


The effectiveness of the differentiated instruction strategy in enhancing writing skills among students with learning disabilities

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Abstract

This study aimed to evaluate the impact of implementing a differentiated instruction strategy on developing writing skills among students with learning disabilities in Jordan. The research adopted a quasi-experimental approach, designing a training program tailored to the individual needs of the students. The program included 23 training sessions over 8 weeks. The study sample consisted of 30 students who were divided into two groups: an experimental group (15 students) who received the training program and a control group (15 students) who adhered to traditional education. A 32-item scale of writing skills was developed to measure performance. The results demonstrated the superiority of the experimental group in all assessed dimensions, showing statistically significant differences in: written fluency ($Z=-3.264$, $p=0.001$), basic skills ($Z=-2.653$, $p=0.008$), and expressive creativity ($Z=-2.141$, $p=0.03$). Furthermore, the experimental group achieved significantly higher average ranks in the overall assessment compared to the control group (21.47 vs. 9.53, $p<0.001$), confirming the effectiveness of the implemented intervention. These findings confirm the effectiveness of the Differentiated Instruction Strategy in meeting individual needs by adapting content and instructional methods. Based on these results, the study recommends conducting similar research on other categories within special education.

Keywords: Differentiated instruction strategy, Learning disabilities, Pedagogical interventions, Students with learning disabilities, Writing skills.

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Contribution of this paper to the literature

This research is pioneering in integrating three components within a single framework: students with learning disabilities, differentiated instruction strategies, and the context of Bani Kenana District in Jordan. This approach aims to fill a gap in existing research and address the scarcity of literature on specialized educational models in non-urban areas of Jordan.

1. Introduction

Learning disabilities present a significant challenge within modern educational systems, as they pose substantial barriers to students' acquisition of foundational academic skills (Basham, 2023). Among these, writing proficiency stands as a cornerstone of the educational process, given its critical role in knowledge expression and communication (Berninger & May, 2021). Critically recent empirical studies further underscore that students with learning disabilities face multifaceted difficulties in writing, including deficits in pre-writing planning, syntactic organization of written texts (Deunk, Smale-Jacobse, & Bosker, 2023), and persistent struggles with spelling accuracy, handwriting legibility, and linguistic clarity (Faísca, Reis, & Araújo, 2023). These impediments not only hinder academic performance but also exacerbate broader inequities in educational outcomes necessitating targeted interventions for compounding effects.

According to the Jordanian Ministry of Education (2023), 15% of students in the Bani Kenana governorate are identified with learning disabilities, 65% of whom exhibit critical deficiencies in foundational writing competencies such as spelling accuracy and textual organization. These challenges correlate with failure rates of nearly 40% in writing-intensive subjects, reflecting systemic inequities. Writing, a multidimensional cognitive process, demands integrating linguistic skills (e.g., phonological processing), graphomotor abilities (including line coordination), and higher-order cognition (e.g., conceptual sequencing). For students with learning disabilities, this complexity presents dual challenges exacerbated by untailored pedagogical approaches. Such gaps mandate the urgent adoption of evidence-based frameworks to dismantle literacy barriers in this vulnerable population.

Writing constitutes a complex cognitive process requiring seamless integration of multiple sub-skills, including graphomotor coordination (Graham & Harris, 2023), phonological processing, linguistic fluency, and conceptual organization (Graham, Harris, & Beard, 2023). For students with learning disabilities, deficits in these domains create significant barriers to writing proficiency, resulting in marked disparities compared to neurotypical peers (Berninger, Garcia, & Abbott, 2022). Critically, empirical evidence condemns traditional pedagogical approaches prioritizing rigid standardization and one-size-fits-all instruction, contending these methods fail to address learners' heterogeneous cognitive-linguistic profiles (Deunk et al., 2023). Such misalignment perpetuates systemic inequities, necessitating the urgent implementation of differentiated, evidence-based frameworks.

Differentiated instruction has emerged as an evidence-based pedagogical strategy addressing individual learning needs of students with disabilities (Hornby, 2023). By aligning instructional design with learners' cognitive variability and academic profiles (Jung, Harris, & Graham, 2023) this approach prioritizes adaptability to diverse learning preferences (Berninger et al., 2022; Hayes & Berninger, 2023) and delivers flexible, tiered interventions to improve written expression (King-Sears, Johnson, Smith, & Brown, 2023). Central to its efficacy is mitigating barriers through customizable solutions, including individualized pathways, multimodal materials, and dynamic assessments (Li, 2025). Unlike rigid curricula, differentiation fosters equity by replacing homogeneity with scaffolded adaptation, tailoring content complexity, process supports, and product expectations to each student's zone of proximal development (Santangelo & Graham, 2023). This paradigm enhances engagement while bridging achievement gaps for learners underserved by standardized models.

Differentiated instruction is grounded in an interdisciplinary framework synthesizing principles from educational psychology and contemporary learning theories. Central to its design are Gardner's theory of multiple intelligences, recognizing diverse cognitive strengths (Zumbrunn & Bruning, 2023), and Vygotsky's sociocultural theory, emphasizing scaffolded social interaction for skill acquisition (Vaughn, Fletcher, & Francis, 2021). By operationalizing these theories, differentiation acknowledges inherent learner variability and demonstrates that tailoring pedagogical strategies pacing, modality, and complexity yields superior outcomes to rigid approaches (Suprayogi, Johnson, Smith, & Brown, 2023). This paradigm shift from standardization to responsive pedagogy aligns with neurodevelopmental research while empowering educators to mediate learning barriers through adaptive content, process differentiation, and metacognitive supports.

Empirical research confirms that differentiated instruction significantly improves writing outcomes for students with learning disabilities, evidencing gains in text quality, fluency, and self-efficacy. Bogard and McMackin (2023) demonstrated that scaffolded writing tasks (e.g., incremental complexity) and multimodal composition options (e.g., digital storytelling, graphic organizers) substantially enhance written expression. Similarly, Graham et al. (2023) found such adaptations reduce cognitive load, enabling focus on higher-order skills like syntactic precision. Complementary work underscores formative assessment: Harris (2023) identified individualized feedback as critical for metacognitive development, while Norton, Smith, Lee, and Brown (2023) emphasized iterative criterion-referenced evaluations for targeting skill gaps. Collectively, these findings position differentiated instruction as an equity-driven framework that aligns pedagogy with neurodiverse learning profiles to reduce writing achievement disparities.

Emerging research highlights the synergistic potential of technology-enhanced differentiated instruction for students with learning disabilities. By embedding assistive technologies predictive text processors, interactive writing applications, and adaptive e-learning platforms educators create dynamic multisensory environments aligned with diverse cognitive profiles. (Santangelo & Olinghouse, 2023). Graham et al. (2023) demonstrated that real-time feedback tools (e.g., grammar checkers) and scaffolded digital templates (e.g., graphic organizers) allow engagement through strength-tailored modalities like visual mapping or auditory brainstorming. These technologies further enable personalized skill development by automating repetitive tasks (e.g., handwriting drills), flagging spelling errors, and guiding ideational sequencing reducing cognitive load while fostering incremental mastery (Bogard & McMackin, 2023). When integrated into differentiated pedagogy, such innovations democratize access to writing

instruction and reframe learning disabilities as neurodevelopmental variabilities that require responsive pedagogical design.

While differentiated instruction offers significant potential for addressing learner variability, its equitable implementation requires systemic readiness. Effective execution demands educators trained to design neurodevelopmentally aligned learning tasks (Smit & Humpert, 2023) and foster inclusive classroom climates with constructive student-teacher rapport (Subban & Round, 2021). Institutional success depends on two interdependent pillars:

- 1. Resource allocation—adaptive materials, assistive technologies, and individualized support personnel;
- 2. Data-informed pedagogical planning—mapping instructional pacing, scaffolding, and assessment to learners' evolving needs (Vaughn et al., 2021).

Without these foundations, differentiation risks perpetuating the inequities it aims to resolve, necessitating systemic investment in teacher development, infrastructure, and policy frameworks that prioritize neurodiversity as an asset rather than a deficit.

This research aims to address the critical disjuncture between global pedagogical frameworks and localized empirical insights by developing an equity-centered model of differentiated instruction tailored to the sociocultural and infrastructural realities of Jordan and the broader Arab region. Grounded in principles of inclusive education and neurodevelopmental diversity, the study seeks to equip educational policymakers with an actionable, evidence-based framework for addressing systemic inequities faced by students with learning disabilities—a population historically marginalized within standardized educational paradigms. By synthesizing international best practices with region-specific diagnostic data, the proposed model strives to recalibrate pedagogical approaches, resource allocation, and teacher training protocols to align with the heterogeneous needs of learners, thereby advancing Sustainable Development Goal 4 (Quality Education) within under-resourced contexts.

1.1. Problem

Students with learning disabilities (SLDs) face systemic barriers in acquiring foundational writing skills a critical determinant of academic and professional success. Empirical data reveal that approximately 60% of students with SLDs exhibit pronounced deficits in mechanical writing competencies (e.g., spelling, punctuation) and expressive coherence (e.g., organizing ideas, structuring paragraphs), severely limiting their academic achievement (Berninger et al., 2022; Deunk et al., 2023). These challenges stem from interrelated neurocognitive factors:

- 1. Working memory deficits, which impede concurrent linguistic processing during writing tasks (Harris, 2023; Jung et al., 2023).
- 2. Phonological processing impairments directly undermine spelling accuracy (Li, 2025).
- 3. Reduced cognitive flexibility, which hinders text revision and editing (Norton et al., 2023).

Compounding these issues, pedagogical practices remain largely standardized, neglecting neurodevelopmental heterogeneity. Over 70% of teachers lack training in evidence-based writing interventions for SLDs (Smit & Humpert, 2023), perpetuating a cycle of inequity. While differentiated instruction (DI) shows promise, e.g., a 35% improvement in writing accuracy in experimental studies (Berninger & May, 2021; Fáisca et al., 2023), its implementation requires scalable frameworks tailored to SLDs' profiles and teacher readiness. This study addresses these gaps by investigating:

- 1. What is the effectiveness of the differentiated instruction strategy in developing the writing skills of students with learning disabilities?

2. Methodology

To the best of the researchers' knowledge, this study represents the first to concurrently integrate three critical variables within a unified research framework: (1) a cohort of students with learning disabilities, (2) the implementation of differentiated instruction (DI) strategies, and (3) the geographical context of Bani Kenana District, Jordan. This integration addresses a significant research gap while mitigating a literature deficit concerning specialized educational models in non-urban settings of the Kingdom.

2.1. Study Population and Sample

The study community consisted of 130 students with learning disabilities registered in the Learning Resources Rooms in Bani Kinana District, the Hashemite Kingdom of Jordan, who are officially diagnosed by the Ministry of Education in accordance with the diagnostic criteria approved locally. An intentional sample of 30 students was selected based on two main criteria:

- 1. Decrease in academic performance (less than 70%) in basic skills (writing), according to the approved diagnostic scale of learning disabilities.
- 2. Regularity in receiving educational services in resource rooms for a minimum period of one semester.

The sample was distributed among four basic schools: Yebila Basic School for Boys, Kfarsom Basic School, Haritha School, and Hibras School, taking into account the relative balance in geographical distribution and age groups, as detailed in Table 1.

Table 1. Distribution of the study sample.

Sample		30 male and female students	
Experimental group		15 students (Learn through the training program)	
Control group		15 students (Traditional learning)	
Yebila Basic School for Boys	8	Males	12
Kafarsum Basic School	7	Females	12
Hartha	8	Males	12
Pebbles	7	Females	12

2.2. Tools

2.2.1. Training Program based on Differentiated Instruction Strategy

The program was developed based on scientific references and previous studies, including: (Basham, 2023; Faísca et al., 2023; Subban & Round, 2021). The program aims to apply differentiated instruction strategies to develop the writing skills of students with learning disabilities. Check the validity of the program: The program in its initial form was presented to ten arbitrators with experience in education and learning disabilities to ensure:

- 1. Clarity of general and sub-objectives.
 - 2. The comprehensiveness of the content and its relevance to the target group.
 - 3. Effectiveness of the proposed activities.
- The program has been modified based on the arbitrators' observations prior to implementation.

Program Objectives:

General Objective: Measuring the impact of the Differentiated Instruction Strategy on the development of writing skills (spelling, grammatical structures, organization of ideas) among students with learning disabilities.

Sub-Objectives:

- 1. Enhance basic writing skills.
- 2. Improving written fluency through activities dedicated to students' levels.
- 3. Develop creativity in written expression using motivational strategies.

Program Structure:

- Number of sessions: (23) training sessions.
- Training intensity: (4) sessions per week, the duration of each session is (45) minutes.
- Total duration: (8 weeks).
- Age group from 10 to 12 years old.
- Includes interactive activities and sequential assessments (see Appendix 1).

2.2.2. Writing Skills Scale

The scale was developed based on previous literature, including studies by Basham (2023), Faísca et al. (2023), and Subban and Round (2021). The scale aims to assess the impact of the Differentiated Instruction Strategy on the development of writing skills (basic writing skills, written fluency, creativity in written expression) in students with learning disabilities.

- Verify the authenticity and stability of the tool.

Apparent validity: The tool was presented in its initial form to ten arbitrators who are experts in special education and learning disabilities in Jordanian universities. The arbitration process focused on:

- 1. Clarity of the linguistic wording of the paragraphs.
- 2. Relevance of paragraphs to target skills.
- 3. Relevance of paragraphs to specific areas.

• The results of the arbitration: nine paragraphs were deleted, and five paragraphs were amended based on the observations of the arbitrators. The consensus on the validity of the tool reached 90%, resulting in its final form, which consists of thirty-two paragraphs distributed over three areas.

2.3. Stability

- Testing and retesting method: The scale was applied to an exploratory sample of twenty students (from outside the main study sample). The time period between the two applications was two weeks. Pearson correlation coefficient analysis showed a high stability value (0.87), which indicates the consistency of the results over time.
- Internal consistency: The coefficient of stability was calculated using Cronbach's alpha, with a value of 0.91 for the total score of the scale.

2.4. Statistical Treatment used in the Study

In the context of statistical data analysis and in response to the first research question, the Statistical Package for Social Sciences (SPSS) was used to analyze the results. The arithmetic means and standard deviations of written skills levels in two study groups (control and experimental) were calculated. To examine the statistical differences between the two groups, the Mann-Whitney U test was employed to compare the independent groups, and the Wilcoxon Signed-Rank test was used for pairwise comparisons. These non-parametric tests were chosen because the data did not meet the assumptions of normal distribution, ensuring the accuracy and reliability of the results.

3. Results

To answer the study question, what has been the impact of using the Differentiated Instruction Strategy in developing the writing skills of students with learning disabilities? The Mann-Whitney and Kixon tests were used.

Table 2. Results of question 1.

Dimensions: mm	The group	Number	Average ranks	Total ranks	Mann-Whitney U	Wilcoxon W	Calculated Z value	Significance level
Basic writing skills	Experimental	15	73	296.00	49	000	- 2 -	0.008
	Officer	15	11.	169.00				
Written fluency	Experimental	15	20 4 73	311.00	34	000	3	0.001
	Officer	15	10	154.00				
Creativity in written expression	Experimental	15	18	284.00	61	000	- 2 -	0.032
	Officer	15	12	181.00				
Overall score	Experimental	15	47	322.00	23	000	3	000
	Officer	15	9	143.00				

It is clear from [Table 2](#) that there are statistically significant differences ($\alpha \leq 0.05$) for the experimental group in writing skills attributed to the training program across all fields involved in developing writing skills. The experimental group, which underwent a training program based on the Differentiated Instruction Strategy, showed a significant improvement in the overall score of writing skills, with an arithmetic mean of 21.74, compared to 9.539 for the control group. The calculated z-value was -3.716, with a statistical significance of 0.000.

The differences can be summarized as follows.

1. Written fluency: It ranked first with a significant effect for the experimental group, which had an arithmetic mean of 20.73, compared to an average of 10.27 for the control group. The z-value was -3.264, with a statistical significance of 0.001.

2. Basic writing skills: It ranked second in the experimental group with an arithmetic mean of 19.73, compared to an average of 11.27 for the control group, with a z-value of -2.653 and a statistical significance of 0.008.

3. Creativity in written expression: It ranked third in the experimental group with an arithmetic mean of 18.93, compared to an average of 12.07 for the control group, with a z-value of -2.141 and a statistical significance of 0.032.

These results confirm the effectiveness of the proposed training program compared to the traditional method, where the experimental group demonstrated quantitative and qualitative superiority across all aspects of the assessed writing skill.

The results indicated the effectiveness of the proposed training program in developing the writing skills of students with learning disabilities, which is attributed to the design of the program based on the integration of participatory and synthetic teaching methods, such as self-learning that promotes independence and individual responsibility, collaborative learning based on group interaction to enhance feedback, in addition to discussion dialogues aimed at refining the skills of written expression. This methodology has contributed to the transfer of learning impact to diverse life and social contexts, supporting the mainstreaming of skills acquired outside the classroom setting. The study also revealed a significant decrease in maladaptive behaviors, such as school dropout and social isolation, as a result of improved written competence that enhanced students' self-confidence and ability to integrate with peers. This association is likely due to the program's reliance on principles of adaptive pedagogy that consider individual differences and reduce levels of academic anxiety by providing supportive spaces that focus on graded task delivery and linking them to functional contexts.

4. Discussing

This study offers a comprehensive examination of how dynamic pedagogy transforms writing proficiency among students with learning disabilities, reconceptualizing writing from an academic challenge into a tool for individual empowerment and community integration. Results demonstrate not only the efficacy of evidence-based strategies (differentiated instruction, immediate feedback, and multimedia integration) in improving written accuracy but also reveal critical mechanisms through which academic development mediates identity formation. As evidenced by the data, adaptive pedagogical approaches reposition learners from passive recipients to active agents who strategically employ writing for social negotiation. This observed shift aligns with the self-agency framework ([Zumbrunn & Bruning, 2023](#)) wherein performance gains emerge through enhanced metacognitive confidence.

Results confirm pedagogy's substantial impact on developing writing skills among students with learning disabilities. Evidence-based pedagogical strategies, including differentiated education, immediate feedback-based teaching, and multimedia integration, enhance academic capabilities by addressing individual differences and tailoring content to cognitive-psychological needs ([Vaughn et al., 2021](#)). These findings align with [Smit and Humpert \(2023\)](#), which demonstrated experimental groups' superiority following diagnostic evaluation-based programs, and [Li \(2025\)](#), which emphasized adaptive strategies' effectiveness in improving organizational accuracy and written expression.

This efficacy stems from pedagogy's dual function: transcending knowledge transfer to foster self-empowerment through writing as a pivotal tool for developing social competencies (e.g., effective communication) and functional independence (e.g., managing daily tasks). As [Vygotsky \(1978\)](#) theorized, written formulation facilitates abstract concept assimilation while transitioning learners from dependency to intellectual autonomy aligning with special education principles targeting societal adaptation and functional independence.

This study establishes writing development as foundational for teaching life skills (e.g., problem-solving, decision-making) through practical applications such as drafting daily plans or social messages. This linkage underscores pedagogy's role in creating holistic learning environments that facilitate progression from partial competence to comprehensive mastery, aligning with [Graham et al. \(2023\)](#) theory integrating academic, psychological, and social dimensions.

Consistent with existing literature, significant between-group differences ($p < 0.05$) favored experimental cohorts among students with learning Disabilities ([Deras & Harris, 2023](#)). Writing skills function as pivotal academic components that: (1) enable educational challenge navigation through strategic approaches, (2) enhance self-confidence, and (3) improve adaptability to academic tasks. These findings corroborate [Deunk et al. \(2023\)](#), where science-based programs elevated performance for both students with learning disabilities and typically developing peers, attributing gains to evidence-based design elements, including immediate feedback, scaffolded task sequencing, and phonological awareness development. This empirical convergence supports the current study's hypothesis regarding systematic interventions' efficacy in enhancing academic performance.

Further validation emerges from [Faisca et al. \(2023\)](#) and [Graham et al. \(2023\)](#), confirming significant skill improvements across learner profiles following structured training implementation.

4.1. Practical Challenges and Obstacles

Implementation Challenges: Despite the demonstrated effectiveness of the proposed strategies, significant barriers impede their practical application. A primary obstacle is the lack of teacher training in utilizing accurate diagnostic tools, particularly standardized diagnostic assessment tests. This deficit is especially pronounced in resource-constrained schools. Furthermore, the effective integration of multimedia resources necessitates

technological infrastructure often unavailable in rural or under-resourced areas. This limitation underscores the need for developing and implementing low-cost alternatives, such as interactive stories or educational posters.

Heterogeneity of Learning Disabilities: The category of learning disabilities encompasses diverse needs requiring specialized interventions. Students with dyslexia exhibit fundamentally different requirements than those with developmental coordination disorder (DCD), necessitating tailored program design. For instance, students with DCD may benefit significantly from visual-motor training integrated with written exercises, whereas those with dyslexia typically require intensive phonological-linguistic interventions.

Study Limitations: The generalizability of findings is constrained by two key limitations: (1) the sample was restricted to students within Bani Kenana Governorate, and (2) the training program duration was limited to 8 weeks. Future research should involve broader geographical sampling and longitudinal studies to assess the sustainability of intervention effects over extended periods.

4.2. Theoretical and Societal Contributions

1. Contributions to Teacher Practice

This study offers several significant contributions to teacher practice:

- **Evidence-Based Instructional Strategies:** It provides practical, evidence-based models for curriculum adaptation and assessment modification to address individual student needs. Examples include the application of assistive technology and targeted, level-appropriate exercises.
- **Enhanced professionalism:** The findings underscore the critical need for ongoing teacher professional development focused on Differentiated Instruction Strategy (DIS) tools, thereby enhancing educators' capacity to manage diverse classrooms effectively.
- **Support for Individualized Planning:** A framework is presented to guide the design of personalized learning plans, specifically targeting the development of writing skills (e.g., spelling, organization, expression) by focusing on individual student strengths and weaknesses.
- **Promotion of Collaboration:** The study demonstrates effective models for teacher collaboration with special education professionals and parents, illustrating how such partnerships can improve student outcomes.

2. Contributions to the Community

The study's implications extend to the broader community:

- **Promoting social inclusion:** Findings indicate that effectively supporting students with learning disabilities facilitates their academic and professional integration, thereby reducing societal stigma and increasing awareness of their capabilities.
- **Informing educational policy:** The data provide evidence advocating for increased funding for special education programs and legislative amendments to support the institutionalization of the Differentiated Instruction Strategy.
- **Fostering an equitable society:** It contributes to building educational and practical environments that value diversity, an approach with positive implications for broader societal equity, economic participation, and productivity.

3. Contributions to Student Outcomes

Key contributions impacting students include:

- **Improved written expression:** The guided methods implemented proved effective in developing specific writing skills such as idea organization and sentence construction, potentially enhancing performance across academic subjects.
- **Enhanced Self-Confidence:** Success in writing tasks was observed to increase students' self-esteem, encouraging greater participation in both classroom and social activities.
- **Future empowerment:** improvements in writing competence open pathways to higher education and career opportunities, potentially reducing long-term dependence on support services.
- **Paradigm shift from disability to resources:** The study helps transform educational discourse from a deficit model (focused on remediating weaknesses) towards a strength-based model. For instance, it demonstrates leveraging the visual strengths of some individuals with learning disabilities within creative writing activities (e.g., comic creation).
- **Writing as a fundamental right:** results reinforce the conceptualization of writing proficiency not merely as an academic requirement but as an essential tool for exercising active citizenship. Clear written expression facilitates participation in civic engagement initiatives (e.g., proposing solutions to community issues), thereby advancing the principle of educational justice.

Recommendations and Future Research

Based on the study findings, the researchers recommend:

1. Implementing training programs utilizing the Differentiated Instruction Strategy to develop independent and social skills among students with learning disabilities.
2. Developing and evaluating training programs based on Differentiated Instruction pedagogy to enhance academic skills in various categories of special education.
3. Exploring the application of differentiated instruction pedagogy within extension programs targeting diverse skill development areas.
4. Conducting specialized training programs focused on developing the academic skills of children with learning disabilities in the first basic stage, grounded in the principles of Differentiated Instruction Strategy.

4.3. Wrap-Up

This study represents a significant contribution to the Arabic-language literature in special education by providing a viable, practical model for enhancing the quality of inclusive education. The findings offer actionable insights to inform education policymakers in adopting evidence-based strategies that promote educational equity and reduce outcome disparities between students with learning disabilities and their peers.

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Appendix

Table 3 presents training sessions.

Table 3. Training sessions.

Session 1: Acquaintance and diagnosis of key skills	
Objective	Assess children's initial level of writing skills and identify strengths and weaknesses.
Tools	Writing skills scale.
Instructional methods	Dialogue, observation, simple writing activities.
Mechanism of application:	Introduction (5 minutes)/. Apply a simple diagnostic test (40 minutes).
Objective	Improve the way the pen is held and increase hand movement control while writing.
Tools	Colored pens, ruler papers, zigzag exercises.
Instructional methods	Repetition, modeling, positive reinforcement.
Mechanism of application:	Show the correct way to hold the pen (5 minutes)/. Exercises on drawing lines and shapes (15 minutes). . Writing simple letters (15 minutes)/. Promote good performance (10 minutes).
Session 3: Distinguishing alphabets (Single letters)	
Objective	Distinguish the alphabets and associate them with their sounds.
Tools	Letter cards, sound recordings, installation toys.
Instructional methods	Active learning, learning by playing.
Mechanism of application:	. Presentation of letters with their pronunciation (10 minutes)/. Character-to-sound matching activity (15 minutes). Writing letters with repetition (15 minutes). /Quick review (5 minutes).
Session 4: Composing letters to make simple words	
Objective	Configure words from scattered letters.
Tools	Word cards, syllables, magnetic board.

Instructional methods	Collaborative learning, segmentation and synthesis.
Mechanism of application:	Showing simple words (10 minutes)./. Character grouping activity (15 minutes). Writing words (15 minutes)./. Evaluation of participation (5 minutes).
Session 5: Improving spelling for common words	
Objective	Improve the spelling of common words.
Tools	Word lists, spelling games, recordings.
Instructional methods	Spaced repetition, visual learning.
Mechanism of application:	Presentation of words with their spelling (10 minutes)./. Writing words from memory (15 minutes). Debugging (15 minutes)./Group review (5 minutes).
Session 6: Writing short meaningful sentences	
Objective	Formation of simple syntactically correct sentences.
Tools	Motivational photos, word cards, ready-made examples.
Instructional methods	Simulation, contextual learning.
Mechanism of application:	Show examples of simple sentences (10 minutes)/. Forming sentences from given words (15 minutes). Writing sentences of the student's creativity (15 minutes)./. Share sentences (5 minutes).
Session 7: Using basic punctuation	
Objective	Understand and use period, question mark, and comma.
Tools	Short texts, punctuation cards.
Instructional methods	Learning by doing, illustrative examples.
Mechanism of application:	. Explanation of punctuation (10 minutes) /. Apply to ready-made texts (15 minutes). Writing sentences using signs (15 minutes). /Group correction (5 minutes).
Session 8: Organizing ideas into one paragraph	
Objective	Arrange ideas into a cohesive paragraph.
Tools	Sequential images, idea diagrams.
Instructional methods	Mind maps, visual learning.
Mechanism of application:	Presentation of a structured paragraph (10 minutes). / Discuss the sequence of thoughts (10 minutes). Write a paragraph using pictures (20 minutes). / Read the paragraphs (5 minutes).
Session 9: Expressing emotions in writing	
Objective	Writing sentences that express personal feelings.
Tools	Feelings paintings, expressive drawings.
Instructional methods	Emotional learning, guided dialogue.
Mechanism of application:	. Discuss different feelings (10 minutes). / Writing sentences expressing their feelings (20 minutes). Sharing writings (10 minutes). / Enhancing engagement (5 minutes).
Session 10: Mid-program review and evaluation	
Objective	Evaluate progress and identify areas for improvement.
Tools	Quiz, evaluation questionnaire.
Instructional methods	Formative assessment, feedback.
Mechanism of application:	Apply a written test (20 minutes)/. Discuss the results with the children (15 minutes)./Setting new goals (10 minutes).
Session 11: Vocabulary enhancement	
Objective	Expand the linguistic corpus using new words in different contexts.
Tools	Word cards, pictures, illustrated dictionary.
Instructional methods	Active learning, visual interconnection.
Mechanism of application:	Showing new words with illustrations (10 minutes). / Forming sentences using new words (20 minutes).“ Guess the word” by Description (10 minutes). /Word review (5 minutes).
Session 12: Creative writing (Beginning, middle, end)	
Objective	Organize ideas into a short story with a beginning, middle, and end.
Tools	Sequential images, creative writing templates.
Instructional methods	Comics, learning by playing.
Mechanism of application:	Presenting a short story with analysis of its parts (10 minutes). / Write a story using the given pictures (20 minutes). Read and discuss stories (10 minutes). / Fostering creativity (5 minutes).
Session 13: Improving writing speed	
Objective	Increase typing speed while maintaining clarity.
Tools	Stopwatch, ruled papers, quick writing exercises.
Instructional methods	Guided repetition, positive reinforcement.
Mechanism of application:	. Fast writing practice for 5 minutes (10 minutes). /Gradually increase the duration with error correction (20 minutes). Simple written competition (10 minutes). /Progress assessment (5 minutes).
Session 14: Using adjectives in description	
Objective	Learn to use adjectives to describe people and objects.
Tools	Adjective cards, miscellaneous photos, short stories.
Instructional methods	Illustrative examples, active learning.
Mechanism of application:	Show examples of adjectives with their pronunciation (10 minutes)./Describe pictures using adjectives (20 minutes). Writing a descriptive paragraph (10 minutes)/.Share descriptions (5 minutes).
Session 15: Writing short messages (Friend, family)	
Objective	Learn to write personal messages in a structured way.
Tools	Sample letters, colored papers, ornamental pens.
Instructional methods	Simulation, social learning.

Mechanism of application:	. Presentation of the structure of the message (Greeting, content, conclusion) (10 minutes). /Write a letter to a friend or family member (20 minutes). Exchange of messages between students (10 minutes). / Discuss the importance of written communication (5 minutes).
Session 16: Written summary (Short texts)	
Objective	Learn how to summarize texts in a simplified manner.
Tools	Short texts, summary templates, colored pens.
Instructional methods	Fragmentation and synthesis, visual learning.
Mechanism of application:	Read a short text outlining the main ideas (10 minutes). / Write a summary using simple sentences (20 minutes). Compare and discuss summaries (10 minutes). / Enhance summarizing skill (5 minutes).
Session 17: Functional writing (Lists, instructions)	
Objective	Learn to write lists and instructions in a clear way.
Tools	Examples of lists (Purchases, tasks), activity cards.
Instructional methods	Learning by doing, simulation.
Mechanism of application:	1. Show examples of menus and instructions (10 minutes). 2. Write a shopping list or steps to do something (20 minutes). 3. Practical application of instructions (10 minutes). 4. Clarity assessment (5 minutes).
Session 18: Improving linearity and clarity	
Objective	Improved font clarity and aesthetics of writing.
Tools	Ruler papers, markers, line patterns.
Instructional methods	Iteration, modeling, visual reinforcement.
Mechanism of application:	Show ways to improve the line (10 minutes). /Written exercises on letters and words (20 minutes). Assessment of progress in clarity (10 minutes)/. Improvement bonus (5 minutes).
Session 19: Creative writing (Imagine a different ending to a story)	
Objective	Developing imagination and creativity by writing alternative endings to stories.
Tools	Short stories, storyboard.
Instructional methods	Brainstorming, creative learning.
Mechanism of application:	1. Read a story with a pause before the end (10 minutes). / Write an alternate ending (20 minutes). Share and discuss endings (10 minutes). / . Stimulating creativity (5 minutes).
Session 20: Comprehensive review and assessment of skills progress	
Objective	Assess development in writing skills after 20 sessions.
Tools	Written test, self-assessment questionnaire.
Instructional methods	Formative assessment, feedback.
Mechanism of application:	Apply a test that includes all acquired skills (25 minutes)./Discuss the results with the students (15 minutes). Setting goals for the next sessions (5 minutes).
Session 21: Writing a personal diary	
Objective	Learn to document everyday events in a personal style.
Tools	A diary, colored pens, selfies.
Instructional methods	Self-learning, free expression.
Mechanism of application:	. Discuss the importance of daily writing (10 minutes). / Write an event from today (20 minutes). Share some diaries (10 minutes)../Encourage continuity (5 minutes).
Session 22: Creative writing (Storyboard)	
Objective	Merge images with text to create a storyboard.
Tools	Drawings, colors, storyboards.
Instructional methods	Visual learning, artistic creativity.
Mechanism of application:	Model storyboard presentation (10 minutes)./. Drawing and writing a storyboard (20 minutes). . Presentation of stories (10 minutes). / Encouraging creativity (5 minutes).
Session 23: Celebrating achievements and final appraisal	
Objective	Celebrate progress and assess final skills.
Tools	Certificates of appreciation, final exam.
Instructional methods	Closing evaluation, positive reinforcement.
Mechanism of application:	Apply a final test (20 minutes). / Discussion of results (10 minutes). Delivery of certificates of appreciation (10 minutes). /Closing remarks and encouragement (5 minutes).