

Strategy Instruction in Writing for Adult Literacy Learners: A Summary

Charles A. MacArthur

Leah Lembo

University of Delaware

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Abstract

This study investigated the effectiveness of cognitive strategy instruction in writing with adult literacy learners. Three middle-aged African-American adults participating in adult education with the goal of passing the GED received tutoring in a strategy for planning, writing, and revising persuasive essays along with self-regulation strategies. The study used a multiple-baseline design across participants with multiple probes. All the adults made consistent gains from baseline to posttest in the quality and organization of their essays. Mean gains in overall quality from baseline to posttest for the three students were 2.7, 1.9, and 1.7 on a 7-point scale. Percentage of non-overlapping data (PND) was 100% for text structure organization and 89% for quality. The results demonstrate that strategy instruction, which has had positive effects with school-age students, has potential for adult literacy learners as well.

Strategy Instruction in Writing for Adult Literacy Learners

Writing skills are important to adult learners for employment, further education, participation as citizens, and personal fulfillment. Despite the importance of writing, two recent reviews of the literature on writing in adult education found little research (Gillespie, 2001; MacArthur, 2007). Much has been written about the writing of under-prepared college students, and a few descriptive studies have focused on college students with learning disabilities (e.g., Gregg, Coleman, Stennett, & Davis, 2002). However, little research has focused on adult basic education students, and no experimental or quasi-experimental research was found on writing instruction with this population (Gillespie, 2001; MacArthur, 2007; Torgerson, Porthouse, & Brooks, 2005).

Strategy instruction has been shown to be an effective approach for teaching writing to students from second grade through high school including students with learning disabilities (LD) and low-achieving writers. A recent meta-analysis of 39 studies (Graham, 2006) found large effects for both planning and revising strategies, with both narrative and persuasive writing, in elementary and secondary schools, and when taught by tutors or classroom teachers. In addition, the Writing Next meta-analysis of writing instruction research in grades 4 to 12 (Graham & Perin, 2007) found the largest effects for strategy instruction. However, no investigations have addressed its application with adult literacy learners.

Strategy instruction in writing draws on three theoretical and empirical sources: cognitive models of writing, self-regulation theories, and social constructivist theories of learning. First, cognitive models of writing (e.g., Hayes & Flower, 1980) provide an understanding of what strategies might be useful to teach. Strategies are conscious, goal-directed processes for solving problems or completing complex tasks. Proficient writers use a great many strategies. For example, they think about their audience and purpose and set goals and subgoals for writing accordingly. They have strategies for generating content internally, such as brainstorming and freewriting, and externally, for example, through reading or talking with others. They use what they know about genre and text structure to generate and organize ideas, perhaps, developing outlines or graphic displays. They also know a lot about what makes writing good, and when they revise they use that rich knowledge of evaluation criteria to identify problems and opportunities to improve their text. In contrast, struggling writers tend to skip the planning stage or do very little planning even when they are prompted (Bereiter & Scardamalia, 1987; Troia, 2006). Moreover, they spend little time revising and when they do so, their focus is on changing words and editing mechanical errors (Fitzgerald, 1987). In the current study, the strategy for persuasive writing was designed to capture several aspects of expert knowledge and cognitive processes, including brainstorming, using text structure to generate and organize ideas, applying specific evaluation criteria, and revising based on those criteria.

Second, one of the main differences between more and less proficient writers is the ability to organize and regulate their own efforts. Thus, strategy instruction draws on theories about self-regulation to help us understand how to help writers develop independence in their use of strategies (Graham & Harris, 2005). In writing, self-regulation includes processes such as setting goals, analyzing tasks, selecting specific strategies, monitoring and adjusting the use of strategies, maintaining motivation, and evaluating progress. These self-regulation processes can be taught in conjunction with specific writing strategies to enhance their use, especially to increase maintenance and generalization of strategies. The self-regulated strategy development

(SRSD) model of Graham and Harris (2005) emphasizes the importance of integrating specific writing strategies with general self-regulation strategies.

Finally, strategy instruction draws on social constructivist theories of learning (Englert, Mariage, & Dunsmore, 2006) to understand how to help students develop self-regulated strategies. Students actively construct their own understanding of strategies and where and when they are useful through their learning experiences. Teachers support learning by providing explicit explanations, modeling the strategies with think alouds, scaffolding students as they apply the strategies, arranging for peer collaboration, and gradually releasing control. Emphasis is placed on the purpose and value of the strategies to enhance motivation and transfer. Instruction in the current study included all of these elements except for peer collaboration. The instructor explained all aspects of the strategy, modeled it with think alouds initially and again as needed, guided the students as they used the strategy, discussed where and when the adult might use the strategy, and gradually faded support until the adults could explain and use the strategy independently with just paper and pen. Instruction was not planned for a particular number of sessions but rather was continued until each adult demonstrated independent mastery.

The purpose of the current study was to evaluate with adult education students the effectiveness of an approach to writing instruction that has been found to be effective with elementary and secondary struggling writers – strategy instruction. Students learned a strategy for writing persuasive essays, a form of writing that would be useful preparation for the GED examination.

Methods

Design

The study used a multiple-baseline design, an experimental method for investigating instruction with small numbers of participants. Before instruction, during baseline, students wrote 3 – 5 essays. Instruction was provided individually to students. After instruction, three essays were written to evaluate improvement. Instruction was provided to each student in sequence, with the next student starting instruction only after the previous student had demonstrated improvement. The design is widely used in special education research and has been recommended for wider use in literacy research.

Participants

Three adult learners from adult education classes with problems in the area of written language participated. The participants ranged in age from 40-44 and were all native English speakers; all were African-American. All stated that their primary reason for attending adult education was to pass the GED. All three had scores above the 8th-grade level on the Test of Adult Basic Education (TABE).

Raya (all names are pseudonyms) was a single African American woman, age 40, who had been taking GED preparation classes for about four years. She had attended school through 12th grade but had not received a high school diploma; she had changed schools frequently as a child because her father was in the military. She worked 20 hours a week as a janitor, a job she had held for six years that, by her report, required virtually no reading or writing. On a question about literacy activities, she reported reading, writing, and doing math for her adult education classes daily and reading newspapers or magazines, books, religious materials, and word puzzles

at least once a week. She reported no writing other than for her classes (e.g., no email, letters, cards, diary) and she used a computer only occasionally for her classes.

Anna was a divorced African American woman, age 44, with an adult child, who was taking math and social studies classes to prepare for the GED. She had attended school through 8th grade. She was not currently employed and had not worked in the previous year, but she had worked earlier in a warehouse and in housekeeping. She reported reading the mail and television listings daily and reading class assignments, newspapers or magazines, and religious materials a few times a week. She reported reading a book or writing an essay for her adult education classes about once a month.

Eric was a single African American man, age 40, who was taking English (literature and writing), science, math, and social studies classes to prepare for the GED. He had worked at his current job in video surveillance full time for seven years. His work required daily reading of manuals and reports, writing a daily log, and reading and entering information on a computer, as well as requiring occasional math calculations. Outside of work, he reported daily use of a computer to access the Internet to read the news, browse sites, and shop. He also reported reading and writing for the adult education classes, reading and writing religious materials, and reading newspapers and magazines and television listings a few times a week. He seldom read books, and despite his frequent computer use, seldom sent email.

Measures

In all phases, students wrote persuasive essays responding to prompts. The prompts used in the study addressed serious issues relevant to an adult population (e.g., drunk driving laws, the death penalty, television and children).

Essays were scored for structural elements, overall quality, and length. First, essays were scored for text-structure elements typical of persuasive writing, including introduction, position, reasons, evidence, alternative positions and reasons, rebuttals, conclusion, and transition words. Second, overall quality was measured using a 7-point holistic rubric that directed raters to consider content, organization, word choice, sentence fluency, and conventions in arriving at a single overall score for quality. Third, essays were scored for length (number of words) using the computer count.

Instructional Procedures

Instruction was provided by the second author, a doctoral student with an M.A. in Curriculum and Teaching and over 16 years of classroom teaching experience. The instructor was familiar with strategy instruction. Instructional procedures were described in detailed lesson plans. Instructional sessions were conducted in a quiet room at the adult education center two or three times a week for 60 to 120 minutes. The three students had 9, 9, and 8 instructional sessions, respectively.

Instruction focused on a strategy for planning persuasive essays and for evaluating and revising the essays. Instruction included discussion of the purposes of persuasion, explanation of the characteristics of persuasive writing, explanation of the strategy, modeling of the planning strategy using think aloud methods, explanation and modeling of evaluation and revision, memorization of the strategy, and scaffolded practice in use of the strategy for planning, writing, and revising essays. Instruction continued until the student demonstrated mastery of the strategy

including the ability to explain the strategy and to apply the strategy to planning and revising an essay.

Steps in the strategy included the following: *brainstorm* (identify two opposing positions and brainstorm reasons and evidence on both sides using a simple graphic organizer consisting of pro and con columns with positions at the top); *take a side* (choose a position); *get it together* (identify reasons, evidence, opposing reasons, and rebuttals from the brainstorm to use in the essay); *compose* (write the paper following the text-structure mnemonic IRRC [Introduction, Reason, Rebuttal, Conclusion]); *evaluate* (self-evaluate the paper using a scoring guide based on the same mnemonic); and *revise*. Self-regulation strategies were incorporated throughout the stages of instruction to encourage independence. A graphic organizer was supplied for the brainstorm, and a printed evaluation rubric was provided to support evaluation, but both of these supports were faded and students were expected to plan and evaluate using plain paper for posttesting. See the Appendix for the handout on parts of an essay, the strategy steps, and the graphic organizer.

In Lesson 1 the instructor discussed with the student the purpose of persuasive writing and introduced a particular text structure for a persuasive essay. The structure was represented with the mnemonic IRRC (Introduction, Reasons, Rebuttal, Conclusion). The structure was explained using a model essay. As the instructor read the model essay aloud and labeled its parts, she encouraged the student to participate in the process. The Introduction included a “hook” to grab the reader’s attention and a statement of position. Each Reason paragraph included a topic sentence with a reason and supportive evidence. Evidence was defined as the use of facts, examples, and explanations that support the reason. The Rebuttal paragraph gives an opposing position and reason, provides evidence for the opposing reason, and explains why the reason is not valid. The Conclusion restates the position and summarizes the reasons. The use of transition words was also explained. Next, the instructor explained the steps in the strategy and discussed the value of the strategy for planning and revising.

In Lesson 2 the parts of a persuasive essay were reviewed via the labeled essay completed during Lesson 1. Steps in the strategy were explained again. Next, the instructor modeled using the strategy while thinking aloud to plan and write a persuasive essay. The student was encouraged to contribute ideas for the essay and to discuss the process as it was modeled. In addition, the importance of considering the viewpoints of the audience was discussed.

Lesson 3 focused on the last steps in the strategy: *evaluate* and *revise*. The scoring rubric was discussed, and then the essay written during Lesson 2 was scored collaboratively. Based on the evaluation, goals were set for revision. Some revisions were made and the essay was scored again to compare the two drafts. The instructor stressed the importance of self-evaluation as a way to learn to write better essays.

In Lesson 4 the student was asked to recall the parts of a persuasive essay and the steps in the strategy on a piece of lined paper. She was then given a persuasive prompt and asked to use the strategy to plan and write an essay. Guided support was provided to ensure that the strategy was followed. In Lesson 5 the student was asked to evaluate, score and revise the essay.

During the remaining lessons, students continued to practice using the strategy to plan, write, evaluate, and revise essays. Instructor support was provided as needed until the student was able independently to use all parts of the strategy and complete an essay that included all the

components of the text structure. Individual support was focused on use of the strategy, including generating and organizing ideas, drafting the essay following the text structure, and evaluating and revising according to the text-structure criteria. Support did not extend to teaching other aspects of writing, such as grammar.

Results

Text-structure Elements

All three students made gains in text-structure elements from baseline to posttest (see Table 1). Mean gains for Raya, Anna, and Eric were 5.0, 4.8, and 8.2, respectively. We cannot include the graph in this summary, but all of the students posttest essays were scored higher than all of their baseline essays. Raya made the greatest gains in considering alternate positions and conclusions. In all three posttest essays, she addressed an alternative position and attempted to rebut it. She also learned to add a conclusion. Anna began from a higher baseline level and already included reasons and evidence in her essays, but she also showed the greatest gains in addressing alternate positions and writing conclusions. She also demonstrated gains in use of transition words to connect parts of her papers. In contrast, Eric made substantial gains in expressing reasons clearly and supporting them with evidence. He also increased in his ability to address opposing positions. Examples of student essays will be discussed below.

Overall Quality

All three students also made gains in overall quality of writing (see Table 1). The gains in mean score for Raya, Anna, and Eric, respectively, were 2.7, 1.9, and 1.7. We cannot include the graph in this summary, but all of the students posttest essays were scored higher than all of their baseline essays. These are substantial gains on a 7-point rubric.

Examples of Essays and Discussion of Text Structure

In this section, we discuss examples of representative baseline and posttest essays written by each of the adults. The quality of their writing was more variable than the text structure, so we selected essays that received median ratings for quality. We have typed the essays but have not corrected errors in spelling and grammar, which are evident in their writing. The strategy instruction focused on helping these adults learn to plan what they wanted to say and write it in an organized way. It was evident to us in working with them that they had strong opinions on these issues that they enjoyed expressing. We think that is also evident in their writing.

Raya's second baseline essay was on school prayer. It was considerably shorter than the other baseline essays, which tended to ramble. In this essay, she presents her opinion clearly and gives a general reason to support it.

I think that prayer should be used in every school. Charter and public schools. It will help the children in the long run as they grow and understanding the knowledge of our creator. Maybe they would consider going to church. [Raya, baseline 2]

Her final posttest essay was on whether to legalize gambling. Compared to her baseline essay, she provides some elaboration of her single reason based on personal experience, and she acknowledges opposing reasons – addiction and noise and traffic -- though she does not provide any rebuttal. She also provides a conclusion restating her position.

Legalizing Gambling

I believe and maybe 100% of the people who gamble would like gambling to be legalized across the country. Why? Cause some of us need a place to go just to have fun sometimes. Even if you go on a vacation out of the states, but a least there will be a gambling or casino you can go and enjoy yourself. For example, like me I was happy knowing I was going to a casino where there was a gambling table and that was down Atlantic City. I was having a ball with the other people who where gambling. The only problem is leaving the table. It's an addiction.

On the other hand some people don't want gambling legalized because it will cause problems as far as loud noise, a lot of traffic and other problems.

But I feel as though if the states or the people would vote about legalizing gambling in their own state then I don't see any problems with the approval.

To sum it up, I'm saying that the 100% of us would like all the states to legalize gambling so when you are out of the states least you will know if that state will legalize gambling or not. It's up to the people of that state. [Raya, posttest 2]

Anna had a better idea than Raya about the requirements of persuasive writing at baseline. In her essay on drunk driving, she proposed both stricter laws and better education though she could not manage to produce the complex sentence required to express both these ideas. She provided evidence about the problem from a news report she remembered. Although she numbers her paragraphs, the content and organization of the last two paragraphs are confused. She does not consider opposing views or provide any conclusion.

Drunk drivers are the highest futilely in car accidents in a recent study at the U of D. I think drunk drivers should have stricker laws and better education drunk driving to send a message to those who get behind a wheel intoxicated.

#1 In recent studies the University of Delaware shows deaths on interstate highways result from drunk driving. They have compare studies in the largest cities in the United State, and age differences of the drivers. It was proven that teenagers between the ages of 16-19 have the highest death rate compared to adults over the age of 21 years old.

#2 A driver should know the effects of different mixtures of drinks, also exstnicif testing on penalties of drunk driving. Years of each voilation should double.

#3 Education is a valuable ingident to give anyone about the dangers of over indulging the alcohol limit. This will allow the driver to be responsible of not just themselve but for other drivers. [Anna, baseline 1]

Anna's posttest essay on prayer in public schools shows the effects of careful planning. Following the strategy, she brainstormed ideas on both sides of the issue and labeled the ideas she would use in the introduction, reason, and rebuttal paragraphs. The essay acknowledges the opposing position and the constitutional basis for that position but rebuts it with her own view of our history. It also includes a clear conclusion. Interestingly, her sentence formation and word usage are improved even though instruction did not address those aspects of writing. Perhaps, clear planning of her ideas enabled her to focus on expressing herself more clearly.

Public schools are no longer safe for our children. They have become places of expression for self-destruction. I believe prayer is the key to bring back reconciliation and restoration to our public schools.

Prayer is the way to a relationship with God. Many people have different hang ups about prayer. But praying to God gives understanding to one's purpose in life. Prayer helps a individual to also identify themselves spiritually in a way that gives therapeutic connection to good versus bad.

Our schools need security and standards. In the late sixties prayer in public schools was the norm. Then schools were safe and there were no criminals. Students and teachers relationships were respectful and proper.

America is divided that our church and state should not be working together. They say religion has no place in our congressional process. But I argue the fact that God, our creator, who our forefathers acknowledge as the one who has given us the right to pursue peace and happiness has also given us the right to pray anywhere.

Prayer is the only way to have a relationship with God, and ones purpose in life. This will bring back security and standards to our schools. [Anna, posttest 2]

Eric's baseline essay contains plenty of ideas but has no apparent organization and presents reasons on both sides of the argument without clarifying his views. The first sentence reads like a conversational response to the prompt, which asked whether people should be allowed to own handguns. He then states a position but immediately begins to undermine it by presenting opposing reasons. Ideas are presented with passion and drama but not with clarity. Overall, the paper reads like a free association on the topic, almost a rant. The free association aspect is reflected in the extended run-on sentence that ends the essay.

The sale of hand guns is only part of the problem. I believe there should be a hand gun ban. There should be a war on the black market were the guns are sold to minor and violent criminals. It will take more than a ban on guns to make to world safer. The media play's it's part too. People allow anything to play on T.V. if it will bring money yes!! The decision maker's, why even produce of lack a video that pay's money power getting high is the life. I really don't get it. the messages we send through the T.V. play a role so we need the Gov. – law enforcement agencies to do their part and we need the Entertainment Industry to do their part. In the home is another place were parent's can do their part. People have always been allowed the write to bear arms long before teenagers started killing each other the guns don't kill people, people kill people irresponsible, impulsive people so yes law abideing Citizens should have the right to protect their home and all it's precious contents it not what you do it's how you do it like you wouldn't sit down on a Sat or Sun afternoon and clean your gun in the den and say look kids we have a gun in the house I don't believe every house hold should have a gun because there are different way's to protect ourself's nor am I saying people should be allowed to own a gun some of these neighbor hood we need a special plan devise have perptriter come in and national guard and just bust the a sting operation if we can go outside our country, and fight full fledged wars we can certainlle do it here it the guns on the street's in the hand's of these wanna be gangster were are they comin from someone knows let's find out. [Eric, baseline 2]

Eric's posttest essay on the death penalty retains the dramatic sense of his baseline essays in its focus on insane mass murderers, but it is better organized and presents a consistent position. His reasons for supporting the death penalty for mass murderers are clear. He also presents the opposing position with a reason and rebuts it. This essay shows the gains he made in presenting reasons and considering opposing positions. Division of the text into sentences with punctuation is still a problem, but division into paragraphs makes the essay more comprehensible.

Some states are saying kill and you may be killed. The death penalty should depend on the severity of the crime. More states should have the death penalty. Especially for mass murders going around cutting, chopping, and eating people for your own insane reason's just don't wash.

The one thing is true is these are some sick people. Some where in their distorted thinking these people deserve to die. They don't really think of anything but their need to feed their urge to kill.

No where in history has there been a of a rehabilitated mass murder. Some state feel there is no other crime worste Mass murder should be without a doute punishable by death this is the only reason The death penalty should be issued.

They are calculating and smart people and like the attention. When people are psycho, smart and attention seeking that could be a dangerous combination it's like catch me if you can like. It's some sort of game innocent people be killed. They have no value for human life.

Although some might say we don't have the right to take a life because they are sick lock them away for a couple of life sentence's. Even a mass murder get's a fair trial by jury in the U.S.

But we must keep in mind these people will not stop killing on their own and a lot of times the damage done to them is so severe there is no help for them they have to be stopped Because they will kill at will.

When people are an extreme danger to Society they should be away from society but, there is at least one instance where the death penalty should be allowed. mass murder's. [Eric, posttest 2]

Although the writing achievement of these three adults varied considerably, they all made improvements in their ability to generate and organize their ideas, which helped them to express their views more clearly. As of one year after the completion of the study, Anna had passed the GED writing test, and Eric had passed the preliminary writing test that the adult literacy program requires before permitting students to take the official GED test.

Discussion

The results of this research extend the findings about strategy instruction in writing to adults participating in adult education programs. Three middle-aged African-American adults attending adult education with the primary goal of passing their GED examination participated in the study. They received instruction in the characteristics of effective persuasive essays; strategies for planning, writing, and revising an essay; and self-regulation strategies, including goal setting and self-evaluation. Discussion of the characteristics of persuasive writing

emphasized the dialogic nature of argument and pointed out that effective persuasion requires consideration of opposing positions. The planning strategy further instantiated this emphasis by involving students in generating reasons on both sides of the issue before selecting arguments to use in their own essay. The primary self-regulation strategy taught was self-evaluation. Students learned to evaluate their essays to determine whether they were well organized but also whether they would be convincing to readers who did not necessarily agree with their position. Following self-evaluation, students set goals for revising their essays.

Although an instructional method developed for use with school-age students proved effective with adults, we do think that the strategy instruction methods could be adapted to work more effectively with adults. The baseline essays of these adults differed considerably from those of middle and high school students with whom we have worked before. The adults had strong opinions about the issues that we selected for writing, and in general, they had quite a lot to say about them. Their essays lacked organization and were sometimes hard to follow, but they were not lacking in content. Further analysis should examine the characteristics of the writing of this adult population in a more systematic way and consider the implications for instruction. In addition, we found that adults were eager to discuss their ideas with the instructor. Instruction that integrated reading, writing, and group discussion about controversial public issues might be especially effective with adults.

Table 1. *Mean Scores for Total Text-structure Score, Overall Quality, and Length*

Student Phase (# compositions)	Text Structure	Quality	Length
Raya			
Baseline (3)	3.5	1.5	128
Posttest (3)	8.5	4.2	220
Anna			
Baseline (4)	9.8	3.9	220
Posttest (3)	14.0	5.8	203
Eric			
Baseline (5)	5.3	3.0	241
Posttest (3)	13.5	4.7	284

Appendix

Handout #1: The Parts of a Persuasive Essay

INTRODUCTION

- Hook: *Catch the reader's attention.*
- Position: *Tell where you stand.*

REASON PARAGRAPH(S)

- Clear reason: *Give a reason for your position.*
- Supporting Evidence: *Support your reasons with facts, examples and explanations.*
- Transition Word: *Guide the reader through your essay so that it makes more sense.*

REBUTTAL PARAGRAPH

- Give opposing reason: *What does the other side have to say?*
- Some evidence for opposing reason: *What are the facts?*
- Say why you disagree: *Make your argument.*
- Transition Word: *Guide the reader through your essay so that it makes more sense.*

CONCLUSION

- Summarize all reasons: *Say it all again concisely.*
- Re-state position: *Tell them where you stand one more time.*

Handout #2:
PERSUASIVE WRITING STRATEGY

BRAINSTORM
Generate ideas for writing

TAKE SIDES
Decide which position to take

GET IT TOGETHER
Choose the information you want to include

COMPOSE
Write the first draft

EVALUATE/REVISE
Score the essay and
decide how to improve it

BRAINSTORM: Think about Both Sides

TOPIC:

Position 1	Position 2