Language Ladder Snake Game to Develop Children's Vocabulary

In language learning, the game of ladder snake has advantages, namely fun, flexibility, low cost, develops

communication and interaction, and improves children's motor development [9]. The drawback of this game is that it requires a large space. Following [10] and [9], language ladder snakes (UTB) are not just fun and develop communication, but UTB can develop children's vocabulary in language learning because of the following. First, this ladder snake consists of a series of letters A-Z in each box. The letters' function in each box is to stimulate the players (children) to produce words according to the letters in the box. Second, ladder snake cards consist of three types: yellow cards, green cards, and red cards. There are questions on each of the cards in the form of *tebak kata*, *tebak pantun* whose answers are in the form of words, and composing words. The three cards can build children's vocabulary because the child will think of a word or produce a word as the answer through the questions on the cards. The difference between creating words according to the letters A-Z on the UTB board and the UTB card is the children's freedom in producing words. On the UTB board, children are free to produce vocabulary according to the letters in the box. On the language ladder snake card, the child generates vocabulary based on the question's questions or conditions. It can be seen in the Figure 1.



Figure 1. Language ladder snake board

Based on figure 1, if the player stops at box G, the player must say a word starting with the letter G, for example, "ganggu". If the player cannot say the required word, the player must return to the previous box. It appears that the player is asked to produce any word according to the letters in the box. It makes players develop vocabulary without realizing it.

Figure 2 shows that the player will be asked to guess the word based on the given keyword. Through keywords, children are asked to produce vocabulary based on the meaning of words. Thus, the resulting

vocabulary is tied to the question, not as free as the vocabulary created when stopping at the UTB board box. On this green card, questions are being asked related to Covid-19. It aims to develop children's vocabulary about Covid-19.



Figure 2. Language Ladder Snake Green Card

Third, this ladder snake game will build interaction and communication between players because the opposing player reads out the cards' questions. Besides, for children who are in low class (class 1—3), this language ladder game can help children to be able to read fluently.

The UTB game also received positive responses from parents and children. They think that UTB is worth playing and can develop vocabulary, especially vocabulary about Covid-19. It can be seen in the following graph.

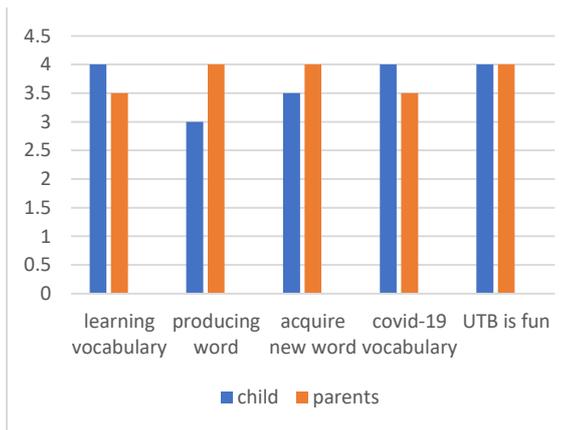


Figure 3. The response of parents and children about the UTB function

Based on graph, it appears that UTB is considered to be able to develop children's vocabulary. It can be seen from the positive response in all categories. That means

that UTB is deemed capable of helping children learn vocabulary, especially vocabulary about Covid-19, obtained from the UTB card questions. In addition, children also learn to produce vocabulary obtained from the UTB board

### 3.2. Children's Vocabulary Development After Playing Snakes and Ladders Language

The language ladder snake game produced by this study is able to develop children's vocabulary, especially vocabulary related to the Covid-19 pandemic. The development of the vocabulary is the development of vocabulary in low-grade children and children's vocabulary at high-grade age. It can be seen in Table 1.

Table 1. Vocabulary Generated When Playing UTB

N O	cate gory	Low grade age children (1—3 SD)		high grade age children (4—6 SD)	
		type	example	type	exampl e
1	noun	concrete, every day, immediate environment, basic form	<i>Baju, tas, rumah, lemon, mobil, Tuhan</i>	Concrete, abstract, wider environment, complex word	<i>Sekolah, ide, bangunan, Tuhan, otak, pembangunan</i>
2	verb	concrete, often done every day, basic form	<i>Makan, tidur, kerja, belajar, bangun, sakit</i>	Concrete and abstract, broader, complex shapes	<i>Mewarnai, berpikir, menangis, lari, kerja.</i>
3	adjective	tend to color	<i>Merah, hijau, kuning, biru, malas, adil, mati</i>	color, attitude/ character	<i>Merah, malas, lemah, kuat, biru, meninggal, mati.</i>
4	adverb	preposition, place	<i>Di, ke, dari, atas, bawah</i>	prepositions, conjunctions, places, cardinal points	<i>Di, ke, walaupun, meskipun, atas, bawah, utara, selatan.</i>

5	num -bers	number	<i>Satu, dua, tiga</i>	number	<i>Satu, dua, tiga</i>
6	Covid-19	popular	<i>Corona, vaksin, virus, masker, desinfektan</i>	popular and unpopula r	<i>Corona , virus, covid- 19, desinfe ktan, pandem i droplet</i>

Based on table 1, we can conclude four things. First, the vocabulary produced by children tends to be the vocabulary of nouns and verb categories. Second, the vocabulary made by low-grade children tends to be concrete and revolves around daily activities. There are not many abstract vocabularies. It is different from the vocabulary produced by high-age children.

The resulting vocabulary is in abstract vocabulary and is not just in daily activities or the child's closest environment. Third, the vocabulary produced by low-grade children tends to be basic, while the vocabulary made by high-age children is in the form of basic vocabulary and complex vocabulary. Fourth, concerning Covid-19, the vocabulary produced by high-age children is more comprehensive than that of low-class children. It can be seen from the vocabulary of *droplets* and *pandemics*, which are rarely used in the community. Even so, the emergence of the vocabulary for *corona*, *vaksin*, *virus*, *masker*, and *desinfektan* can be considered as a new vocabulary for low-grade children.

In addition to the vocabulary listed in table 1, some vocabularies are considered problematic by children in the UTB game. The difficulty is based on the child's inability to produce vocabulary, or the resulting vocabulary tends to be the same vocabulary in several games. These are in table 2.

**Table 2.** Vocabulary The Considered Difficult in UTB

N	letter	Low grade age children (1—3 SD)	high grade age children (4—6 SD)
1	F	-	<i>fajar</i>
2	O	<i>obat, orang</i>	<i>obat, orang</i>
3	Q	-	<i>quran</i>
4	V	<i>virus, vaksin</i>	<i>virus, vaksin, vaksinasi, vitamin</i>
5	W	-	<i>waktu, wilayah, wabah</i>
6	X	-	-
7	Y	<i>yang, yaitu</i>	<i>yakin, yang, yaitu</i>
8	Z	-	<i>zona, zaman</i>

Based on table 2, it appears that the vocabulary that is considered difficult is the vocabulary that tends to be borrowed from foreign languages. However, the children's answers indicated that their vocabulary tended to increase.

Vocabulary is built gradually and develops along with one's development as Keraf and Hurlock in [9]; In childhood, the vocabulary that is mastered tends to be concrete ideas which are divided into four types, namely object names, adjectives, verbs, and tasks. Children's vocabulary consists of general vocabulary (nouns, verbs, adjectives, adverbs, couplers, and pronouns) and special vocabulary (color, amount, time, money, speech, popular, oath, and secret language). Referring to Keraf and Hurlock in [9], it can be said that UTB games can develop children's vocabulary. Children's vocabulary when playing UTB is not just vocabulary in the form of concrete ideas. There is an abstract vocabulary produced by children based on the letters in the UTB box. Examples of this vocabulary are *ide*, *pikiran*, *meninggal*, *kelemahan*, *kekuatan*, *mati*, and *wabah*. Besides, children can also produce unique vocabulary related to the Covid-19 pandemic and health. It shows that children have produced particular vocabulary, as stated by Hurlock in [9].

Vocabulary mastery can be divided into two, namely active-productive and passive-receptive mastery. Productive and active vocabulary mastery is vocabulary that has been understood, mastered, and can be used by language learners naturally without any difficulty in communicating and speaking. Knowledge of receptive passive vocabulary is vocabulary that has been mastered but can only be understood by learners from other people's language expressions, cannot use it properly in communicating or speaking [8]. In connection with in [8], children's vocabulary in the UTB game shows active-productive mastery. It can be seen when children use it in sentences during UTB games, for example, "*kita harus pakai masker*", "*sebelum masuk mall disemprot desinfektan dulu*", "*Selama pandemic covid-19 murid belajar di rumah*". It also shows that UTB games can develop children's vocabulary, both low-grade and high-grade children

#### 4. CONCLUSION

Based on the discussion of the research results, the following conclusions can be made. First, the language ladder game (UTB) can help children to develop their vocabulary. A letter in each box on the UTB board and UTB card can stimulate children to produce more vocabulary. Second, the development of children's vocabulary through UTB games tends to be nouns and verbs, which are concrete words and abstract words. High-class children tend to produce a more diverse and complex vocabulary. Third, the vocabulary of Covid-19

produced by children in the UTB game has varied. This vocabulary is a popular vocabulary about Covid-19 and unpopular vocabulary (rarely used by the public). It shows that UTB games can develop children's vocabulary. Based on these conclusions, further research can be carried out on children's vocabulary development through different games. It needs to be done so that we can find out what games can develop children's vocabulary.

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## REFERENCES

- [1] A., Bruckman. "Situated support for learning: Storm's weekend with Rachael". *Journal of the Learning Sciences*, 9(3), pp. 329–372, 2000.
- [2] C., Dede. "Multi-user virtual environments". *EDUCAUSE Review*, 38(3), pp. 60–61, 2003.
- [3] K., Huda, A., Purmadi, & N., Iman. "peningkatan pengenalan kosakata bahasa Inggris pada anak melalui permainan kartu gambar", *Jurnal Visionary*, Volume 4 No. 2, Oktober 2017, pp 92—97.
- [4] L.P., Rieber. "Seriously considering play: Designing interactive learning environments based on the blending of microworlds, simulations, and games". *Educational Technology Research & Development*, 44(2), pp. 43–58, 1996.
- [5] M., Dickey. *Aesthetics and Design for Game-based Learning*. New York: Routledge, 2015.
- [6] M., Fauziddin. "Useful of Clap Hand Games for Optimize Cognitive Aspects in Early Childhood Education". *Jurnal Obsesi* (online), jilid 2, no.2, 2018, <https://doi.org/10.31004/obsesi.v2i2.76>. Pp. 162—169
- [7] Mulyati. "Peningkatan Kemampuan Menyimak Anak Melalui Permainan Pesan Berantai di TK Taufiq Perguruan Islam Bayur", *Jurnal Pesona Paud*. I(1): pp. 1—13, 2012.
- [8] N., Markus. "Penguasaan Kosakata Bahasa Indonesia Anak Usia 4—5 Tahun". *Jurnal Ilmiah Fenomena* (online). Jilid 4. No. 2, 2017. <https://ejournal.unitomo.ac.id/index.php/pbs/article/view/762/376> pp. 102—115
- [9] Sudarmanto, J., Pamungkas, A.W., Anggraini. "Peningkatan Kosakata Benda Melalui Permainan Ular Tangga pada Kelompok B di TK Pertiwi Tamanagung Muntilan". *Jurnal Pendidikan Anak*, Volume I, Edisi 2, Desember 2012. pp. 146—153.
- [10] T., Musfiroh. *Memilih, Menyusun, dan Menyajikan Cerita Untuk Anak Usia Dini*, Yogyakarta: Tiara Wacana, 2008.
- [11] Y., Elviza, Emidar, & E., Noveria. "Peningkatan Penguasaan Kosakata Melalui Teknik Permainan Teka Teki Silang di Kelas VII A SMPN 2 Sungai Penuh". *Jurnal Pendidikan Bahasa dan Sastra Indonesia*, Vol 1. No. 2. Maret 2013. Seri F, pp. 399—476.