

# **Improving the Writing Scores of At-Risk Students through Arts-based Instruction**

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## **Abstract**

Since the early 1980s the need to improve the writing skills of our children has come to the forefront of education and public interest. As our society has changed, so too should our approach to literacy instruction. One method which has consistently shown positive results is the introduction of arts-based methods of instruction. The sample consisted of seventh and eighth grade at-risk students who were enrolled in a two week summer remediation program. The focus of the study was on writing and instruction was delivered from an arts-based perspective. The writings for the course included a personal resume and short biography, a script for a commercial, and a culminating presentation of their marketing plan using PowerPoint. Students were given a pretest and posttest writing sample which was scored using a 4x4 rubric which included reasoning, communication, organization, and conventions. A fifth variable, word count was also examined. Through the incorporation of visual arts, music, and drama students were engaged in the learning which resulted improvement in all areas.

## **Introduction**

Summer school programs have traditionally been focused on students who have either not been successful during the regular school year or who have been identified as at risk of dropping out. The problem with this approach however, is that the method of teaching used throughout the summer program rarely, if ever, varies from the models that were used during the regular school year. As a result students who attend often do so begrudgingly because they see it more as a punishment than an opportunity to succeed. Many students struggle with particular subjects because of an unclear understanding not necessarily of the content itself but of the language associated with it. All too often key vocabulary

is taught independent of context in which it is normally found and by removing words from their context, we remove their meaning. The study focused on an arts-based program that was developed by the researchers in concert with school board representatives and the instructors who would be implementing the summer program. The question upon which the research was focused was whether students who have been taught using an art-based literacy program show any improvement in writing skills?

### **Review of the Literature**

#### *The Context of Balanced Literacy*

The uniqueness of the arts is found not in the individual techniques or fundamental elements that pertain to specific disciplines, but rather in the cohesive focus of the arts on both meaning and significance. The danger of perverting the perspective from which the arts are viewed is exemplified by the study of art solely as an historical medium through which customs, dress, behavior, social unrest, or decorum etc., are fossilized. Although one cannot deny the contribution of various art forms as providers of necessary contexts from which historians may accurately recount events, one must not overlook that art, in any form, possesses the distinct ability to contextualize thought (Gardner, 1983, Langer, 1953).

An understanding of the problem that exists in the transference of thought to word was integral to Vygotsky's (1987) analysis of the connection between

thinking and speech. His main concern stems from the belief that the mental functions are constant and unvarying with regard to the relationship between perception and attention, memory and perception, and thought and memory. Misunderstanding with respect to these mental functions remaining constant rather than pliable have consistently led to the relationship of thought and word being overlooked. Attempts to resolve the problem have resulted either in what Vygotsky referred to as identification (i.e., complete fusion of thought and word), or a severance of the two. The notion that research could vacillate between Vygotsky's beliefs and what he saw as a misrepresentation of the thought-language relationship in the hope of somehow finding a logical compromise has been exacerbated. To Vygotsky, thought was based on language thereby accentuating the importance of words. In order to facilitate the understanding of words in Vygotsky's perspective, pragmatists encouraged integration and cross-curricular teaching and learning practices by suggesting that language be contextualized in culture. In order to derive meaning from the word, pragmatists believe that it must be couched in context and that it is from the experience of the context that meaning is derived.

No where has this been more apparent than in literacy; in the "good old days," hailed by many reformists as the golden age of learning, educators approached literacy from a behaviorist perspective which found its roots in an atomistic theory of learning (Miller, 1993). Literacy, like all other important content curriculum, was compartmentalized into spelling, grammar, reading, and writing; all were taught

independent of one another. This approach went hand in hand with rote learning methodologies which focused on recitation and memory. According to Cheyney and Cohen (1999) this was not successful because “...to effectively acquire, store, and retrieve new knowledge such as reading skills, the learner must first have a purpose for learning it, be provided with many opportunities to practice it, and ultimately apply it in other related situations” (p.1).

A Balanced Reading philosophy is based on cognitive psychology and best practice, and supported by the belief that language development and literacy begin at birth and should continue to develop in a balanced manner throughout the school-age years. Balanced reading avoids the overemphasis on word analysis at the expense of passage comprehension, and vice versa; it avoids the extreme position of teaching without teacher direct instruction and the contrasting extreme position of teaching by almost exclusively direct instruction; balanced literacy balances these competing values into a workable and effective way of teaching literacy (Leu and Kinzer, 2003). Balanced literacy respects the claims of emergent literacy, which holds that both spoken and written language are learned from birth (Meece, 2002). Although phonics instruction is essential to a balanced approach to literacy, instruction should focus on the interaction of the learner with print in a whole-to-part-to-whole approach (Cheyney and Cohen, 1999). Plunkett (1998) stresses the importance of contextualizing vocabulary. “Children must have regular experiences with reading words that are put together into meaningful passages, such as stories. They must be taught how to derive

meaning from these passages, including obtaining meaning at many levels of complexity” (p. 314). To be literate implies that one cannot only identify words but is able to extrapolate meaning from them as well. By removing words from their context, we remove their meaning, adding to the complexity of the language rather than to its simplification; “unrelated facts are not knowledge any more than words of a dictionary are connected thought” (Dewey, 1895/1974, p.196).

Fundamentally, balanced literacy revolves around two primary strands, a reading strand and a writing strand, each of which mirrors the other. Unlike the traditional phonics approach, balanced literacy incorporates context; however, unlike whole language the context is not devoid of teaching necessary skills. In this respect, the arts can play a vital role in literacy. Students can be initially engaged in reading by focusing on their comprehension and enjoyment of a given story, poem, chant, or rhyme (Strickland, 1995). What distinguishes the balanced literacy model from the behaviorist model is that it is recursive rather than linear in its approach; additional skills can be taught out of context and then reapplied to the original text. *The Importance of Writing*

Language, according to Vygotsky, is a necessary component of thought; being able to express oneself at a high level is directly correlated to the one’s ability to think and speak at that level. As a key component to language development, the process of writing can be equated with the process of thought through a constructivist approach which reinforces the symbiotic relationship between

process and product that leads to thinking, learning, and knowing. According to Kraus (1992), since the early 1980s, methods of teaching English Language Arts have emphasized the need to include prewriting, writing, thinking and rewriting as critical elements of the learning process.

Journaling has been shown to be a very effect method of improving writing skills; one variation of this is dialogue journaling which incorporates the research on peer tutoring. In this method, two or more students journal among one another, responding to concerns and answering questions. “Interaction among pupils is involved in writing as the means of communication” (Ediger, 2003, p.3).

Whether one is unsure of what to write because he or she believes that there is nothing to write about, or whether there is so much to write about that one is unsure where to begin, at all levels of writing it remains a difficult process.

Teachers need to instill in young writers the ability to explore life through written language, and in doing so, to verify their own existence and improve self-esteem, “seeing oneself in print... provides some sort of primal verification: you are in print; therefore you exist” (Lamott, 1994, p. xiv).

### *The Relationship between Reading and Writing*

Although reading and writing rely on many of the same cognitive elements, they are nonetheless distinct from one another (Shanahan, 1997). In both instances, knowledge of phonology, semantics, pragmatics, syntax, and lexicon is a critical

element toward success. According to Moore (1995), better writers are usually found to be better readers, and are found to spend more time reading than poorer writers. “The reader reconstructs meaning from print, the writer constructs meaning using print...the reading process can enhance the writing process.” (Truax, 2000, p. 4) This is not however, meant to imply that reading and writing need not receive separate instruction; according to Shanahan (1997) both need instructional consideration.

Reciprocal teaching, promoted by Palinscar and Brown (1984) and Brown and Campione (1990), and critiqued by Slater and Horstman (2002), is a learning/teaching process that has been found to be beneficial to learners in middle and high school. This method aligns itself with constructivism by placing emphasis on the learner shifting the focus from the teacher; “when students assume the leadership, they do some of their best learning” (p. 165). In accord with the ideas of Harry Wong, one must learn the procedures to follow in order to ensure success, and in reciprocal teaching, there are four. The first step is questioning, which emanates from the group’s reading of the passage. The second is the clarification of issues, which again is achieved through group discussion. The third is summarizing, which is accomplished through group effort. The final step is predicting, where the group applies higher level thinking by applying past experiences in a manner that will clarify what is yet to come. The reciprocal process for writing parallels the above with one exception; the verbal

discussion that takes place in step two is replaced by written discussion which occurs through the exchange of written responses among group members.

### **Design of the Study**

The arts-based method was grounded in a constructivist framework which stressed a student centered approach. The language arts curriculum was focused on media literacy. Students received instruction in drama, the visual arts, music, and such technology as the use of digital cameras, digital video, and PowerPoint. Writing instruction was focused prewriting and organization and centered around the Four-Square method which stresses the importance of prewriting through the use of a graphic organizer. The method appeals to students who are both visual and kinesthetic and is used to assist them with conceptualizing, understanding, and structuring their thoughts and writing. Students begin by folding a blank paper into four equal squares and writing a topic sentence in the middle of the paper. In three of the squares students are to write complete sentences which state reasons, or provide examples, support for or explanations of the topic sentence. In the fourth box, students write a sentence that expresses their feeling toward the topic sentence. The final stage of the prewriting requires students to accompany each sentence with a pictorial representation.

Their focus of the program was to have students create and market a fictional product. The readings for the course included a media literacy text and current



events materials such as newspapers and magazines. The writings for the course included:

- a personal resume and short biography,
- a script for a commercial,
- a culminating presentation of their marketing plan using PowerPoint.

The writing sample was selected from the 2005 Education Quality and Accountability Office (EQAO) Grade 6 test booklet and scored according to the rubric provided in the 2003-2005 Trait Scoring Guide (<http://www.eqao.com/Parents/Elementary/036/036.aspx?Lang=E&gr=036>). The Education Quality and Accountability Office (EQAO) is an arms-length government body which is in charge of standardized testing for the Province of Ontario.

The study began with the participation of 49 seventh and eighth grade students who were enrolled in a summer school program. However, the data at one site was not completed which resulted in a final sample of 28 seventh and eighth grade students who attended a four week summer school program offered by a southern Ontario school district. Participants ranged in age from 11-13 years. These students had not met with success during the year and were identified by the board as being at-risk of dropping out of school. The four week program which they attended was funded by the board and provided to students at no additional cost. The program was divided between mathematics and language

arts, each of which was assigned a two week instruction block. The first block of instruction was dedicated to mathematics and the second to language arts. This study focused only on the teaching of language arts.

Having made the decision that the traditional programs that had been offered in the past was not meeting the needs of the students, the school board decided to change the program from a traditional model to an experimental arts-based model. The school district informed parents and students of the change in April as per their regular recruiting schedule. Parents and students were provided with consent/request forms outlining the purpose of the change. The classes were held in three locations, with each location offering the same arts-based program. Each teacher was provided with a materials package and textbooks. In order to ensure reliability and validity of the methods employed, all teachers were in-serviced in the method of delivery, the curriculum to be addressed, and the method of data collection that was to be employed. The researchers implemented a pretest and posttest design which analyzed aggregated and subset scores for difference. Two scorers blindly graded each paper with respect to student name, gender, grade level, location of program, and whether the test was used as a pretest or a posttest. All tests were graded independently by two highly experienced raters and a score for each subsection was recorded. Discrepancies were reviewed by a third rater and a consensus grade was recorded. To ensure rater-reliability graders were in-serviced in accord with the procedures outlined by the EQAO in preparing graders.

On the first day of classes, students were assigned a number which enabled the researcher to match pre- and posttests. Students were then given one of two writing tasks extracted from the Ontario Grade 6 Language Arts Test and given 15 minutes to complete the task at the end of which the tests were collected by the classroom teacher. These questions were:

1. If you could change one thing in the world, what would you change?  
Explain why.
2. What is the best invention in the world today? Explain why you think it's the best.

The format of the question followed the format of the EQAO test and included one sheet of paper entitled rough notes.

Posttest data was collected during the second-to-last class period, using the same method as was employed with the administration of the pretest. In order to control for possible discrepancies in the difficulty levels of the two writing tasks, the first group of participants received task 1 as a pretest and task 2 as a posttest while the second group of participants received the writing tasks inversely, i.e., task 2 was used as the pretest and task 1 as the posttest. In either case, all papers were graded using the 4X4 rubric design approved by EQAO

(<http://www.eqao.com/Parents/Elementary/036/BookletsandGuides.aspx?Lang=E&gr=036&yr=06>) . Data was then entered into Excel and SPSS and analyzed

to determine mean differences between pretest and posttest data both collectively and by subgroup.

## Results

Students who are not successful in either language arts or mathematics or who are deemed to be “at risk” by their classroom teachers are recommended for the program at the end of the regular school year. The program runs each summer for four weeks. These sessions are run at three locations, which are driven by enrollment and cover the breadth of the school district. Data analysis was based solely on subjects who were present for both the pretest and the posttest ( $n=28$ ). No data was included for the one site that failed to report posttest scores. Moderate to high correlations  $r=.596$ ,  $p=.001$  were found for subtest 1 scores, reasoning and communication. A linear regression explained this correlation as causal  $R^2=.355$ ,  $F(1,27)=14.318$ ,  $p<.001$ , with Beta = .596. Moderate to high correlations  $r= .584$ ,  $p=.001$  were also found for subset 2, organization and conventions. A linear regression explained this correlation as causal  $R^2=.335$ ,  $F(1,27)=13.431$ ,  $p<.001$ , with Beta = .584. Correlations of composite pretest and posttest scores were also found to be high and causal  $r= .638$   $p<.001$ . Paired sample  $t$  tests and tests for effect size (ES) conducted on the pretest and posttest data yielded significant differences for raw scores on subtest 1  $t(27)=3.292$ ,  $p=.003$ , ES = 0.546471, SD=13.72 which was graded out of a possible 60 points; for raw scores on subtest 2  $t(27)=4.117$ ,  $p<.001$ , ES = 0.690118, 13.06 which was graded out of a possible 40 points; and for composite

scores  $t(27)=4.022$ ,  $p<.001$ ,  $ES = 0.627908$ ,  $SD=22.18$  which were recorded as percentages.

## **Discussion**

It should be noted that although the writing scores were the focus of the investigation, the program did not focus on intensive writing. Instead, the program included reading and writing as well as the use of computer programs (Word and PowerPoint). As could be expected based on previous studies in this area that have shown a correlation between reading and writing scores. Further, when addressed within a context of interest, it seems reasonable to expect an improvement in writing scores. This being said, performance on the pretest was found to be a good predictor of performance on the posttest which suggests that there was little change in student rank. Students showed a significant improvement in each of the four areas of writing, reasoning, communication, organization and conventions which could be attributed to organizational instruction provided using the Four-Square method of prewriting. Another possible reason for the change could be attributed the active engagement of the students in the learning process. Research suggests that students who engage in their learning are more successful than those who learn passively. In this case, the arts-based curriculum acted as the motivator/catalyst for engagement. Improvement in scores would suggest that the students were actively engaged in the actual concepts in which they were being instructed and not just the activities in which they were participating. The question of engagement often focuses on

the physical aspect; however, what we are speaking about here is the cognitive engagement that is necessary for learning to occur. This cognitive engagement requires that students think and reflect on the task.

Since the curriculum was adapted to student interest and since the assignments incorporated the use of cooperative learning groups the increase in test scores could be explained a residual effect of the model. Another possible explanation is the order in which the programs were delivered; however, as there was no control for the order of delivery, it is not possible to ascertain from this study whether or not delivering the language arts curriculum in the second rather than the first block of study, positively or negatively affected their scores. Although it would be possible to expect that the additional bonding time among peers and between students and instructors could possibly lead to an improvement in scores, it could also be expected that students would have felt more frustration and been less likely to engage in the program after four weeks. It should also be noted that two of the three instructors who were involved in the delivery of the program were familiar with both a constructivist framework and an arts-based approach to teaching and that the instructor who came from a more traditional model did not report posttest scores; therefore, the results may not be generalizable to instructors who may be more familiar with traditional methods. Further, as similar data is not available for years in which traditional instruction models were implemented it is not valid to claim that an arts-based model is in any way more effective than a traditional model, only that the arts-based model

was effective in and of itself. The sustainability of the learning also comes into question. Although the students showed significant improvement during the two week program, there is no evidence that they would be able to apply this model to their studies the coming year.

### **Conclusion**

These findings are preliminary and at best should be accepted with caution; however, they do seem to indicate that alternative approaches to literacy, and in particular the use of an integrated arts-based curriculum, could prove beneficial. Further study in this area will need to include a larger sample and longer time of instruction. There also needs to be closer attention paid to why students chose to attend classes which could be achieved through the daily tracking of interest. At best, it would appear that learning through the arts can enhance learning by putting into an enjoyable context, important skills that may otherwise seem disconnected to a student's world. Although both the traditional and the art-based course are consistent in their objectives, they employ different methods of delivery. The use of an experimental design, which includes the use of a control group using a traditional model of instruction, should shed light on whether the effects are due to the population, the teacher, or the methodology.

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