

# Remedial Writing Instruction for Primary School Students with Difficulties in Tamil Language

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## Abstract

Remedial writing instruction is part of a larger basic skills academic re-education program focused on students who did not benefit from conventional strategies or procedures.

The present study uses an exploratory-cum-one shot pre-test post-test non-experimental design comprising of non-equivalent groups for initial development and try-out of a need based remedial instruction program on 17 students from 5 government schools randomly identified as falling below a set cut-off score on a criterion referenced Tamil writing assessment device.

The 12-week teaching program spread across 36 sessions of 45-minute duration each for 3 days a week, was carried out using an assortment of individual as well as small group based strategies, techniques and activities drawn from several sources, but based on a discernible 4-tier interventional model. It involved (i) direct skills based instruction on identified individual skill deficits; (ii) teaching the generic structure, semantics, grammar and organization of writing; (iii) promoting self management strategies for writing; and, (iv) use of technology-assisted procedures for writing.

Results indicate the possibility of developing a comprehensive remedial teaching package program for improving Tamil writing in primary school children and demonstrates significant gains between their pre to post test writing scores ( $p < 0.001$ ). Admittedly, the rather inferior research design used in this study precludes sufficient external validity and wide spread applications of the results in classroom settings across the country. Nonetheless, it paves the way for a need to undertake more intensive, highly focused and case-controlled studies on writing intervention strategies on several other Indian languages for benefit of such students in our country.

## Introduction

Writing is an important foundation skill for success in school. It is a complex form of communication involving a process that covers organization and structuring of sentences,

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use of correct grammar, punctuations and spelling. As a skill to be mastered by every student, it involves handwriting or keyboarding when digital personal devices are used. Unfortunately, many students show difficulties in written language production. They may lack knowledge of the writing processes, employ deficient strategies for organization, planning, goal implementation and self-regulation (Grigorenko, Mambrino & Preiss, 2012).

Some common errors in writing seen in primary school children involve use of faulty grammar, inclusion of unwanted space between alphabets, words or sentences, illegible handwriting, letter-word substitutions, improper arrangement of letters or words, spelling mistakes, disproportional alignment of written matter, etc. (Harris, McKenzie, Fitzsimmons & Turbill, 2009; Boscolo, 2008; Liow & Lee, 2004). Suat (2008) classified writing errors of young children as grammatical and semantic errors. Examples of grammatical errors are missing subject, active-passive disagreement among verbs, missing adverbial clause of place, etc. Semantic errors are in the form of use of unnecessary, conflicting or confusing words, using incorrect idioms and proverbs etc.

Although assessment, identification and listing of writing errors for a particular language in primary school children constitutes an independent ongoing area of research, simultaneous work on evolving remedial writing teaching techniques is also a growing concern. There are several well prepared and copyrighted 'remedial writing instruction programs' available (Taft & Mason, 2010; Tandy & Howell, 2008; Graham & Harris, 1999). In a related study, writing intervention strategies of instruction, summarization, peer assistance, setting product goals, word processing, sentence combining, inquiry, pre-writing activities, process writing approach, study of models and grammar instruction were used on young school children with some measure of success (Graham & Perin, 2007). Graham, Harris & Larsen (2001) highlighted six principles to be considered when planning, preparing and programming for remedial writing instruction. They are: (a) providing effective writing instruction; (b) tailoring instructions to meet individual needs; (c) intervening early; (d) expecting that each child will learn to write; (e) identifying and addressing roadblocks to writing; and, (f) employing technologies.

## **Indian Studies**

In the Indian scene, some researchers have targeted the natural writing errors in native children in their own languages or in English as second language (Paparagudu, 2006; Venkatesha, 2005; Hegde, 1998; Thimmappa, 1998). There are hardly studies on writing remediation. By following trends in the west (Jeong-Bae, 2008; Warschauer & Healey, 1998), Shamir & Johnson (2012) used 'Computer Assisted Language Learning' (CALL) techniques for teaching 'English as Foreign Language' (EFL) or 'English as Second Language' (ESL) for school students with some measure of success. Another approach tried by Das (2002) successfully used 'Mastery Learning Strategies' (MSL) (Bloom, 1976) by providing corrective feedback information and promoting writing in children. The specific techniques envisaged in this program for achieving optimum writing

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effectiveness (Kulik, Kulik & Bangert-Downs, 1990) include group study, tutorial help, text books, workbooks and programmed instruction, audiovisual methods and academic games. Raghavan (2001) developed a remedial instruction program to target spelling mistakes, illegible hand writing, irregular slant, proportion, alignment and forms of letters among normal as well as children with writing problems. Others have used assistive technology (Reddy et al. 2001), models and examples (Naik, 1999), multimedia based modular approaches (Reddy, Lokanatha & Ramar, 1998), stop-start strategies (Prasad, 1997), teaching aids (Sharma, 1997), concept attainment models (Srivastava, 1996) and/or Programmed Instruction Materials (Bhatia & Kusum, 1995) in varying combinations to achieve different levels or degrees of success with assorted groups of children.

### **Study on Tamil**

Notwithstanding all these, research exploration pertaining to writing Tamil by children from primary school grades is not yet begun in the Indian scenario. Further, a comprehensive package of remedial writing instruction is unavailable. In the background of these facts and spurred on by the need, rationale and justification emerging thereof, the present study was undertaken with the aim:

- (i) to develop a comprehensive remedial teaching package program for improving Tamil writing in primary school children.
- (ii) to evaluate the efficacy of the developed remedial teaching package program for improving Tamil writing on a select sample of primary school children.

### **Method**

The present study makes a combined use of an exploratory-cum one shot pre-test post-test non-experimental design comprising of non-equivalent groups.

#### **(a) *Operational Definitions***

The key term used in this study is remedial teaching package program intended for improving Tamil writing in primary school children. Remedial writing instruction forms part of a larger basic skills academic re-education program focused on students who did not benefit from conventional pedagogical assistance, strategies or procedures. A small group of children in every class are unlikely to benefit from regular modes or content of instruction targeted toward the whole class. Hence, they may require an additional level-appropriate developmental education, basic skills education, compensatory education, or academic upgrading before addressing the sequences of an increasingly advanced course content to realize their level of full competency. Such strategies and procedures need to be characteristically individualized or carried out in small groups. It should be made

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systematic, sequential, customized, purposeful, procedural, flexible, matched to learner speed, activity based, cost effective and eliminative of barriers in terms of time and space. There is a clear distinction to be made between remedial teaching and coaching, as the latter involves a repetition of lessons already offered before (re-teaching).

**(b) Procedure**

The study was completed in two phases. Based on an exhaustive review of literature, a comprehensive catalog of available writing remediation strategies, techniques, procedures, aids and activities was prepared in first phase. Following this exercise and based on factors like convenience, economy of time, portability, availability and urgency, a short listed pragmatic remedial teaching package for improving Tamil writing on a select sample of primary school children was deduced for final try-out and field testing.

In the second phase, field testing or final try-out of the developed remedial teaching package for improving Tamil writing was carried out by recruiting 17 subjects for the experimental sample by roping students in class, three under five government schools in Coimbatore, Tamil Nadu, from those falling below a set cut-off score of 4 out of 40 (10 %) on a criterion referenced 'Tamil Writing Assessment Device' (TWAD) exclusively developed for this purpose. This need-based diagnostic device comprising of test items was drawn from the text books in Tamil language for class one in primary schools prescribed by the Government of Tamil Nadu. The FIVE competency areas covered for assessment in this tool were: (a) Completion of Vowel and Consonant Sequences; (b) Formation of words which begin with given letter; (c) Making meaningful words; d) Supplying required personal information; and, (e) Construction of sentence. Recording of observed reactions and parent ratings were carried out with prior permission, informed consent and open knowledge of the respondents by respecting the ethical issues and guidelines as enshrined in official documents for such practices. The details of sample selection and characteristics are given in Tables 1 & 2. **Please see at the end of the paper.**

**(c) Tools**

The data collection instruments used in this study included (a) Demographic Data Form; (b) Tamil Writing Assessment Device; (c) Teacher Interview Format; (d) Student Records; (e) Direct Observation; and (f) Writing Evaluation Scale.

The *Demographic Data Form* was prepared to collect details on or about the child and teacher participants in the study including their personal information, school and home. The *Tamil Writing Assessment Device* was essentially a criterion referenced tool to ensure recruitment of subjects into the treatment group. A 2-week test-retest reliability check exercise for this tool on a sample of 20 students measured a co-efficient ratio of  $r: 0.921$ .

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The *Teacher Interview Format* was essentially an open ended discussion arrangement to elicit suggestions from teacher educators, text book writers and teaching faculty at the District Institute of Education and Training, Coimbatore, on the possible remedial techniques, activities or teaching aids that can be put into use for enhancing Tamil writing competencies in the affected children.

Additionally, *Student Records* in the form of examination scripts, copywriting, black board copying, submitted assignments, and home assignment work books, formal or informal class tests were perused, both, before and after the intervention program. Further, *Direct Observation Techniques* were also used to enlist the pre-test, post-test common writing errors committed by the students in the experimental group. Eventually, a formal *Writing Evaluation Scale*, another need-based summarizing instrument was developed and used for listing the various types and/or frequency of the observed writing errors. The pre and post therapy errors were eventually subjected to statistical analysis in terms of frequency counts and percentages.

#### (d) *Remedial Writing Instruction Program*

Broadly, the remedial writing instruction program envisaged in this study can be conceptualized as a four tier model focusing on (i) direct skills based instruction, based on identified individual skill deficits; (ii) teaching the generic structure, semantics, grammar and organization of writing; (iii) promoting self awareness strategies for writing; and, (iv) use of technology assisted writing procedures. While many institutions offer writing intervention programs; they seldom encompass or provide opportunity by genuinely addressing all these four needed aspects to maximally exploit the true potential of individual children with such problems. The overall long term goal for any such program must be to teach the student to internalize what is being taught and reach a level of independent mastery. The locus of control should not and cannot be an externally school or teacher driven, but an internal self-driven child controlled activity.

The first tier of the intervention program used in this study drawn from several sources (Boyle & Scanlon, 2010; Chapman & King, 2006; Graham, 2006; Berninger, Mizokawa & Bragg, 1991) recognizes that there are *idiosyncratic individualized writing skill sets* unique to each child that need to be explicitly identified, addressed and directly corrected. For example, there are recognizable visual, auditory, kinesthetic or tactile learners which have to be used for individual learners. Likewise, there are learners who process information sequentially while others do it simultaneously. The sequential learner progresses well if the teaching or learning units for writing are arranged as micro units successively, and presented to the student. A mismatch between learner preferences and the teaching strategy has often become the source leading to poor learning in students (Graham et al. 2012).

In the ongoing school curriculum systems in our country, there are discrete and often demarcated compartments of reading-writing activities. For example, the language

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teacher or curriculum stands alone and apart from the science teacher in owing responsibility for improving the students writing competencies. In actuality, this can be never so. The science teacher can and must incorporate the study of morphology into science lessons or can and must apply syllable division rules and phonetic analysis to help students decode a vocabulary word in science class. As students appreciate the connectedness of specific isolated skills to content areas across subjects, the remediation process becomes increasingly meaningful and more easily internalized.

The second tier involved procedures for *teaching a structure to organize, retain, comprehend and express information*. The aspects of writing that get under this category include handwriting, spelling, punctuations, text structure, sentence cohesion or structure and vocabulary. For example, one research-proven structure is for students to use a graphic organizer to take notes or as a pre-writing step to organize an essay. It helps students understand how they learn and what tools they can use to maximize their strengths to compensate for their weaknesses. The third tier includes the inculcating of *self awareness and use of self regulation strategies* as exemplified by the ‘Self Regulated Strategy Development’ (Lane et al. 2008; 2009; Graham & Harris, 2000; Englert, et al. 1991).

In actuality, the three tiers are interconnected and overlapping. For example, students with significant fine motor deficits can be negatively affected in their written output. Similarly, the student needs to have an awareness of when and how s/he can bypass a strategy. The last tier is to focus on use of *technology assisted procedures*, such as, word processors, palm tops, digital personal devices, keyboarding, computer aided spell check programs, word prediction programs, grammar and style checkers, multimedia applications, power point presentations, voice activated programs, speech synthesizers and voice recorders. An assortment of remedial writing instruction techniques, aids and activities drawn from several sources is given (Table 4). **Please see below at the end of the paper.**

The remedial writing instruction program in this study was implemented by the first investigator over a period of 12-weeks spread across 36 sessions of 45-minute duration each for 3 days a week. The sessions were conducted based on individual as well as small group activities. The ground level *strategies* covered the use of enriched environmental stimulation through providing ample opportunities for writing, daily record keeping and creating a literate classroom atmosphere. Among the *techniques* used as part of this program were reinforcement, group discussion, guided practice, activity scheduling, home assignments, brain storming, and management through self observation, self recording or self instruction. More specifically, related *activities* included writing readiness exercises, air writing, grip or grasp training, posture training, writing to dictation, copying geometric shapes, written text from board or computer screen, tracing, cutting, pasting, poster preparation and displays. The various *teaching aids* used during the remedial writing instruction program included the use of ergonomically designed

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grippers, black boards, processors, voice recorders, word or spelling lists, dictionaries, pictionaries and thesaurus, pens, pencils, paint materials, crayons, etc (Table 4).

## Results & Discussion

The results of ground level experience gathered in this study suggest the possibility for developing a comprehensive remedial teaching package program for improving Tamil writing in primary school children. The tentative indications are that the program must be envisaged as falling under the discussed FOUR tiers covering FOUR components, viz., strategies, techniques, activities and teaching aids. The goal must be to view writing as a process involving development of self awareness. It must attempt to incorporate teaching aids or preferably the contemporary digital paraphernalia for fostering writing competencies for young children. Results on evaluation of the remedial writing instruction program evidenced significant gains in the measured pre and post test writing raw scores as well as percentage scores of children in the experimental group (T: 3.833; Df: 31; SED: 1.539; p: <0.001). Although, admittedly, the present study has made use of a rather inferior research design which precludes sufficient external validity and generalization of its efficacy in classroom settings across the country, it paves way for the need to undertake more intensive, highly focused and case controlled studies on writing intervention strategies on Indian languages for the benefit of such students in our country.

The comprehensive listing of an assortment of remedial writing instruction techniques, aids and activities involving provisions for *plentiful opportunities for writing and a literate classroom atmosphere* by means of activities like journal keeping, generating stories based on personal experiences and writing reports for sharing in collaboration with one another have been severally emphasized (Behrman, 2002). Additionally, techniques like *teacher modeling, peer group teaching, discussion and guided practice*, providing temporary supports that help scaffolding their learning to write, using word banks, spelling lists, pictionaries and planning sheets as incorporated in this study are reaffirmed. The interventional setting allowing participants to engage in brainstorming, talk with one other about what they were doing and share their writings in the class either orally or through their written materials is an evocative strategy. Wherever necessary, it is recognized by this study that information has to be supplemented by use of conventional skills instruction, providing *personalized one-to-one assistance* explicitly and systematically for students who need to be taught phonemic awareness, semantic webbing, generating and organizing writing content using text structure (story, grammar), spelling, and phonics skills (Gipps, Mc Callum & Hargreaves, 2000).

The student's written works being prominently displayed, the classroom walls being adorned with word lists and packed with lots of reading-writing materials has proved to be a useful adjunct. Further, home assignments on writing were given, a *non-threatening parent-teacher conference* held periodically to discuss the writing difficulties experienced by the children. Of course, handwriting was also given attention with stress on punctuation

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and spacing between words, paragraphs and text (Berninger et al. 1997). Adopting few strategies advocated under ‘Self-Regulated Strategy Development Model’ (Harris & Graham, 1996), an important ingredient in this remedial writing program was the use of *self-management techniques*, such as, self-instructions, goal setting, self-observation, self-monitoring, self-recording, self-reinforcement and self-evaluation (Englert, et al. 1991). Self-management techniques facilitate independence by systematically fading reliance on external controls like instruction, feedback or praise through shifting control to the child (Smith & Fowler, 1984). Self-management is defined herein as ‘the personal and systematic applications of behavior change strategies that result in the desired modification of one’s own behavior’ (Cooper, Heron & Heward, 1987, p. 517). Research has shown that changes in behaviors achieved through self-management training are maintained over periods of time and across instructional settings even when there are no trained service providers (Gardner et al. 1983).

Although not used extensively in this study, the *use of technological tools* for writing, such as, word processors, palm tops, digital personal devices, keyboarding skills, computer aided spelling check programs, word prediction programs, grammar and style checkers, multimedia applications, power point presentations, voice activated programs, speech synthesizers and voice recorders have been severally recommended (King, 2005; MacArthur, 1999; 1996; Graham & MacArthur, 1988). Such devices help students in doing away with tedium of recopying, enable them to display their writing on screen in a wide range of fonts, sizes and formats while their typing provide them an interesting alternative option to use their fine motor skills (Bangert-Downs, 1993).

However, *idiosyncratic remediation strategies* for few children with particular written language problems were given by way of writing readiness exercises, air writing, use of the vertical plane (chalkboard), simultaneous verbal cues, reinforcement with tactile input, instructions and practice using appropriate pencil grip, formation of symbol skills, copying of geometric shapes, practice to increase fluency and direct instruction to improve writing organization. Writing was rehearsed as a process with communicative intent involving planning, drafting, revision, and editing for the reader as an audience. Emphasis was placed on short assignments, with minimum stress on speed or time, grading for content of work and then on quality, avoiding negative reinforcement, using oral exams and allowing oral presentations from the student, and giving tests in untimed conditions. *Reward rather than punishment techniques* like impositions for faulty spelling or staying after class hours were preferred and implemented throughout the program. On the whole, the tenor for implementation of this writing remediation program was success oriented than inducing failures or fear of success (Graham & Harris, 1994; 1988).

*Compensatory mechanisms* were used by way of task analysis, task slicing, or dividing the writing task into smaller units and performing each subtask independently. This helped students from being intimidated by the prospect of having to write large texts or passages. Several copying activities in this writing remediation program covered copying

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from one book to another, copying print or non-print materials, copying on a board or from board to book. Both, ruled and un-ruled paper were used although the format for writing was left optional - the one most comfortable for a given student. Of course, as in English, there is no cursive format in Tamil. *Notes taking* activities were regularly practiced since many were found to be slow and inefficient in that task. A special focus was paid to *spelling learning and correction strategies*. Even if these pupils spell correctly on a weekly spelling test, they falter during a composition wherein they may simplify their word usage. They need to be taught on how to pre-organize before writing (or typing) a draft. Another step would be to go back and work on fixing misspelled words. Many times, the spell checker on a computer may not help the student because the misspelled word is not close enough to the correct one. In such situations, they were taught to develop strong phonetic analysis skills to spell words phonetically or according to their sound (Jones & Christensen, 1999).

A common complaint of the students was that their hand gets tired when writing. This was noticed to be due to a variety of factors, such as, inappropriate grip, tight pencil grip or inefficient tripod hold or sitting writing posture. In few cases, ergonomically efficient grippers had to be supplied to enhance their efficiency of pencil grasp. In two cases with writer's cramp, *behavior therapy techniques* based on supinated writing combined with local muscle relaxation procedures was used although they were excluded from the final sample. However, in general, activities to help the student manipulate and relax muscles in the writing hand were routinely practiced, such as, rubbing palms of hands together, shaking hands slightly though firmly or clasping hands together and stretching upwards. The initial stress on writing for such children were on content and mechanics of writing rather than quality or neatness, since many of them could not simultaneously work or focus on both (Richards, 2005).

In sum, teaching students with writing difficulties is a complex activity. There can be no single program to address the needs of all students. It can and must vary according to their age, grade, developmental levels as well as the language under focus for a given child or groups of children. Even as this study has explored the possibility of developing a comprehensive remedial teaching package program for improving Tamil writing in primary school children, it paves way for a need to undertake more intensive, highly focused and case controlled studies on writing intervention strategies on several other Indian languages for the benefit of such students in our country. Effective teaching for writing requires specific training and the knowledge to integrate elements of varying programs to build an educational intervention package that is most appropriate for an individual student. As teachers, one should never lose sight of the end goal: to empower young children with writing skills and strategies to function independently in the world and to be happy, productive members of society.

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**References**

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Bangert-Downs, R.L. (1993). The word processor as an instructional tool: A meta-analysis of word processing in writing instruction. *Review of Educational Research*, 63(1): 69-93.

Behrman, C.H. (2002). Write! Write! Write! Ready-to-use writing process activities for grades 4 - 8. Hoboken, NJ: Jossey-Bass.

Berninger, V., Mizokawa, D., & Bragg, R. (1991). Theory-based diagnosis and remediation of writing disabilities. *Journal of School Psychology*, 29: 57-97.

Berninger, V., Vaughn, K., Abbott, R., Abbott, S., Rogan, L. Brooks, A., Reed, E., &

Graham, S. (1997). Treatment of handwriting problems in beginning writers: Transfer from handwriting to composition. *Journal of Educational Psychology*, 89: 652-666.

Bhatia, C.J., & Kusum., R. (1995). Identification and remedy of difficulties in learning fractions with programmed instruction material. *Journal of Indian Psychological Abstracts and Reviews*, 2(1): 137.

Bloom, B.S. (1976). Learning for mastery. University of California, Los Angeles: Center for the Study of Evaluation of Instructional Programs, 1&2: 1-10.

Boscolo, P. (2008). Writing in primary school. In C. Bazerman. (Ed.). *Handbook of research on writing: History, society, school, individual text*. New York: Lawrence Erlbaum Associates

Boyle, J., & Scanlon, D. (2010). Written language: strategies and techniques. Chapter 7. In *Methods and strategies for teaching students with mild disabilities*. Beaumont, CA: Wadsworth Cengage Learning. Pp. 221-256.

Chapman, C., & King, R. (2006). *Differentiated instructional strategies for writing in the content areas*. California: Sage.

Cooper, J.O., Heron, T.E., & Heward, W.L. (1987). *Applied behavior analysis*. New York: Macmillan.

Das, P. (2002). Slow learners: their identification and remediation. *Journal of Indian Psychological Abstracts and Reviews*, 9(2): 367-368.

Englert, C., Raphael, I, Anderson, L., Anthony, H., Stevens, D., & Fear, K. (1991). Making writing and self-talk visible: Cognitive strategy instruction writing in regular and special education classrooms. *American Educational Research Journal*, 28: 337-373.

Englert, C., Raphael, I, Fear, K., & Anderson, L. (1988). Students' meta-cognitive knowledge about how to write informational texts. *Learning Disability Quarterly*, 11: 18-46.

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- Gardner, W., Berry, D., Cole, C., & Nowinski, J. (1983). Reduction in disruptive behaviors in mentally retarded adults: A self management approach. *Behavior Modification, 7*: 76-96.
- Gipps, C., McCallum, B., & Hargreaves, E. (2000). *What makes a good primary school teacher? Expert classroom strategies*. London: Routledge.
- Graham, S. (2006). Strategy instruction and teaching of writing: A meta-analysis. In C.A. MacArthur, S. Graham, & J. Fitzgerald. (Eds.). *Handbook of writing research*. New York: The Guilford Press. Pp. 187-213.
- Graham, S., & Harris, K. R. (1988). Instructional recommendations for teaching writing to exceptional students. *Exceptional Children, 54*: 506- 512.
- Graham, S., & Harris, K. R. (1994). Implications of constructivism for teaching writing to students with special needs. *Journal of Special Education, 28*: 275-289.
- Graham, S., & Harris, K. R. (1996). Self-regulation and strategy instruction for students who find writing and learning challenging. In M. Levy & S. Ransdell (Eds.). *The science of writing: theories, methods, individual differences, and applications*. Mahwah, NJ: Erlbaum. Pp. 347-360.
- Graham, S., & Harris, K.R. (2000). The road less traveled: prevention and intervention in written language. In K. Butler & E. Silliman (Eds.), *The language learning disabilities continuum: Integration of research, technology and education*. Mahwah, NJ: Erlbaum.
- Graham, S., & Harris, K. R. (2000). The role of self-regulation and transcription skills in writing and writing development. *Educational Psychologist, 35*: 3-12.
- Graham, S., & Harris, K.R. (1999). Assessment and intervention in overcoming writing difficulties: An illustration from the self regulated strategy development model. *Language, Speech, and Hearing Services in Schools, 30*: 255-264.
- Graham, S., & MacArthur, C. (1988). Improving learning disabled students' skills at revising essays produced on a word processor: Self-Instructional strategy training. *Journal of Special Education, 22*: 133-152.
- Graham, S., Bollinger, A., Olson, C.B., D'Aoust, C., MacArthur, C., McCutchen, D., & Olinghouse, N. (2012). *Teaching elementary school students to be effective writers: A practice guide on what works*. Princeton, NJ: Clearinghouse.

Graham, S., Harris, K.R., & Larsen, L. (2001) Prevention and intervention of writing difficulties for students with learning disabilities. *University of Maryland Learning Disabilities Research and Practice*, 16(2): 74-84.

Grigorenko, E.L., Mambrino, E., & Preiss, D.D. (Eds.). (2012). *Writing: a mosaic of new perspectives*. Florence, KY: Psychology Press.

Harris, P., McKenzie, B., Fitzsimmons, P., & Turbill, J. (2009). *Writing in the primary school* Melbourne: Social Science Press.

Hegde (1998). *Writing difficulties among primary school children in Kannada language*. Unpublished M.Ed Dissertation submitted to University of Mysore, Mysore.

Jeong-Bae, S. (2008). Using web-based language learning activities in the ESL classroom. *International Journal of Pedagogies and Learning*, 4: 34-43.

Jones, D., & Christensen, C. (1999). The relationship between automaticity in handwriting and students' ability to generate written text. *Journal of Educational Psychology*, 91: 44-49.

King, D.H. (2005). *Keyboarding skills*. Cambridge, MA: Educators Publishing Service.

Kulik, C.L.C., Kulik, J.A., & Bangert-Downs, R.L. (1990). Effectiveness of mastery learning programs: A meta-analysis. *Review of Educational Research*, 60(2): 265-299.

Lane, K.L., Graham, S., Harris, K.R., Little, M.A., Sandmel, K., & Brindle, M. (2009). Story writing: the effects of self-regulated strategy development for second-grade students with writing and behavioral difficulties. *The Journal of Special Education*. 44 (2): 107-128.

Lane, K.L., Harris, K.R., Graham, S., Weisenbach, J.L., Brindle, M., & Morphy, P. (2008). The effects of self-regulated strategy development on the writing performance of second-grade students with behavioral and writing difficulties. *The Journal of Special Education*. 41 (4): 234-253.

Liow, S.J.R., & Lee, L.C. (2004). Meta-linguistic awareness and semi syllabic scripts: children's spelling errors in May. *Reading and Writing*. 17(1-2): 7-26.

MacArthur, C. (1996). Using technology to enhance the writing performance of students with learning disabilities. *Journal of Learning Disabilities*, 29: 344-354.

MacArthur, C. (1999). Overcoming barriers to writing: Computer support for basic writing skills. *Reading & Writing Quarterly*, 15: 169-192.

**Language in India** [www.languageinindia.com](http://www.languageinindia.com) ISSN 1930-2940 13:6 June 2013

K. Ranganathan, M.Ed., Ph.D. Research Scholar, K. Anil Kumar, Ph.D. and S. Venkatesan, Ph.D.

Remedial Writing Instruction for Primary School Students with Difficulties in Tamil Language

- Naik, A.K. (1999). Concept learning in primary grade. *Journal of Indian Psychological Abstracts and Reviews*, 6(1): 134.
- Paparayudu, S. (2006). *An Analysis of writing difficulties of IV standard children in Telugu Language of Prakasam District, Andhra Pradesh*. Unpublished M.Ed Dissertation submitted to University of Mysore, Mysore.
- Prasad, S. (1997). Stop strategy of language cueing for learning disabled children. *Journal of Indian Psychological Abstracts and Reviews*, 4(1): 139.
- Reddy, G. Lokanatha, G., Kusuma, A., & Jayaprabha, R. (2001). Assistive technology to overcome learning difficulties in children. *Journal of Indian Psychological Abstracts and Reviews*, 8(1): 177 & 178.
- Reddy, G., Lokanatha G., & Ramar, R. (1998). Effectiveness of multimedia based modular approach in teaching English to slow learners. *Journal of Indian Psychological Abstracts and Reviews*, 5(2): 350.
- Richards, R.G. (2005). *When writing's a problem: understanding dysgraphia & helpful hints for reluctant writers*. Riverside, CA; RET Center Press.
- Shamir, H., & Johnson, E.P. (2012). The effectiveness of computer-based EFL instruction among primary school students in Israel. *Journal of Educational Media International*, 49(1): 49-61.
- Sharma, G. (1996). Development of educational remedial program for specific learning disabilities in Telugu. *Journal of Indian Psychological Abstracts and Reviews*, 3(1): 137-138.
- Srivastava, Y.V. (1996). Efficacy of concept attainment model in the teaching of English grammar. *Journal of Indian Psychological Abstracts and Reviews*, 3(1): 141.
- Smith, L., & Fowler, S. (1984). Positive peer pressure: the effects of peer monitoring on children's disruptive behavior. *Journal of Applied Behavior Analysis*. 17: 213-227.
- Taft, R.J., & Mason, L.H. (2010). Examining effects of writing interventions highlighting results for students with primary disabilities other than learning disabilities. *Remedial and Special Education*, 32 (5): 359-370.
- Tandy, M., & Howell, J. (2008). *Creative writers in the primary classroom: Practical approaches to inspire teachers and their pupils*. Oxon: Routledge.

**Language in India** [www.languageinindia.com](http://www.languageinindia.com) ISSN 1930-2940 13:6 June 2013

K. Ranganathan, M.Ed., Ph.D. Research Scholar, K. Anil Kumar, Ph.D. and S. Venkatesan, Ph.D.

Remedial Writing Instruction for Primary School Students with Difficulties in Tamil Language

Thimmappa, L. (1998). *An analysis of writing difficulties among primary school children in Kannada language*. Unpublished M.Ed Dissertation submitted to University of Mysore, Mysore.

Venkatesha, M. (2005). *An analysis of writing difficulties of IV standard children in Kannada language of Koppal district*. Unpublished M.Ed Dissertation submitted to University of Mysore, Mysore.

Warschauer, M., & Healey, D. (1998). Computers and language learning: an overview. *Language Teaching*, 31: 57-71. .

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**Table 1: Details of the Schools & Sample**

<i>SNo</i>	<i>School</i>	<i>Student Strength</i>	<i>Present</i>	<i>Absent</i>	<i>CWSN</i>	<i>Intervention Cases</i>
1.	1	39	33	6	0	5
2.	2	25	19	6	0	5
3.	3	35	31	4	0	2
4.	4	16	11	5	1 (P.H)	1
5.	5	18	12	6	1 (M.R)	4
	<b>Total</b>	<b>133</b>	<b>106</b>	<b>27</b>	<b>2</b>	<b>17</b>

**Table 2: Details of 3<sup>rd</sup> standard falling under critical scores**

<i>SNo</i>	<i>School</i>	<i>Standard</i>	<i>Boys</i>	<i>Girls</i>	<i>Total</i>	<i>Rural / Urban</i>
1.	1	3	5	0	5	Rural
2.	2	3	3	2	5	Rural
3.	3	3	2	0	2	Rural
4.	4	3	1	0	1	Rural
5.	5	3	4	0	4	Rural
	<b>Total</b>		<b>15</b>	<b>2</b>	<b>17</b>	

**Table 3: Pre and Post Test Writing Individual Scores for Interventional Group**

<i>Student Code</i>	<i>Scores</i>		<i>Percentage</i>		<i>Improvement Percent</i>
	<i>Pre-Test</i>	<i>Post-Test</i>	<i>Pre-Test</i>	<i>Post-Test</i>	
1	3	12	7.5	30	22.512
2	0	5	0	12.5	12.55
3	2	4	5	10	54
4	2	1	5	2.5	2.51↓
5	1	4	2.5	10	7.45
6	3	13	7.5	32.5	2135
7	1	4	2.5	10	7.45
8	0	4	0	10	140
9	2	8	5	20	15
10	1	8	2.5	20	17.5
11	3	27	7.5	67.5	60
12	4	5	10	12.5	2.5
13	2	3	5	7.5	2.5
14	0	9	0	22.5	22.5
15	0	7	0	17.5	17.5
16	0	3	0	7.5	7.5
17	0	4	0	10	10
<i>Total</i>	24	121	-	-	-
<i>Mean</i>	1.41	7.31	-	-	-
<i>SD</i>	1.33	6.20	-	-	-
<b>Total</b>	<b>17 Students in below 10% group on Standard I Diagnostic Test</b>				

(Unpaired T Test: 3.833; df: 31; SED: 1.539; p: 0.0006)



**Table 4: Assortment of Remedial Writing Instruction Strategies, Techniques, Aids & Activities**

<b>Snos</b>	<b>Domain</b>	<b>Strategies</b>	<b>Techniques</b>	<b>Aids &amp; Activities</b>
1.	<b>Individual Related</b>	Enriched Environment Stimulation	Opportunity Training	Record keeping & diary writing
			Creating a literate classroom atmosphere	Setting classroom library
			Journal Keeping	Hanging spelling lists
		Ensuing Writing Readiness	Training on Prewriting Skills	Cutting, Pasting & Origami
			Guided Practice	Air Writing
			Prehension/Grasp Training	Board Writing, Use of Ergonomically Designed Grippers
			Supinated Writing	Hand-Wrist Exercises, Grasp-Grip Exercises & Posture Training
		Imitation	Teacher Modeling	Copying Geometric Shapes, 3-Dimensional Figures
			Peer Group Teaching	Tracing & Shadowing
		Foster Creativity	Brain Storming	Story writing
			Group Discussion	Designing picture dictionaries, posters & displays
			Word building & Scrabble games	Drawing Non-print Symbols
			Solving cross word puzzles	Free-Hand Drawing
			Spell checkers, Dictionary search Thesaurus Use	Preparing word bank & work sheets
		Operant Conditioning	Rehearsal, Reinforcement, Task Analysis,	Home Assignments
			Prompting (Physical-Verbal), Fading	
			Activity Scheduling, Cueing	
2.	<b>Writing Related</b>	Dictation	Phonemic Awareness	Phoneme-Grapheme Correspondence
		Copying Text from Board/Computer Screen	Semantic Webbing	Correct Spelling Recognition

		<i>Peer Group Correction</i>	<i>Grammar Correction</i>	<i>Paragraphing</i>
		<i>Paraphrasing</i>	<i>Spelling Learning</i>	<i>Notes Taking</i>
		<i>Drafting</i>	<i>Phonic Skills</i>	<i>Summarization</i>
		<i>Revising</i>	<i>Calligraphy</i>	<i>Cursive Writing</i>
		<i>Editing</i>	<i>Punctuation</i>	<i>Spacing (between words, paragraphs &amp; text)</i>
3.	<b><i>Self Management</i></b>	<i>Self Reinforcement</i>	<i>Self instruction</i>	<i>Relaxation Training</i>
		<i>Self Observation</i>	<i>Goal setting</i>	<i>Palm-Finger Muscle Relaxation</i>
		<i>Self evaluation</i>	<i>Self monitoring</i>	<i>Feedback</i>
		<i>Self Assessment</i>	<i>Self recording</i>	<i>Non threatening Parent Teacher Conferences</i>
4.	<b><i>Technology Assisted</i></b>	<i>Keyboarding</i>	<i>Word Processing</i>	<i>Palmtops &amp; Laptops, Multimedia, Power point preparations</i>
		<i>Browsing</i>		<i>Internet use</i>
		<i>Software or Hardware Assisted</i>	<i>Digital Personal Devices</i>	<i>Voice activated programs, Speech synthesizers</i>
				<i>Word prediction programs, Grammar checkers, Voice recorders</i>

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