

## WRITING SKILLS INTERVENTION FOR DEAF CHILDREN: SCOPING REVIEW

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### **Abstract**

Writing skills are an important aspect of learning and communication, including for deaf children. However, deaf children generally experience difficulties in writing due to their limited language and knowledge. This study aims to review the various interventions that have been conducted to improve writing skills in deaf children. The scoping review method was used to compile the literature related to writing skill interventions in deaf children. The literature was collected through Harzing's Publish or Perish 8.1.3625.7987 application using articles sourced from google scholar. The results of the review showed that there were 44 interventions that had been carried out, including application-based interventions, methods, learning models, modules, media, approaches, activities, techniques, and strategies.

**Keywords:** Intervention, Deaf, Scoping Review

### **Abstrak**

Keterampilan menulis merupakan salah satu aspek penting dalam proses pembelajaran dan komunikasi, termasuk bagi anak tunarungu. Namun, anak tunarungu umumnya mengalami kesulitan dalam menulis karena keterbatasan bahasa dan pengetahuan mereka. Penelitian ini bertujuan untuk mengkaji berbagai intervensi yang telah dilakukan untuk meningkatkan keterampilan menulis pada anak tunarungu. Metode scoping review digunakan untuk menyusun literatur terkait intervensi keterampilan menulis pada anak tunarungu. Literatur dikumpulkan melalui aplikasi Harzing's Publish or Perish 8.1.3625.7987 dengan menggunakan artikel yang bersumber dari google scholar. Hasil review menunjukkan bahwa terdapat 44 intervensi yang telah dilakukan, antara lain intervensi berbasis aplikasi, metode, model pembelajaran, modul, media, pendekatan, kegiatan, teknik, dan strategi.

**Kata kunci:** Intervensi, Tunarungu, Scoping Review

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## INTRODUCTION

Writing is a basic written communication activity for everyone, including deaf children. Nurbiana (2014) explains that writing is a medium for conveying ideas, thoughts and feelings through a series of meaningful words. Karasu (2017) added, writing is a challenging activity for all students because being able to channel thoughts through words uses a complex combination of skills. Writing skills require concise marketing, knowledge of syntactic structure, planning, reviewing, and improving written products (Malik & Din, 2019).

Sentences are a fundamental element in writing. Good and effective sentences help the writer convey the message clearly, concisely and on target. According to Sasangka (2015), sentences are the smallest collection of language that can convey complete thoughts and information. Sentences without

subjects and predicates cannot be said to be sentences, but only groups of words. Composing sentence patterns is an expressive language ability that is closely related to receptive language, which is obtained from hearing (Ruspitayanti, et al. 2015). Lack of hearing ability in deaf children causes expressive language disorders, so that their skills in constructing sentence patterns are lower than children with normal hearing.

Deaf people are individuals with hearing impairment, from mild to severe, including deafness and hard of hearing (Marlina, 2015). Loss of hearing function results in obstacles to their language abilities, both spoken and written. Deaf children only acquire language through sight, so their language is incomplete (Khairunnisa, et al, 2016). The composition of written sentences for deaf children is often difficult to understand because the sentence structure is inaccurate and inverted (Sari, 2019).

A preliminary study at SLB YRTRW Surakarta showed that the majority of deaf students experienced difficulties in writing skills, especially in making sentences according to the Subject-Predicate-Object (S-P-O) structure. They often go back and forth in writing and pronouncing S-P-O sentences. This can hinder their development at school and in everyday life, because writing skills are very important for deaf children to communicate, learn, and participate in society. Therefore, interventions to improve the writing skills of deaf children are essential to help them develop their writing abilities and reach their full potential.

## **METHOD**

The search strategy used a scoping review type with the topic of writing skills intervention for deaf children in the last ten years. Literature was collected through the Harzing's Publish or Perish 8.1.3625.7987 application using a database sourced from Google Scholar, using the keywords "writing skills intervention for deaf children, writing ability intervention for deaf children, writing skills intervention for deaf children, and writing ability intervention for deaf children". According to Peterson et al (2017), the scoping review method is effective for assessing how a research topic is developing to then become the basis for future research development.

This research follows the 5-step scoping review procedure according to the guidelines from Arksey and O'Malley in 2005. The five steps include: (1) identifying problems and research questions, (2) identifying relevant articles, (3) selecting studies (selection). articles), (4) mapping the data (data charting) and (5) the final stage of collecting, summarizing and reporting the results (Arksey & O'Malley, 2005). The research stages are described in more detail as follows:

(1) Identifying problems and research questions. At this stage the researcher identifies research questions to be used as a reference in searching for articles. Identifying problems and research questions is also used to prevent sources that are not of good quality from being used and used as material for conducting research. Based on this, the question in this research is "What interventions are used to improve the writing skills of deaf children?". (2) Identify relevant articles Literature sources were obtained through searches using several search engines from Google Scholar via the Harzing's Publish

or Perish 8.1.3625.7987 application. The keywords used for literature searches in Indonesian were "writing skills interventions for deaf children and writing skills interventions for deaf children". Meanwhile, keywords in English include "writing skills intervention for deaf children, and writing abilities intervention for deaf children". The goal of the search strategy is to find research that has already been published. Based on searches on search engines using predetermined keywords, researchers found 201 articles related to the research topic.

(3) Selecting studies (article selection). At this stage the researcher selects literature obtained from various search engines mentioned previously based on the keywords that have been determined. The literature obtained will be selected according to the inclusion and exclusion categories of the research. The articles reviewed are all articles from 2014-2024 (the last 10 years), use Indonesian or English, full text is available, and are specific to the main question that is the focus of the review, namely the steps for preparing a research protocol. Based on the criteria and suitability of the literature to the research topic, 201 articles were obtained, then excluded because there was duplication to 184 articles. Of the 184 articles, further screening was then carried out by reading the abstract and full text. The 70 selected articles underwent critical appraisal to assess their quality, especially their suitability to the research objectives. In the end, 44 articles were obtained which will be analyzed further.

(4) Charting data (data charting). At this stage the researcher carries out literature analysis and collects the literature found in accordance with the research topic, namely the steps for compiling a research protocol. This data will form the basis of subsequent analysis. The mapping results will be categorized in Table 1. (5) Collect, summarize and report results. Compiling, summarizing and reporting the results is the final stage of preparing a scoping review study. The scoping review attempts to provide a general overview of all the articles reviewed and how best to present the problem. This requires some analytical framework or thematic construction to be able to present a narrative from the selected study literature (Arksey & O'Malley, 2005). At this stage, researchers carry out analysis, summarize and compile the selected literature and then report the results in results and discussion.

## RESULTS AND DISCUSSION

The following table presents a summary of the analysis of 44 articles that focus on interventions to improve writing skills in deaf children.

**Table 1.** Findings and Literature Results

No	Authors and Years	Title	Intervention	Results
1.	Vebbyo Syaputri & Jon Efendi, 2021	Efektivitas I-CHAT ( <i>I Can Hear and Talk</i> ) Untuk Meningkatkan Keterampilan Menyusun Pola Kalimat Bagi Anak Tunarungu di SLB Wacana Asih Padang	I-CHAT (I Can Hear and Talk)	Effectively used as a medium that can help to improving the skills of composing sentence patterns in grade VI deaf children at SLB Wacana Asih Padang in the 2020/2021 academic year.

2.	Defni Darwis, 2014	Efektivitas Metode Latihan Sensoris Motor Dalam Meningkatkan Kemampuan Menulis Huruf (Vokal) Bagi Anak Tunarungu Sedang	Sensory motor training method	Effectively used to improve abilities writing vowel letters for middle class I deaf children at SDLB N 015 Bangkinang, Riau.
3.	Amy R. Lederberg, Elizabeth M. Miller, Susan R. Easterbrooks, & Carol McDonald Connor, 2014	<i>Foundations for Literacy: An Early Literacy Intervention for Deaf and Hard-of-Hearing Children</i>	Preschool early literacy intervention	Improving early literacy skills in DHH children with functional hearing.
4.	Winda Greatta Zakiah, Mohammad Anwar, & Priyono, 2018	<i>Impact Of Project Based Learning Learning Model On The Ability Of Deaf Children To Build The Structure Of Sentence</i>	Project based learning model	Influence on improvement the ability to structure children's sentences in deaf class 5 at SLB B YRTRW Surakarta 2017/2018 academic year.
5.	Azizah Ma'rifah Yulia Tomara & Mega Iswari, 2019	Keterampilan Menulis Lettering melalui Modul Pembelajaran pada Anak Tunarungu	Learning module	Improving lettering skills for children deaf.
6.	Totok Warsito, 2014	Meningkatkan Hasil Belajar Menulis Karangan Berdasarkan Topik Tertentu Melalui Media Presentasi Pada Siswa Kelas XII SMALB Tunarungu Karya Mulia Surabaya	Presentation media	Increased yield class XII SMALB Karya Mulia Surabaya students learn to write based on topics certain
7.	Sri Wulandari & Marlina, 2018	Meningkatkan Kemampuan Menulis Kalimat Dengan Model Pembelajaran Picture And Picture Bagi Anak Tunarungu Kelas VIII Di SLB Negeri 2 Padang	Picture and picture learning model	Increase ability to write sentences of deaf children in class VIII at SLB Negeri 2 Padang
8.	Sitti Nurliani Tarigan, 2017	Meningkatkan Keterampilan Siswa Tunarungu Dalam Menulis Karangan Sederhana Melalui Media Gambar Berseri Di Kelas DIV-B SLB-E Negeri Pembina Medan	Serial Image	Improve skills writing simple essays for deaf students in classes D-IV-B SLB-E Negeri Pembina Medan.
9.	Ariensa Gita Pralistyo Putri, 2019	Mind Mapping Terhadap Keterampilan Menulis Siswa	Mind mapping	There is a significant effect of applying mind mapping on skills writing deaf

10.	Sevi Indra Pratiwi, 2016	Tunarungu Model Induktif Kata Bergambar Animasi Terhadap Kemampuan Menulis Permulaan Anak Tunarungu Di SLB	Animated Picture Word Inductive Model	students. Influential on beginning writing ability deaf child
11.	Tri Cahyono & Siti Masitoh, 2018	Model Induktif Kata Bergambar Seri Terhadap Kemampuan Menulis Permulaan Pada Siswa Tunarungu Kelas Rendah Di SDLB-B	Inductive Model of Picture Word Series	There is a significant influence on the use of the inductive model of picture word series in learning writing beginnings in deaf students low classes (classes 1 and 2) at SDLB-B Karya Mulia I Surabaya.
12.	Isnaini Nurhalimah, 2017	Model Pembelajaran Kontekstual Terhadap Kemampuan Menulis Peserta Didik Tunarungu Di Sekolah Luar Biasa	Contextual Learning Model	There is a significant influence on the use of learning models contextual to writing ability personal experiences of deaf students at SMPLB-B Karya Mulia Surabaya
13.	Maria Agustina Mera, Rudy Sumiharsono & Kustiyowati, 2023	Pemanfaatan Metode SAS (Struktural Analitik Sintetik) dalam Meningkatkan Kemampuan Membaca Permulaan dan Menulis Permulaan Siswa Tunarungu Wicara	SAS Method (Synthetic Analytical Structural)	1) Research by utilizing the SAS method, grade 1 students at SDLB Bhakti Luhur Malang have become skilled in read and write both letters, syllables, words, words and simple sentences in the rules beginning reading and writing and students also pay more attention to the teacher's explanations well and students are more enthusiastic in learning and students find it easy to learn language structures. 2) By applying the SAS method, it can improve the initial reading and writing skills of grade 1 students at SDLB Bhakti Luhur Malang.
14.	Ervina Dyah Kusumaningtyas, 2017	Pendekatan Saintifik dalam Pembelajaran Menulis Anak Tunarungu Kelas V Di SDLB B	Scientific approach	Significant influence on the use of the approach scientific knowledge in learning to write science concepts about changes in the shape of objects in deaf children in class V at SDLB-B Karya Mulia I Surabaya
15.	Alfina Darmayanti,	Pendekatan Saintifik terhadap Kemampuan	Scientific approach	1. There is a difference in the value of the ability to

	2017	Menulis Deskripsi Pada Siswa Tunarungu Di Sekolah Luar Biasa		write descriptions in deaf students before being given intervention using a scientific approach the average value is 41.6 and after being given intervention with using a scientific approach with average values average 76.6. 2. There is a significant influence on the application of the approach scientific knowledge of the ability to write descriptions class II deaf students at SLB Muhammadiyah Sidayu Gresik
16.	Diyah Ery Meliana, 2016	Pendekatan Saintifik Terhadap Kemampuan Menulis Narasi Anak Tunarungu Kelas IV SDLB	Scientific approach	Approach scientific influence on the ability to write narratives of deaf children in class IV at SDLB PGRI Kawedanan Magetan.
17.	Furi Fuziana Wati, M Shodiq A M & Henry Praherdhiono, 2019	Penerapan Metode Field Trip dalam Pembelajaran Menulis Karangan Deskripsi pada Siswa Tunarungu	Field Trip Method	The field trip method in writing descriptive essays can significantly influence student learning outcomes compared to using conventional methods.
18.	Falachaini Anitya Putri, 2018	Pengaruh Kegiatan Story Telling Berbasis Buku Cerita Bergambar Terhadap Kemampuan Menulis Kalimat Sederhana Siswa Tunarungu Kelas Rendah SDLB Bina Bangsa Sidoarjo	Story Telling Activities Based on Picture Story Books	1. There is a significant influence on story telling activities based on picture story books on the ability to write simple sentences of deaf class students low SDLB Bina Bangsa Sidoarjo. 2. Ability to write simple sentences low class deaf students at SDLB Bina Sidoarjo nation before it was given storybook-based story telling activities low image with average value 56.87. 3. The ability to write simple sentences of low class deaf students at SDLB Bina Bangsa Sidoarjo after being given story telling activities based on picture story books improved with grades average 83.75.

19.	Atika Rahma Rohadatul 'Aisy, 2019	Pengaruh Media Magic Sands terhadap Kemampuan Menulis Permulaan pada Tunarungu Kelas Dasar 1	Magic Sands Media	There is a significant influence the use of magic sands media on initial writing skills in elementary class 1 deaf people at SLB B Wiyata Dharma I Sleman.
20.	Agus Damiran, 2022	Pengaruh Metode Karyawisata terhadap Keterampilan Menulis Karangan Deskripsi pada Siswa Tunarungu Kelas VII SMPLB B di SLB Negeri Gedangan Sidoarjo Semester II Tahun Pelajaran 2021/2022	Field Trip Method	There is a significant effect of using the field trip method on descriptive essay writing skills for class VII SMPLB-B SLB Negeri Gedangan Sidoarjo students, with a value of $ZH=2.47 > Z$ table 5% 1.96.
21.	Desi Cahya Rachmawati & Pramono, 2015	Pengaruh Model Pembelajaran Concept Sentence Terhadap Kemampuan Menulis Deskripsi Sederhana Peserta Didik Tunarungu Kelas VII	Concept Sentence Learning Model	Concept learning model sentence has a good influence on students' ability to write descriptions deaf
22.	Nur Jaya & Yuliyati, 2018	Pengaruh Pendekatan Proses Menulis Terhadap Keterampilan Menulis Narasi Siswa Tunarungu Di SLB-B Dharma Wanita Sidoarjo	Writing Process Approach	There is a significant influence of the process approach writing towards skills writing narratives of deaf students at SLB-B Dharma Wanita Sidoarjo.
23.	Eryana Fatimasari Retno B &Wagino 2015	Pengaruh Penerapan Metode Scramble Terhadap Kemampuan Menyusun Kalimat Anak Tunarungu Kelas V SDLB-B Dharma Wanita Sidoarjo	Scramble Method	1. There is a significant influence on the application of the method scramble on the ability to compose sentences deaf children in class V of SDLB-B Dharma Wanita Sidoarjo. 2. There is a difference in the value of composing ability sentences to deaf children before they are given intervention using the scramble method with an average value of 69.16 and after being given using the scramble method with an average value of 94.16.
24.	Nur Ahmad Ardli Abdillah, 2014	Pengaruh Penggunaan Teknik Single Audience Peer Feedback Terhadap Keterampilan Menulis Deskripsi Anak	Single Audience Peer Feedback Technique	1. Pretest results of descriptive writing skills of deaf children before being given intervention using the Single Audience Peer

		Tunarungu		<p>technique feedback received an average score of 8 out of a maximum score of 15 in 2 assessment aspects description writing skills.</p> <p>2. Posttest results of description writing skills deaf children after being given intervention using the Single Audience Peer Technique Feedback received an average score of 14 out of a maximum score of 15 in 2 assessment aspects description writing skills.</p> <p>3. Data analysis results show usage Single Audience Peer Feedback Technique have a significant effect on descriptive writing skills in children deaf class IV at SDLB-B Karya Mulia I Surabaya.</p>
25.	Ina Agustin, 2019	Pengembangan Lembar Kerja Siswa (LKS) Untuk Meningkatkan Kemampuan Menulis Siswa Tuna Rungu Di SDN Inklusi	Student Worksheets (LKS)	Effective use in learning to improve writing skills for deaf students.
26.	Norma Nia Safitri & Suparkun, 2014	Pengembangan Media Pop Up Book Untuk Keterampilan Menulis Narasi Siswa Tunarungu Kelas IV	Pop Up Book Media	After interactive pop up book media Indonesian language subjects are applied to fourth grade student at SDLB B Dharma Wanita Sidoarjo it can be concluded that deaf students can stimulate narrative writing skills as an effort to optimize language skills in the learning process.
27.	Akmalia Khairunnisa, Permanarian Somad & Dedy Kurniadi, 2016	Penggunaan Media Adobe Flash Terhadap Kemampuan Menulis Struktur Kalimat (SPOK) Pada Anak Tunarungu Kelas VII SMPLB di SLB BC Permata Hati Sumedang	Adobe Flash media	The use of Adobe Flash media has a positive effect on the ability to write sentence structures in deaf students
28.	Hamdan Bachry, Joko Yuwono, &	Penggunaan Media Word Wall Untuk Meningkatkan	Word wall media	Interventions used in this research is in the form of using Word Wall media to



	Yuni Tanjung Utami, 2018	Kemampuan Menulis Tegak Bersambung (Studi Single Subject Research Pada Siswa Tunarungu Kelas III Di SKh Negeri 02 Kota Serang Banten)		increase the ability to write in cursive order learning for deaf students in class III SDLB SKh 02 Serang City, Banten.
29.	Khaulah, 2018	Peningkatan Kemampuan Menyusun Kalimat Dengan Media Puzzle Kalimat Bagi Anak Tunarungu Kelas Dasar IV Di SLB B Wiyata Dharma 1 Sleman,D.I Yogyakarta	Media Sentence Puzzle	Ability to compose sentences using sentence puzzle media in elementary class IV deaf children at SLB B Wiyata Dharma 1 Sleman has increased
30	Fisia Malonda, Donal M. Rattu & Mayske R. Liando, 2022	Peningkatan kemampuan Menulis dalam Pembelajaran yang Menggunakan Media Gambar untuk Siswa Tunarungu SLB Finjili di Pulau Lembeh	Image media	The use of image media can improve the ability to write poetry for deaf students Funjungi SLB on Lembeh Island
31.	Rahayu Dwi Putriani, 2016	Peningkatan Kemampuan Menulis Deskripsi Menggunakan Metode Karyawisata Untuk Anak Tunarungu Kelas X Di Slb Negeri Purbalingga	Field trip method	The use of the field trip method can improve the learning process of descriptive writing skills in class X deaf students in State Special Schools Purbalingga.
32	Suhardini Intikasari Tumardi Endro Wahyuno, 2014	Peningkatan Kemampuan Menulis Kalimat Sederhana Melalui Media Keping Kata Bergambar Pada Siswa Tunarungu Di SDLB	Illustrated Word Chip Media	1. The use of picture word chip media for deaf class II students at SDLB Negeri Jombatan 7 Jombang includes arranging picture words into simple sentences right, write simple sentences. With use of picture word chip media in learning to write students' simple sentences looks active in participating in learning activities designed using the game method 2. Use of pictorial word chip media and can improve your ability to write sentences simple for deaf class II students at SDLB Negeri Jombatan 7

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33.	Sudarmi, 2022	Peningkatan Kompetensi Menulis Teks Laporan Bahasa Indonesia melalui Media Gambar Seri bagi Peserta Didik Tunarungu	Series Image Media	Jombang. Serial image media makes students more active, participative and can increase competence write report text.
34.	Rina Puspita Sari, 2015	Peningkatan Kemampuan Menulis Karangan Deskripsi Melalui Teknik Peta Pikiran (Mind Mapping) Pada Anak Tunarungu Kelas VII Di Sekolah Luar Biasa Marsudi Putra I	Mind Map Technique (Mind Mapping)	The ability to write descriptive essays can be improved by using mind mapping techniques for deaf children in class VII at SLB Marsudi Putra I.
35.	Asyharul Fachruda Nur Firdaus, 2019	Peningkatan Kemampuan Menulis Paragraf Melalui Model Induktif Kata Bergambar Bagi Siswa Tunarungu Kelas IV Di SLB BC YSBPD Wuryantoro	Picture Word Inductive Model	Improved ability to write paragraphs through an inductive model of picture words in fourth grade elementary school deaf students.
36.	Trian Yuni Sarahwati, 2016	Peningkatan Kemampuan Menulis Permulaan Melalui Metode <i>Peer Tutorial</i> (Tutor Sebaya) Anak Tunarungu Kelas Dasar II Di SLB Wiyata Dharma 1 Sleman	Peer Tutorial Method (Peer Tutor)	Beginning writing abilities in deaf children elementary class II at SLB Wiyata Dharma 1 Sleman can be improved through the Peer Tutorial method.
37.	Ghina Safira, 2016	Peningkatan Kemampuan Menulis Permulaan Menggunakan Teknik Pembelajaran Make A Match Pada Anak Tunarungu Kelas Dasar I Di SLB Wiyata Dharma 1 Sleman	Make A Match Learning Technique	The beginning writing ability of deaf children in elementary class I at SLB Wiyata Dharma 1 Sleman has increased through the make a match learning technique
38.	Yudha Tri Prasetya, 2016	Peningkatan Kemampuan Menulis Struktur Kata Melalui Penggunaan Media Teka Teki Silang Bagi Siswa Tunarungu Kelas Dasar I Di SLB B C Bhakti Putera Bahagia Klaten	Crossword Media	Improvement in the form of increasing ability in mastering letter concept writing, mastery of writing words $\leq 6$ letters, and mastery of writing words $\geq 6$ letters.
39.	Ngesti Winahyu Arum, 2015	Peningkatan Keterampilan Menulis Kalimat Melalui	Contextual Approach	Improving sentence writing skills through contextual approaches

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		Pendekatan Kontekstual Pada Anak Tunarungu Kelas V Di Sekolah Luar Biasa Wiyata Dharma 4 Godean		have increased.
40.	Nabilla Antrisna Putri, Warsiman & Titik Hermiati, 2022	Peningkatan Keterampilan Menulis Teks Eksposisi Melalui Model Problem Based Learning Dengan Media Gambar	Problem Based Learning Model Using Image Media	Students' ability to write expository texts increases.
41.	Friska Prasetyaningrum, 2018	Peningkatan Keterampilan Menulis Kalimat Menggunakan Model Quantum Learning Pada Siswa Tunarungu Kelas IV Di SLB Ma'arif Bantul	Quantum Learning Model	Improving sentence writing skills through the quantum learning model has increased.
42.	Kurniati Laila, 2021	Peranan Eksplorasi Pustaka Untuk Meningkatkan Keterampilan Menulis Pada Siswa Tunarungu Kelas XI SLB Pembina Tingkat Nasional Bagian C Malang	Library Exploration	There is a role for library exploration in improving writing skills in deaf students in class XI SLB Pembina National Level Part C Malang
43.	Ristiadini Mita Aisyah, 2018	Strategi Pemodelan Bermedia Flashcard Terhadap Kemampuan Menulis Teks Deskriptif Siswa Tunarungu Kelas 2 Di SLB-B	Flashcard Media Modeling Strategy	The modeling strategy using flashcard media has a significant influence on the ability to write descriptive text of deaf students at SDLB-B Karya Mulia 1 Surabaya.
44.	Alfath Nur Fajar Wahyu Subroto, Priyono & Dewi Sri Rejeki, 2019	The Effect of Using Multimedia Application in Language Issues to Increase Vocability of Deaf Children Class III SLB B YRTRW Surakarta 2018-2019	Multimedia applications	The effect of using multimedia sign language to increase the vocabulary of deaf children in class III SLB B YRTR Surakarta in 2018/2019

Based on the review of the 44 eligible articles above, there are several types of interventions that can be used to improve writing skills in deaf children. These include application-based interventions, methods, learning models, modules, media, approaches, activities, techniques, and strategies. Application-based interventions were conducted by Syaputri and Efendi (2021) and Subroto, et al 2019. The intervention in the form of I-CHAT (I Can Hear and Talk) conducted by Syaputri and Efendi (2021) is effective as a medium that can help to improve the skills of composing sentence patterns in class VI deaf children at SLB Wacana Asih Padang in the 2020/2021 school year. Intervention in the form of multimedia applications conducted by Subroto, et al (2019) was able to increase the vocabulary of deaf

children in class III SLB B YRTR Surakarta in 2018/2019.

Method-based interventions were conducted by Darwis (2014), Lederberg, et al (2014), Putri (2019), Mera, et al (2023), Wati, et al (2019), Damiran (2022), Retno (2015), Putriani (2016), Sarahwati (2016), and Laila (2021). The intervention in the form of a motor sensory training method conducted by Darwis (2014) was effectively used to improve the ability to write vowel letters for moderate deaf children X class I at SDLB N 015 Bangkinang, Riau. The preschool early literacy intervention conducted by Lederberg, et al (2014) improved early literacy skills in DHH children with functional hearing. The mind mapping intervention conducted by Putri (2019) had a significant effect on the writing skills of deaf students. The intervention in the form of the SAS (Structural Analytic Synthetic) method conducted by Mera, et al (2023) can improve the reading and writing skills of first grade students of SDLB Bhakti Luhur Malang. The intervention in the form of a field trip method conducted by Wati, et al (2019) significantly affected student learning outcomes compared to the use of conventional methods.

The intervention in the form of a field trip method conducted by Damiran (2022) has a significant effect on the skill of writing description essays for students of class VII SMPLB-B SLB Negeri Gedangan Sidoarjo. The intervention in the form of scramble method conducted by Retno (2015) has a significant effect on the application of scramble method on the ability to compose sentences of deaf children in grade V SDLB-B Dharma Wanita Sidoarjo. Intervention in the form of a field trip method conducted by Putriani (2016) can improve the learning process of description writing skills in class X deaf students at SLB Negeri Purbalingga. Intervention in the form of peer tutorial method conducted by Sarahwati (2016). Intervention in the form of library exploration conducted by Laila (2021) improves writing skills for deaf students in class XI of SLB Pembina National Level Part C Malang.

Interventions based on learning models were conducted by Zakiah, et al (2018), Wulandari & Marlina (2018), Pratiwi (2016), Cahyono & Masitoh (2018), Nurhalimah (2017), Rachmawati & Pramono (2015), Firdaus (2019), Putri, et al (2022), and Prasetyaningrum (2018). The intervention in the form of project-based learning conducted by Zakiah, et al (2018) has an effect on improving the ability to compose sentence structures of deaf children in grade 5 at SLB B YRTRW Surakarta in the 2017/2018 academic year. Intervention in the form of picture and picture conducted by Wulandari & Marlina (2018) improves the ability to write sentences of deaf children in class VIII at SLB Negeri 2 Padang. Intervention in the form of inductive animated picture words conducted by Pratiwi (2016) has an effect on the ability to write beginnings in deaf children. The intervention in the form of inductive picture words series conducted by Cahyono & Masitoh (2018) has a significant effect on learning writing beginnings in low-grade deaf students (grades 1 and 2) at SDLB-B Karya Mulia I Surabaya.

## **CONCLUSION**

Based on the results of research regarding writing skills interventions for deaf children, it shows that there are various interventions that have been carried out, including application-based interventions,

methods, learning models, modules, media, approaches, activities, techniques and strategies. Most studies use media to provide interventions to improve writing skills in deaf children. From the overall analysis of the article, it shows that there is an increase in writing skills in deaf children.

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