

## DOCUMENT RESUME

ED 071 268

88

EM 010 226

AUTHOR Way, Florine L.  
TITLE DOVACK; Method for Teaching Reading. July 1, 1968-August 31, 1971. Project Report.  
INSTITUTION Jefferson County Board of Public Instruction, Monticello, Fla.  
SPONS AGENCY Office of Education (DHEW), Washington, D.C. Div. of Plans and Supplementary Centers.  
REPORT NO DPSC-68-0004  
PUB DATE 72  
NOTE 183p.

EDRS PRICE MF-\$0.65 HC-\$6.58  
DESCRIPTORS \*Computer Assisted Instruction; Disadvantaged Youth; Elementary Grades; Language Experience Approach; \*Program Evaluation; Reading Ability; Reading Achievement; Reading Development; \*Reading Instruction; Reading Programs; \*Remedial Reading Programs; Secondary Grades; Vocabulary Development; Vocabulary Skills  
IDENTIFIERS \*DOVACK; Elementary Secondary Education Act Title III; ESEA Title III

## ABSTRACT

The DOVACK Reading System was field tested on 391 low income, minority, elementary and secondary students over a period of 3 years. The objectives were to test the system for its adaptability to the populations for which it was designed, its effectiveness in meeting goals and objectives, and its economic feasibility on a larger scale. Using five areas of evaluation (soft data, hard data (achievement tests), hard data on rate of learning, data on estimated readability level of dictations, and hard data on vocabulary usage), the author concluded that the DOVACK system was subjectively favorable to other methods. However, no definitive general conclusions could be inferred for the hard data because of both the small sample size and the cultural inappropriateness of some tests. The cost per student for the program was about seven dollars. In general this report provides a significant amount of information about the DOVACK system. An evaluation supplement to the brochure prepared for ED/Fair '72 on the DOVACK system is also included.  
(MC)

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EM 010 226

ESEA Title III  
July 1, 1968- August 31, 1971  
End of Project Period Report  
DOVACK  
Method for Teaching Reading  
Monticello, Jefferson County, Florida  
Project Administered by  
Jefferson County School Board  
Report Prepared by  
Florine L. Way, Project Director

Permission to input this OE  
funded document received from  
Frank Bryars August 31, 1972.

*Jaclyn Caselli*

Jaclyn Caselli  
Acquisitions

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Stanford University  
Stanford, California 94305

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ESEA Title III

July 1, 1968 - August 31, 1971

End of Project Period Report

DOVACK

Method for Teaching Reading

Monticello, Jefferson County, Florida

Project Administered by

Jefferson County School Board

Report Prepared by

Florine L. Way, Project Director

*Project Number DPSC 68-6004*

**CONTENTS**

	<b>Acknowledgments</b>
	<b>Guide from ESEA Title III Manual</b>
<b>Part I</b>	<b>Statistical Report</b>
<b>Part II-C</b>	<b>Narrative</b>
<b>Part III</b>	<b>Financial</b>
<b>Appendix A</b>	<b>Quotations from Visitor's Register</b>
<b>Appendix B</b>	<b>Evaluation and Dissemination</b>
<b>Attachment</b>	<b>Evaluation and Dissemination Materials for Distribution</b>

### Acknowledgments

Florine L. Way originated, designed, and developed DOVACK during 1965-1966 while she was teaching experimental classes on her own time for adult illiterates at the Federal Correctional Institution in Tallahassee, Florida.

Computer support capabilities for her design and specifications for DOVACK were developed at the Computing Center of Florida State University while Dr. E. P. Miles Jr. was Director of the Computing Center.

The Research Council of Florida State University funded the evaluation pilot study that preceded the development of DOVACK.

William Petty and William Fuller are the scientific programmers for DOVACK.

Dr. Duane Meeter is the consultant in statistics for DOVACK. His graduate assistants who worked with him are Ed Stivers and Pat Snyder. (Acknowledgment is also made to Dr. I. Richard Savage, Dr. Richard Cornell, and Dr. Dan Solomon who gave advice and help.)

The U. S. Office of Education, ESEA Title III, funded the field tests of DOVACK in Monticello, Jefferson County, Florida, 1968-1969 - 1970-1971.

The Jefferson County School Board, Desmond M. Bishop, Superintendent, administered the USOE grant.

The Jesuit Sociologist, the Rev. Neil P. Hurley, S. J., obtained and provided the money for the film, DOVACK, for the director to use in an invited presentation in Santiago, Chile. ESEA Title III provided the money for the revision of the film, The DOVACK System.

On the county level, special acknowledgment is made to Desmond Bishop, Superintendent of Schools; Col. William Harrell, Chairman of the School Board, and other members of the School Board and county staff; Handley Olson and George Pittman, Principals; Stephan P. Walker, Assistant Principal; Martha Stokes and Willa Seabrooks, DOVACK teachers; Gloria Jacobs, Virginia Brown, Johnny Mae Broxsie, Doris Mays, and Alberta Barnhart, DOVACK Aides.

Jim Harrell of the Tallahassee Camera Center gave freely of his own time and expertise to make photographs of project activities.

The American Institutes for Research donated the slide talk and extra slides which they had made to include in an audiovisual presentation of model programs at the 1970 White House Conference on Children.

On the federal level, Dr. William Hinze, Dr. Ray Warner, Dr. Gene Engle, and Dr. Norman E. Hearn have been especially helpful.

On the state level, Mr. Leo Howell and his staff have been especially helpful.

Florida's Manual for  
Applicants and Grantees

Title III

Elementary and Secondary Education Act  
Revised October 1970

PART II-C

- APPLICATION FOR CONTINUATION GRANT
- END OF BUDGET PERIOD REPORT
- END OF PROJECT PERIOD REPORT

OUTLINE FOR DEVELOPING NARRATIVE SECTION

- A. Project Identification
  - 1. Name and Address of Agency
  - 2. Project Number
  - 3. Grant Number
  - 4. Budget Period (Month, Day, Year)
- B. A Review of Project Activities
  - 1. For operational activities, discuss the effect of the project on the clientele by briefly stating the major objectives of the project and the techniques used in evaluating the extent to which these objectives were achieved. PACE project applicants are required to provide project evaluations.
  - 2. For planning activities, attach one copy of the results of the planning.
  - 3. Briefly describe project endeavors in which the anticipated results have exceeded expectations, and those in which results have not measured up to expectations.



4. Report the effect of the project on the educational institution or agency by discussing what you consider to be the greatest change resulting from the project.
5. Report the effect of the project on the cooperating agencies by:
  - a. Listing all the community agencies that cooperated in the project;
  - b. Discussing the results of such cooperation; and
  - c. Listing local educational agencies and counties which were served by the project and indicate any changes since the initial application.
6. Discuss how project information was disseminated and include such information as:
  - a. The number of unsolicited requests for information;
  - b. The number of visitors from outside the project area; and
  - c. The estimated costs of such dissemination.
7. Describe the methods and procedures being developed to carry the project forward without Federal support after the designated approval period.
8. List costs for budget period this narrative report covers:
  - a. \$ \_\_\_\_\_ Total Federal support under Title III, P.L. 89-10
  - b. \$ \_\_\_\_\_ Total Federal support other than Title III, P.L. 89-10
  - c. \$ \_\_\_\_\_ Total non-Federal support
  - d. \$ \_\_\_\_\_ Total cost
9. A copy of all materials used for purposes of dissemination are to be compiled as a separate package and submitted with each continuation grant application.

10. Attach several 8" x 11" original photographs of project activities. Whenever possible, activities involving students should be shown. A short paragraph describing the activity depicted should be attached to each photograph.
11. Discuss how recommendations of the on-site evaluators have been incorporated into the project. (See pp 21 and 22)

PART I  
STATISTICAL REPORT  
Elementary and Secondary Education Act, Title III, P.L. 89-10, As Amended

SECTION A - GENERAL PROJECT INFORMATION

<p>REASON FOR SUBMISSION OF THIS FORM (Check One)</p> <p>a. <input type="checkbox"/> INITIAL APPLICATION FOR TITLE III GRANT  <input type="checkbox"/> Planning <input type="checkbox"/> Operational <input type="checkbox"/> Resubmission  If Application for Operational Grant is preceded by Planning Grant, give:  1. Grant No. _____  2. Period: From <u>7/1/68</u> To <u>8/31/71</u></p> <p>b. <input type="checkbox"/> First <input type="checkbox"/> Second--APPLICATION FOR CONTINUATION GRANT</p> <p>c. <input checked="" type="checkbox"/> END OF PROJECT REPORT  Project Number <u>68-06004-0 and 060042</u></p>	<p>2. MAJOR DESCRIPTION OF PROJECT</p> <p>A. Check one category below which best describes your project. If categories do not apply, check Not Applicable.</p> <p>a. <input type="checkbox"/> Central City  b. <input type="checkbox"/> Geographically Isolated  c. <input checked="" type="checkbox"/> Programs for Minority Groups  d. <input type="checkbox"/> Pre-Kindergarten Programs  e. <input type="checkbox"/> Programs for Handicapped  f. <input type="checkbox"/> Not Applicable</p> <p>B. <input type="checkbox"/> Exemplary <input checked="" type="checkbox"/> Innovative <input type="checkbox"/> Services</p>
<p>PROJECT TITLE (5 Words or Less)</p> <p>DOVACK Method for Teaching Reading</p>	

NAME OF APPLICANT (Local Education Agency)

Jefferson County School Board

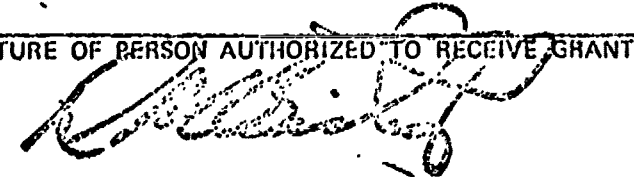
<p>ADDRESS (Number, Street, City, State, Zip Code)</p> <p>P. O. Box 499  Monticello, Florida 32344</p>	<p>6. NAME OF COUNTY  Jefferson</p> <p>7. CONGRESSIONAL DISTRICT  2</p>
--	---

<p>NAME OF PROJECT DIRECTOR</p> <p>Mrs. Florine L. Way</p>	<p>9. ADDRESS (Number, Street, City, Zip Code)</p> <p>P. O. Box 3205  Tallahassee, Florida 32303</p>	<p>PHONE NUMBER  224-6241</p> <p>AREA CODE  904</p>
<p>10. NAME OF PERSON AUTHORIZED TO RECEIVE GRANT (Please type)</p> <p>Desmond M. Bishop</p>	<p>11. ADDRESS (Number, Street, City, Zip Code)</p> <p>P. O. Box 499  Monticello, Florida 32344</p>	<p>PHONE NUMBER  997-2022</p> <p>AREA CODE  904</p>

12. POSITION OR TITLE

Superintendent of Schools

I hereby certify that the information contained in this application is, to the best of my knowledge, correct and the local educational agency named above has authorized me as its representative to file this application.

<p>SIGNATURE OF PERSON AUTHORIZED TO RECEIVE GRANT</p> 	<p>DATE SUBMITTED</p> <p>6/72</p>
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<p>Use Only</p>	<p>Project Number</p>	<p>County Code</p>	<p>Congressional District</p>	<p>Fiscal Year</p>
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<b>13. MAINTENANCE OF FISCAL EFFORT - AVERAGE PER PUPIL ADA / / OR ADM<sub>r</sub> / / EXPEND. OF NON-FEDERAL FUNDS</b>	
a. SECOND PRECEDING YEAR FISCAL YEAR ENDING JUNE 30, 1969	\$ 567.00
b. PRECEDING YEAR FISCAL YEAR ENDING JUNE 30, 1970	\$ 575.00
c. ESTIMATED CURRENT BUDGETED EXPENDITURES FISCAL YEAR ENDING JUNE 30, _____	\$ 792.82

<b>14. LIST THE NUMBER OF EACH CONGRESSIONAL DISTRICT SERVED</b>	<b>15. TOTAL NUMBER OF LEA'S SERVED</b>
2	1

**SECTION B - TITLE III BUDGET SUMMARY FOR PROJECT**

1.	PREVIOUS OE GRANT NUMBER	BEGINNING DATE (Month, Year)	ENDING DATE (Month, Year)	FUNDS REQUESTED
a. Initial Application or Resubmission		July 1, 1968	June 30, 1969	\$ 67,000.00
b. Application for First Continuation Grant		July 1, 1969	June 30, 1970	\$ 67,000.00
c. Application for Second Continuation Grant		July 1, 1970	Aug. 31 1971	\$ 70,000.00
d. Total Title III Funds				\$ 204,000.00

2. COMPLETE THE FOLLOWING ITEMS ONLY IF THIS PROJECT INCLUDES CONSTRUCTION, IMPROVEMENTS TO SITES, REMODELING, OR LEASING OF FACILITIES FOR WHICH Title III FUNDS ARE REQUESTED. LEAVE BLANK IF NOT APPROPRIATE.

TYPE OF FUNCTION	TITLE III FUNDS REQUESTED
a. REMODELING (\$2,000 or less)	\$
b. CONSTRUCTION (over \$2,000)	\$
c. LEASING	\$
d. IMPROVEMENTS TO SITES	\$

**SECTION C - TOTAL SCHOOL ENROLL. AND PROJECT PARTICIPANTS ALL PROJECTS ACTIVE IN FISCAL YEAR**

1. 1968-1968 - 1970-71			PRE-K	KINDER-GARTEN	GRADES 1-6	GRADES 7-12	OUT OF SCHOOL YOUTH	ADULTS (exclude teachers)	TOTALS	TEACHERS EN-GAGED IN INSERVICE TRAINING
a. School Enrollment in Geographic Area Served	(1) Public			588	4491	3527			8606	
	(2) Non-public									
b. Persons Particip. in project	(1) Public	0	38	319	34	0	0	0	391	2
	(2) Non-public	0	0	0	0	0	0	0	0	
	(3) Not Enrolled	0	0	0	0	0	0	0	0	

2. TOTAL NUMBER OF PARTICIPANTS BY ETHNIC GROUPS (applicable to figures given in Sec. C1b.)

White	Negro	American Indian	Puerto Rican	Oriental	Mexican American	Other (Specify)	TOTAL
40	351	0	0	0	0	0	391

\*See table at the end of this section for the pupil participation during the three years by year, grade, race, and sex.

SECTION C (CONTINUED)

RURAL/URBAN DISTRIBUTION OF PARTICIPANTS

PARTICIPANTS	RURAL		METROPOLITAN AREA		
	FARM	NON-FARM	CENTRAL-CITY LOW-SOCIO-ECONOM. AREA	OTHER CENTRAL CITY	OTHER URBAN
Percent of Total Number Served (Based on Total Number in Sec. C1b .)	60%	40%			

SECTION D - TITLE III PROJECT STAFF - ALL PROJECTS ACTIVE DURING FISCAL

PERSONNEL PAID BY TITLE III FUNDS

TYPE OF PAID PERSONNEL	Reg. Staff Assigned to Project				New Staff Hired For Project			
	NUMBER FULL-TIME	NO. OF PERSONS	PART-TIME FTE	TOTAL FULL TIME EQUIV. (Col 2+4)	NO. FULL TIME	NO. OF PERSONS	PART-TIME FTE	TOTAL FULL-TIME EQUIV. (Col. 6+8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
ADMINISTRATION/SUPERVISION	1				1			1
TEACHER:								
(a) Pre-Kindergarten								
(b) Kindergarten								
(c) Grades 1-6	1							
(d) Grades 7-12								
(e) Other								
SUBJECT-MATTER SPECIALISTS (Artists, Scientists, Musicians, etc.)								
TECHNICIANS (Audio-visual, Computer Specialists, etc.)								
PUPIL PERSONNEL WORKERS (Counselors, Social Workers, Psychologists, Attendance Workers)								
MEDICAL AND PSYCH. PERSONNEL								
RESEARCHERS, EVALUATORS								
PLANNERS AND DEVELOPERS								
DISSEMINATORS (Writer, Publ Rel Personnel, Editors, etc.)								
Other Professional								
Para-Professional, Teacher Aides, etc.	4				4			4
Other Non-Prof. (Cler., Bus Drivers, etc.)								

SECTION E - SERVICES OFFERED, PERSONS DIRECTLY SERVED, AND ESTIMATED COST OF SERVICES - ALL PROJECTS ACTIVE DURING FISCAL YEAR - TOTAL NUMBER OF PARTICIPANTS (PERSONS MAY BE COUNTED MORE THAN ONCE)

Three years* MAJOR PROGRAMS OR SERVICES (1)	NUMBER OF PUPILS BY GRADE LEVEL				ADULT (6)	OUT OF SCHOOL YOUTH (7)	NO. OF NON-PUB. PUPILS (8)	ESTIMATED COST (Amt. may overlap) (9)
	PRE-K (2)	K (3)	1-6 (4)	7-12 (5)				
1. Develop, Plan; Eval, or Dissem. Activities		38	319	34	0	0		
2. Better Util. of Inserv. Ed. of Instr. Personnel								
3. Proj. for Instit Improv. Classroom (Org. Admin, Mgt.) Organization		38	319	34				
4. Educ. Centers Serving A Large Area								
5. Improv or Expand Curr. Arts (Music, Theater, etc.)		38	319	34				
Language Arts								
Foreign Languages		38	319	34				
Mathematics		38	319	34				
Science		38	319	34				
So. Studies/Humanities		38	319	34				
Vocational/Ind Arts								
Other-Specify								
6. Educ. Technology Media		38	319	34				
Computers								
TV/Radio								
Other-Specify Dictation equip.		38	319	34				
7. Improv Classroom Instr. Flex. Sched, Ind. Instr. Other-Specify								
8. Remed. & Spec. Education Handicapped Gifted Remed: Reading Speech and Hearing Other-Specify			319	34				
9. Pupil Person. Services Guidance Social Work Health Psychological Attendance								
10. Comm. Serv. or Partic. Meet Crit Educ Needs Central City Geograph. Isolated Minority Groups Early Childhood K & I								
11. Summer Programs		28	291	32				
12. Summer Programs		38	97					

\*See table at the end of this section for the pupil participation during the three years by year, grade, race, and sex.

Table D1

Pupil Population Served by DOVACK with  
Subtotals for Year, Race, and Sex

Grade	1968-1969					1969-1970					1970-1971					TOTALS
	NMM	NMF	WM	WF	T	NMM	NMF	WM	WF	T	NMM	NMF	WM	WF	T	
K	0	0	0	0	0	2	2	0	0	4	9	15	5	5	34	
1	0	0	0	0	0	3	2	0	0	5	37	30	14	11	92	
2	0	0	0	0	0	12	10	0	0	22	0	0	0	0	22	
4	0	0	0	0	0	9	1	0	0	10	0	0	0	0	10	
5	18	12	0	0	30	19	10	0	0	29	27	13	3	0	43	
6	20	10	0	0	30	21	8	0	0	29	15	14	0	0	83	
7	12	18	0	0	30	0	0	0	0	0	2	0	2	0	34	
Totals																
NMM	50					66					90					206
NMF	40					33					72					145
WM		0					0					24				24
WF			0					0					16			16
Year					90					99					202	391

PART II-C  
END OF PROJECT PERIOD REPORT  
NARRATIVE SECTION

A. Project Identification

1. Name and Address of Agency

The DOVACK Method for Teaching Reading

The Jefferson County School Board

Desmond M. Bishop, Superintendent

Box 499, Monticello, Florida, 32344

Florine L. Way, Project Director

P. O. Box 3205, Tallahassee, Florida, 32303

2. Project Number

68-06004-0 and 060042

3. Grant Number

OEG-4-8-060040-0069-056 and OEG-5-060040-0069

4. Budget Period

July 1, 1968 - June 30, 1969

July 1, 1969 - June 30, 1970

July 1, 1970 - June 30, 1971

July 1, 1971 - August 31, 1971



PART II-C NARRATIVE SECTIONB. A Review of Project Activities

1. For operational activities, discuss the effect of project on the clientele by briefly stating the major objectives of the project and the techniques used in evaluating the extent to which these objectives were achieved.

The reader who is not familiar with DOVACK is advised to read the literature in the Attachment to Appendix B, especially the article by this writer (Way, 1970) entitled, "The 'Language Experience' Approach in Teaching Reading - Computerized," which appeared in the September 1970 issue of Computers and Automation, and the brochure prepared for ED/fair '72.

This section contains PROJECT OBJECTIVES, techniques for evaluating each project objective, and CONCLUSIONS.

## PROJECT OBJECTIVES

The major project objectives were to field test and perfect the DOVACK System for its (A) adaptability to the populations for which it was designed, (B) effectiveness in meeting the educational goal and objectives stated for it, and (C) economic feasibility for use on a large scale.

(A) Adaptability

The first project objective was to field test and perfect the DOVACK System for its adaptability for use with beginning readers, severely retarded readers, and adult illiterates.

The adaptability of DOVACK for use with the following populations was field tested: (1) beginning readers in Kindergarten and first grade; and (2) retarded readers in second, fourth, fifth, sixth, and seventh grades.

The field testing with Kindergarten pupils was mainly to make a subjective assessment of the feasibility of using DOVACK with that age group and to develop techniques for adapting DOVACK to that population.

The field testing with the other populations was to assess the feasibility of using The DOVACK System with those populations; to field test the computer software and hardware, and the production/systems support; to field test the use of dictation equipment; and to field test and perfect the teaching strategies that are necessary for the implementation of DOVACK with those populations.

Evaluation of adaptability

The criteria for assessing the effectiveness of DOVACK in meeting the educational objectives (see below) were applied, when appropriate, to each of those populations.

It was not possible during the project to field test the use of DOVACK with adult illiterates. This is not considered a major omission. This writer designed and developed DOVACK while she was teaching experimental classes of adult illiterates at a federal prison (Way, 1965)\* during which she had the benefit of the subjective evaluative comments of the inmate pupils.

(B) Effectiveness

The second project objective was to field test and perfect The DOVACK System for meeting the educational objectives stated for it. Inherent in all of the educational objectives for DOVACK is the aim of enhancing the self-image of each pupil. The goal is that given the opportunity to participate in a DOVACK class, each pupil will develop (1) skill in manipulating his equipment and materials, (2) independent and self-pacing study habits, (3) favorable attitudes toward reading, and (4) proficiency in word recognition, word attack skills, and in general reading achievement.

Educational Objectives

Educational Objective 1 (Psychomotor):- Each pupil who participates in a DOVACK class will demonstrate skill in manipulating his own equipment and materials.

Educational Objective 2 (Affective):- Each pupil who participates in a DOVACK class will demonstrate that he is independent and self-pacing in his study habits.

\*See Appendix B for DOVACK References. See the Attachment to Appendix B for copies of literature about DOVACK.

Educational Objective 3 (Affective):- Each pupil who participates in a DOVACK class will demonstrate favorable attitudes toward reading.

Educational Objective 4 (Cognitive):- Each pupil who participates in a DOVACK class will demonstrate proficiency in word recognition, word attack skills, and in general reading achievement.

#### Evaluation of Effectiveness

An Evaluation Supplement is contained in the Attachment to Appendix B.

Evaluation of the effectiveness of The DOVACK System in achieving the educational objectives stated for it was in five areas: (1) Soft data from subjective judgment, observation, photographs and film. (2) Hard data from standardized tests, although some of these were considered inappropriate. (3) Hard data from each pupil's Rate of Learning his own new words as demonstrated by his performance on the DOVACK Random Sample Vocabulary Recognition (DRSVR) Tests. (4) Hard data on estimated readability levels of dictations. (5) Hard data on Vocabulary Usage.

(1) Soft data from subjective judgment, observations, photographs, slides, film, and visiting evaluators. These data were obtained from staff observation and judgment; daily process evaluation of individual performance in the classroom; entries in the schedules for on-site evaluation; written comments in the Visitor's Register by visiting educators; from graphic representations; and from written judgments expressed by professional evaluators under contract with the USOE and with ESEA Title III. See especially Section II-C, B, 10; Section II-C, B, 11; Appendix A; Appendix B; and the Attachment to Appendix B; and especially the Evaluation Supplement that is contained in the Attachment to Appendix B.

(2) Hard data from standardized tests although some of these were considered inappropriate. These data were collected as a bow to convention (see Evaluation Supplement in Attachment to Appendix B). Tests administered in the county-wide testing program were analyzed. California Test Bureau's California Achievement Tests were used for first grades; CTB's Comprehensive Tests of Basic Skills for the other grades. Results of the latter are of questionable reliability and validity because they were administered on the grade levels of the pupils instead of on their performance levels. Twelve tables have been compiled to show Analyses of Variance on results of the 12 tests on CTBS for the fourth, fifth, sixth, and seventh grades. Approximately

120 tables and figures have been compiled on results of the CAT tests in the first grade. The latter include, for DOVACK and Control, by class, for each test, Analyses of Variance and Multiple Range Tests; and for each test, by class, race, and sex, cumulative per cent tables and figures.

(3) Hard data from each pupil's Rate of Learning his own new words as demonstrated by his performance on the DOVACK Random Sample Vocabulary Recognition (DRSVR) Tests. The DRSVR tests (6-day, 36-day, 72-day, and 108-day) and Reports, for which the design and specifications were written by this writer, are two of the facets of DOVACK that make this system unique. The DRSVR Tests are computer-compiled and computer-printed from each pupil's own word banks and records. Sixty-six tables and figures have been compiled to reveal the findings. These include cumulative per cent tables and figures showing by grade, race, and sex, the Rate of Learning on the 6-day DRSVR Tests and on the cumulative 36-day, 72-day, and 108-day DRSVR Tests; and application of the Wilcoxon Rank Sum Test to the Rate of Learning data by grade and by DRSVR Test, to test differences in performance due to sex. The DRSVR Tests and Reports are used for process evaluation of each pupil's criterion-referenced performance and for product evaluation. These data are the most valuable hard data collected during the field tests. The data collection techniques are valuable tools for further research on a large scale without

interfering with the classroom work.

(4) Data on estimated readability level of dictations.

Fry's formula\* was used to obtain the estimates.

(5) Hard data on Vocabulary Usage. The technique for collecting these data was designed into DOVACK. The data are unique. The Vocabulary Usage data include all of the words dictated during the two full years of the project (except for some of the Kindergarten children). The data structure for the printout shows each word categorized by the number of users and the frequency of use, and by grade, race, and sex. Various combinations of the data can be retrieved. They are stored on magnetic tape until time and money are available for analyzing them, for comparing them with data collected on words in published books, and for preparing the categorized lists for publication and/or for printout by request. The techniques for collecting these data are also valuable for further research on a large scale without interfering with the classroom work.

\*Edward Fry, "A Readability Formula That Saves Time," Journal of Reading, Volume 11, Number 7 (p. 513-516, 575+) April, 1968.

(C) Economic Feasibility

The third project objective was to field test and perfect The DOVACK System for economic feasibility for use on a large scale.

Evaluation of economic feasibility

Data were collected on the cost of using DOVACK with the small number of pupils that were included in the Monticello project. Each year of the project, the per pupil cost was reduced. The per pupil cost should be reduced even more when larger numbers of pupils are served from one computer using the same programming support, production support, and systems support.

Essential units will be considered here. During the last year of the project: (1) Two teachers and four aides served 202 pupils. (For calculations, this will be rounded to 200.) This is a ratio of pupil to adult of approximately 33/1. (2) The average CP (computer central processing) time per pupil per month was fifty seconds. If that is rounded to one minute, the CP cost per pupil per month on the Control Data 6400 computer is approximately \$2.50. To approximate the human support time for the computer, double that figure. Peripheral equipment and services are optional - except for first grade and below - so peripheral costs are not included here. (3) Thirty-seven Dictaphones were used by the pupils, aides, and teachers. At a long-term lease-purchase cost of approximately \$16.00



per month per machine, this amounts to approximately \$3.00 per month per pupil. (4) Three key punch machines were used to prepare the input for the computer. At approximately \$77.00 per month, this is an average cost of approximately \$1.16 per pupil per month if the machines have to be leased especially for use with DOVACK. (5) Miscellaneous supplies would perhaps amount to less than a dollar per month per pupil.

It is impossible to estimate the cost per pupil in any school system without knowing the circumstances, computer services and equipment available, personnel, etc. There are many options available for using DOVACK - options in classroom use, options in equipment use, options in input/output devices, etc.

In most large school systems, the only extra cost for using DOVACK would be in paying for the workshops, in-service training, and fees for educational and technical consultants. A simple reallocation of resources would probably take care of most of the other expense for DOVACK. For example, since DOVACK computer work is independent of class time, the programs can be run on the school system's computer at odd hours. For another example, teachers can use DOVACK in their classrooms.

DOVACK would not be economically feasible nor operationally feasible for use by a small school system alone. The small school system, however, could obtain money to have a peripheral link with the computer serving a large school system, paying its pro rata share of the cost per pupil. Several small counties could have peripheral links with a central computer, each paying its pro rata share of the cost.

In order for DOVACK to be educationally feasible, it is necessary to have leavening-type workshops for the teachers and aides; and to have some in-service training.

Hopefully, the supervisors and principals would attend part of the workshops so that their understanding and support can be assured.

This writer expects to have a team available for educational and technical consulting to facilitate adoption and adaptation procedures. A plan for such a team effort is contained in Section II-C, B, 2.

### CONCLUSIONS

Evaluation of the effectiveness of The DOVACK System in achieving the educational objectives stated for it was conducted in five areas. Evaluation of the economic feasibility of DOVACK was considered in units of essentials. All of these are discussed in detail along with basic assumptions, tables and figures, and references to the literature in the full evaluation report that is being prepared.

This writer extracted some of the representative data to present in the "Evaluation Supplement to the Brochure Prepared for ED/fair '72." That paper is contained in the Attachment to Appendix B. Two sets of conclusions are included in that paper, extracted from the conclusions presented in the full evaluation report: (1) Five areas of evaluation, and (B) Adoption of the DOVACK System. For the convenience of the reader, the two sets of Conclusions are repeated on the three following pages in this section.

(A) Five areas of evaluation

(1) The soft data from subjective judgment and observation of pupils, parents, aides, professional educators, and professional evaluators are overwhelmingly favorable to The DOVACK System. Written documents supporting these evaluations include comments in the Visitors Register; brochure, booklet, and listing by the American Institutes for Research; articles by visiting authors; and written evaluations by professional evaluators for ESEA Title III. Film and photographic evidence are available.

(2) No definitive general conclusions can be inferred from the standardized test data because of the small sample sizes, the experimental field-testing situation, the atypicality of the population, the probable inappropriateness of some of the standardized tests especially on the intermediate level; and the impossibility of controlling certain crucial variables.

However, it can be concluded that a population that is mainly rural, black, and disadvantaged, with dialectical and cultural differences, from a county that has been federally designated "poverty-level" need not necessarily be the population that scores below the national norm on standardized tests.

There is implied evidence that the way the DOVACK composite stories are used in The DOVACK System is effective in teaching standard English for alternative and situational usage; and in helping to make the transition from DOVACK to conventional reading materials.

(3) By their performance on the DOVACK Random Sample Vocabulary Recognition (DRSVR) Tests, pupils proved that they can learn to recognize in isolation the words that they have dictated in context.

There is implied evidence that the DOVACK way of teaching skills for word attack and word recognition is effective.

Performance in learning to recognize words is not necessarily due to sex when the words were dictated in context by the pupils themselves.

The DOVACK System can be used effectively in teaching first grade pupils who are grouped heterogeneously.

(4) The readability level of instructional materials for a first-grade population that is mainly rural, black, and disadvantaged, with dialectical and cultural differences, from a county that has been federally designated "poverty-level" need not necessarily be confined to first-grade level when the instructional materials for those pupils are produced by the pupils themselves in The DOVACK System.

There is implied evidence that teachers in the intermediate grades need to spend much time with pupils who are severely retarded in reading in order to help them expand their experiences - both real and vicarious - to help the pupils extend their vocabularies and to develop their ability to express themselves orally.

(5) When the pupils order and dictate their own instructional materials, they do not necessarily use the words that are on their grade level in the conventional trade books and text books. This needs further investigation by comparing the dictated words from the project populations with the most recent categorized word lists of published materials.

#### (B) Adoption of The DOVACK System

(1) It is necessary for the teachers and aides who will use The DOVACK System to participate in workshops conducted by this writer and/or by teacher-consultants who have successfully used The DOVACK System under the direction of this writer.

(2) Good teachers, with DOVACK workshop experience, and with appropriate support (administrative/equipment/services) who make appropriate use of The DOVACK System, should be able to overcome many of the problems that plague educators in teaching standard English; in teaching initial and remedial reading; and in unifying the teaching of content with the language arts.

- (3) In order to adopt The DOVACK System, and have it work successfully, there can be a reallocation of resources:
- (a) DOVACK workshops can be conducted for the teachers and aides who are already in the school system.
  - (b) Since the computer work for DOVACK is independent of class time, the computer services can be performed any time, day or night. The same computer facilities and services can be used for different populations in different locations.
  - (c) Equipment (i.e. dictation machines, input/output machines) can be used during the day for public school pupils and for administrative purposes; and can be used in the evening for adult illiterates.
  - (d) A special purpose reallocation of resources might be for teaching illiterate prison inmates. There, literate inmates can serve as aides.
- (4) The DOVACK System, when appropriately used on a large scale over a long period of time, should produce cost-effective results.

2. For planning activities, attach one copy of the results of the planning.

This is not applicable because all of the plans were rejected.

However, this writer believes that the conditions that caused the rejection are general conditions that need to be corrected. She has therefore prepared a brief paper entitled "Proposed Plan for Handling Federal Support of Original Programs." This paper is contained in the next pages and is followed by a proposed specific application of the plan for DOVACK entitled "DOVACK Demonstration-Diffusion Center."



.....  
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.....

Proposed Plan for Handling Federal  
Support of Original Programs

by Florine L. Way

Introduction

This writer believes in ESEA Title 111 and appreciates the special service that it performs for education. It is therefore as an advocate of ESEA title 111 and a friendly critic that she directs attention to a disastrous flaw in the program and proposes a solution to eliminate the flaw.

The disastrous flaw is in the way of handling federal support of original programs - that is, original programs as distinguished from programs that are simply innovative for a particular LEA. Under the present ESEA Title 111 plan which exists in reality and is accepted as de facto policy by other funding agents, it is possible for an original program to be denied continued existence by virtue of its success.

The purpose of the proposed plan is threefold: (1) so that original programs that offer viable alternative solutions to persistent educational problems that are common to many school systems will not be lost to education; (2) so that creative human energy and government money will not be needlessly dissipated when an original program reaches significance and magnitude that preclude the possibility of total operational and financial support on the local level; and (3) so that the LEA can continue to have the benefit of the original program by paying its pro rata share of the cost.

Parenthetical comment

It will be obvious to those who know about DOVACK that this is the original program the writer has in mind in proposing the following plan. However, there must be other original programs that either have or will suffer the same fate as DOVACK unless help, such as that outlined below, is provided by the USOE.

DOVACK was originated, designed, and developed by this writer on her own time while she was teaching an experimental class for adult illiterates at a federal prison. Computer support for her design was developed at FSU's Computing Center, Dr. E. P. Miles, Jr., Director. Field testing of The DOVACK System in Jefferson County, Florida, was funded by ESEA Title 111, 1968-69 - 1970-71. DOVACK was evaluated by the American

Institutes for Research - under contract with the USOE - and was included by AIR as one of 34 Model Programs in Childhood Education and as one of 17 Model Programs in Reading. DOVACK has received highest ratings - "excellent" and "of national significance" - by other independent professional evaluators; has had inquiries and visitors from 34 other counties in Florida, more than forty other states, eight other countries; etc. No money is available to continue the program. The Ford Foundation, for example, has a policy of not even reviewing a project that has been funded by ESEA Title III and not continued by the LEA.

#### The proposed plan

- (1) At the time of funding by ESEA Title III, make a clear distinction between the projects that are field testing an original program and projects that are field testing a program that is innovative for a particular LEA.
- (2) Continue to encourage the LEA to phase in, as federal funds are phased out, financial support for an adopted or adapted innovation that proves successful and feasible for local needs.
- (3) Discontinue the expectation that the LEA phase in financial support for any more than its pro rata share of the cost of an original program that proves successful and has potential for meeting national (and/or international) needs as well as for local needs.
- (4) Establish a monitoring evaluation policy on the federal level (the monitoring to be conducted either by the USOE or by a contracted agency such as AIR). The agency would monitor, during the second and third (and perhaps a fourth) year, the relatively few programs in the nation that are field testing original programs.
- (5) If the original program proves to be useful in solving local problems but is not of national significance, the LEA would decide whether or not to continue funding the project when federal funds are phased out. If the original program proves to be a failure, it would be phased out and the report published so that others would not cover the same ground and make the same mistakes. No stigma would be attached to the failure.
- (6) Establish criteria for the monitoring agency to use in its evaluation to judge whether or not the original program is of national significance and worthy of diffusion on a large scale. The criteria might be the following: (a) Are the educational objectives stated for the original program of sufficient depth, scope, and relevance to warrant serious consideration?

(b) Are the criteria for evaluating the objectives appropriate and applicable? (c) Does the original program address itself to solving persistent educational problems that are national in scope and common to many school systems? (d) Is this original program effective in meeting the educational objectives stated for it? (e) Is this original program adaptable to populations in other sections of the country? (f) Is this original program exportable to other sections of the country if appropriate facilities are available to expedite the exportation procedure? (g) Would this original program be economically feasible and cost-effective for LEAs to adopt and/or adapt to their local situations if their financial responsibility for it is confined to paying their pro rata share of the cost?

(7) If the original program meets the first six criteria, the monitoring agency would do the administrative work involved in obtaining appropriate funds from either federal sources and/or private foundations for the establishment of a demonstration-diffusion center and would assure the administrative and financial support for operating the center. This demonstration-diffusion center would (a) conduct on-site workshops for teachers who are going to use the program, (b) furnish technical help to user LEAs to assist in adopting and/or adapting the program to their local needs, (c) furnish teacher-consultants for site visitations and in-service training. The user LEAs would obtain the money to pay for these services.

(8) The demonstration-diffusion center could be located in any convenient place. If it is located in the county in which it was originally field-tested, that county would be expected to pay only its pro rata share of the cost for its pupils. Each participating LEA would be expected to pay only its pro-rata share of the cost for its pupils.

(9) The umbrella operating costs and administrative responsibility (e.g. salary of the educational director, administrative assistant, technical assistants, etc.) would be absorbed by the funds obtained as noted in (7) above.

(10) The above plan can be accomplished with no extra cost by a reallocation of resources within the USOE. For example, a relatively simple computer program could be designed to store and retrieve information on demand to keep each segment of the USOE informed of what the other segments are doing about a particular program in the areas of financial support, monitoring, evaluation, dissemination, continuation, and diffusion.

### Conclusion

ESEA Title 111 is certainly one of the finest programs in the

USOE, especially in its willingness to fund innovative and original programs. However, human creative energy and government money are being dissipated with tragic loss to education because of failure to provide the means for continuing effective, adaptable, and economically feasible programs of national significance that are of such magnitude that they cannot be supported on a local level for more than the LEA's pro rata share of the cost and administrative responsibility. The proposed plan outlined above would provide the means for the LEA and other LEAs in the nation to assume responsibility for only their pro rata share of the cost. The USOE would provide the umbrella support for obtaining financial support and for the administration of the demonstration-diffusion centers for use on a national (and/or international) scale.

The proposed plan involves the reallocation of USOE administrative and financial resources, not the expenditure of additional money.

## DOVACK Demonstration-Diffusion Center

DOVACK is more than just a way of teaching reading - important as that is. DOVACK is a way of living in the classroom. It should be an integral part of the total curriculum for use with the pupils for whom it was designed.

DOVACK was designed by this writer for large-scale use. It is not the kind of program that a school system can just say, "We want to use DOVACK," and start using it.

The following is a proposed plan for a specific application for DOVACK of the "Proposed Plan for Handling Federal Support of Original Programs."

The ideal arrangement would be for this writer to have the financial backing to direct (with a competent administrative assistant) a DOVACK Demonstration-Diffusion Center. This center would serve three main purposes: (a) It would be a model to demonstrate various ways in which DOVACK can be used effectively. (b) It would be a training center in which this writer can train teacher-consultants and aide-consultants for on-site workshops and for traveling to other sites to conduct workshops and in-service training. (c) It would be a center from which a team can be sent to help school systems adopt and/or adapt DOVACK to their needs. This team would consist of an educational consultant (this writer and/or a teacher-consultant that she has trained); an aide-consultant that this writer and the scientific

computer programmer have trained; the scientific computer programmer; and the business-administrative agent.

A brief example of the way in which the DOVACK Demonstration-Diffusion Center might work is the following.

Assume the center has already started. This writer has trained the teachers so that demonstration classes are operating under different kinds of conditions for beginning readers, severely retarded readers, and adult illiterates. (Later, classes will be added for using DOVACK in Spanish and in other foreign languages.)

A brochure is prepared describing the services of the center, cost estimates for using DOVACK, etc.

Pertinent information about the more than 600 educators who have expressed interest in DOVACK by visitations, written inquiries, and telephone calls, has been coded onto computer cards.

As a starter, the descriptive brochures are sent to 10 of the interested educators.

The XYZ School System calls that they are interested in exploring the possibility of adopting DOVACK as part of their curriculum. The DOVACK business-administrative agent estimates the cost of consulting services for two days for the presentations and exploratory conferences by the DOVACK team. Perhaps the XYZ School System has already sent a group to visit the DOVACK Demonstration-Diffusion Center.

The DOVACK team goes to the XYZ School System.

The educational consultant makes a presentation to all of the people who might be involved in using DOVACK and in making decisions about using it. (At first, this writer will make the presentations. She will gradually train teacher-consultants who can make the presentation which consists of the film, slide talk, transparencies, and the extremely important question and answer sessions and discussions with the entire group and with small groups.)

The scientific computer programmer for DOVACK confers with the computer specialists in the XYZ School System who control the programming/production/systems support. (If the XYZ School System already has a Control Data 6000 series or an IBM 360 series computer, this will possibly be the only consulting session necessary for the computer specialists. Others will probably need additional consultation to help with the conversion.)

The aide-consultant confers with teacher-aides in the XYZ School System and answers questions; shows samples of the kinds of work required; and perhaps demonstrates if facilities are available.

The business-administrative agent confers with the specialists in federal-state relations, budget, AV equipment, grantsmanship, etc.

The educational consultant has small-group sessions with the teachers who will be involved, and with the supervisors, principals, and curriculum specialists.

Then a policy conference between the DOVACK team and representatives of the teachers, the aides, the budget specialists, the federal-state relations and grantsmanship specialists, and the decision-makers is held to discuss the educational, operational, and economic feasibility of adopting DOVACK. At that time, if the decision is made to adopt DOVACK, plans will be made to implement the adoption procedures according to the needs of that school system. These plans will include the kinds of workshops, in-service training, and consultation visitations that will be needed; the kinds of services needed (if any) for converting the DOVACK programs to the XYZ computer system; the desirable level of reallocation of resources within the school system, etc. Decisions will be made about performance expected, evaluation procedures, etc.

Then a contract can be drawn and the implementation procedures started. The XYZ and other participating school systems will be expected to reallocate their own financial resources and/or to obtain funds from external sources to implement the plans.

There are certain professional prerequisites that this writer would expect for the DOVACK Demonstration-Diffusion Center from participating school systems. She would expect to have access to the data collected especially on the Rate of Learning and the Vocabulary Usage which are unique features of DOVACK. These data, collected from different populations in different sections of the country can be



invaluable in interdisciplinary research. Additional funds would be obtained to defray the cost of analyzing these data.

This is not the place to go into detail. This just gives a brief indication of how the adoption of DOVACK might be facilitated, and of how the problem of philosophical isolation might be precluded.

3. Briefly describe project endeavors in which the anticipated results have exceeded expectations, and those in which results have not measured up to expectations.

Project endeavors in which the anticipated results have exceeded expectations.

The project endeavors in which the anticipated results have exceeded expectations are in five categories: (1) Staff response. (2) Pupil response. (3) Racial rapport. (4) Data collection and technique: for data collection. and (5) Interest and recognition.

(1) Staff response

The staff consisted of six black women: two teachers and four aides from the community. They were able to absorb the DOVACK philosophy and to learn the skills, techniques, and strategies that enabled them to use DOVACK effectively. They "kept their cool" under circumstances that were often difficult. (For example, there were sometimes as many as twenty-five visitors at one time. There were photographers and a cinematographer making graphic records of them in normal situations.)

The teachers and aides were adaptable, dedicated, and competent. There had been predictions by others that classroom teachers and aides, especially rural blacks, could not learn to use a sophisticated systems approach to teaching. By their performance, these women proved such a position untenable.

(2) Pupil response

This writer was proud to take any visitors from anywhere to observe the DOVACK classes at any time. (When one visitor asked a DOVACK teacher, "What do you do with your discipline problems?" she answered, "WHAT discipline problems?")

By their performance, pupils proved untenable the notion that rural black disadvantaged pupils must always be the ones who score below the national norm on standardized tests. By their performance, pupils proved untenable the predictions by others that these rural black disadvantaged pupils "would tear up the machinery," "can't become self-directing," "can't learn to work independently," "will be discipline problems," "can't learn to recognize those hard words they dictate," "can't learn to read that material they dictate that is far above their grade level," etc., etc.

Although no generalizations can be inferred from the results of the Monticello field tests because of the sample size, the experimental situation, and the atypicality of the population, this writer has the conviction that if success has been achieved with some rural black disadvantaged pupils under certain conditions that success can be achieved again with other rural black disadvantaged pupils and with other populations when those certain conditions are replicated. As Robert Merton wrote, "A single success proves it can be done. Thereafter, it is necessary only to learn what made it work."\*

\*Robert K. Merton, Social Theory and Social Structure, New York: Free Press, 1957. P. 436.

The reader is referred to Section II-C, B, 1 and to the Evaluation Supplement in the Attachment to Appendix B for a discussion of the evaluation; to Appendix A for quotations from visiting educators; to the literature in the Attachment to Appendix B; to Section II-C, B, 10 for annotated photographs of pupils achieving certain educational objectives; to Section II-C, B, 11, for comments by professional evaluators; and to the film, "The DOVACK System," to view the pupils at work in DOVACK classes. The reader is also referred to Section II-C, B, 4.

(3) Racial rapport

Under the able leadership of the superintendent, the supervisors, and with the cooperation of the teachers, many deliberate and conscientious efforts were made in the county to achieve racial rapport and to dispel the stereotyped, negative ethnic images that existed and were observed and recorded by the TAP committee. This writer believes that the DOVACK project helped a great deal in this effort.

In order to appreciate the situation, one needs to understand this part of the Deep South which has a predominantly black population, where there has always been vertical segregation; where there has been paternalistic white supremacist leadership; where there has been the benevolent conviction that "our colored people need to be taken care of" because of their "inborn inferiority," "low moral standards," "shiftlessness," etc.

It was therefore with a deep sense of personal pride that this writer, a Deep South white woman, introduced visitors to her all-black staff in this showcase project and observed the admiration of the visitors - black and white, VIPs and lesser folk, southern and non-southern - as they observed these black women working harmoniously with both black and white students. They worked with poise, self-confidence, and proficiency, and with obvious enjoyment.

(4) Data collection and techniques for data collection

Since 1965, this writer has persisted in her efforts with statisticians and programmers on her design and specifications for collecting data on Rate of Learning and on Vocabulary Usage. This persistence has been rewarded. The data are collected. Large portions of the data are tabulated and graphed. The Vocabulary Usage data are stored on magnetic tape.

The techniques for collecting the data on Rate of Learning and on Vocabulary Usage are field tested and perfected. They can be used as valuable tools for interdisciplinary research without interfering with the classroom teaching.

(5) Interest and Recognition

There were interest and recognition, both formal and informal, beyond this writer's expectations. Information about this is contained in various sections of this report: II-C, B, 6; II-C, B, 11; in Appendix A; in Appendix B; and in the literature in the Attachment to Appendix B.

Other recognition is contained in letters in this writer's file from educators for whose opinion this writer has great respect. These letters have not been included in this report.

Project endeavors in which results have not measured up to expectations.

This section contains two parts: PROBLEMS and SUGGESTED SOLUTIONS.

PROBLEMS

The project endeavors in which results have not measured up to expectations are problems in four categories: (1) Technical problems. (2) Resistance to change. (3) Inflexibilities. (4) Philosophical isolation.

(1) Technical problems

Every technical problem that could be encountered was encountered. When new rows are being hoed and new fields are being ploughed, these kinds of problems can be expected. It must be acknowledged that this writer was at times trying to push the technologists faster than they were ready to be pushed at that time. However, the major problems have been solved now which means that when others use DOVACK they can benefit from the experiences encountered in field testing DOVACK in Monticello. The disappointment is that it took such a long time to solve the problems.

(2) Resistance to change

This resistance did not come from the grass roots. It did not come from the pupils, the parents, the teachers whose pupils were in DOVACK classes. It did not come from the DOVACK teachers and aides. The resistance came from The Experts (some in positions of influence) who did not visit the project.

### (3) Inflexibilities

The director made the mistake of bowing to convention when she included the use of experimental and control groups in the evaluation design. This created an inflexible situation for randomly assigning pupils to DOVACK, thus making many parents and children unhappy.

The director spent countless frustrating hours and days trying to mediate between inflexible agency policies and trying to solve problems that should have been routine had there been common definitions of terms and common policy between the various agencies.

DOVACK has no financial support. Although the ESEA Title III program is otherwise splendid, the inflexible expectation that the LEA will assume financial support of a project after three years of ESEA Title III support created problems that have so far been beyond the ability of this writer to solve. Although "not a policy," the expectation is a reality, seems to be accepted as de facto policy by other funding agencies, and seems to be respected by them regardless of the legitimate reasons for the LEA's not assuming total financial support.

### (4) Philosophical isolation

DOVACK remained a showcase project, philosophically isolated from the mainstream of educational policy in the county. Lest the reader be inclined to criticise the county for this, let the writer remind the reader that the Jefferson



County people allowed and encouraged the writer to conduct the field tests there, welcomed the project, cooperated in planning and implementing the plans, put Title I money into DOVACK, and displayed pride in having the project in the county. This is in contrast to the attitude in the place from which the writer had first wanted to introduce DOVACK.

The philosophical isolation made it difficult to coordinate DOVACK with other parts of the curriculum such as art, music, subject matter, and classroom activities.

#### SUGGESTED SOLUTIONS

None of these problems is insolvable. Had the director been able to indulge in anticipatory retrospect to achieve the benefit of hindsight at the beginning of the project, she could have avoided many of the problems and disappointments. For one thing, money to pay a secretary could have freed the director from the tedious secretarial and clerical chores on evenings, weekends, and holidays so that she could have spent this time more creatively on problem-solving and professional writing.

A brief discussion of possible solutions to each problem follows.

##### (1) Technical problems

Money to pay an administrative assistant to follow through on her instructions and to "ride herd" on those who needed it would have freed the director for other work, and

would have given her more time to spend in work for which she is better prepared, and for trying to overcome the resistance to change.

(2) Resistance to change

Had the director had the time and the power to insist on being invited to conduct faculty seminars to explain the program to The Experts and to insist on visitations to the project by them, some of this resistance to change might have been overcome. (On the other hand, this might be an overoptimistic speculation.) Also, had the director had the time to prepare papers for publication in professional journals in her field, it might have helped.

(3) Inflexibilities

For the inflexibilities problems, the director suggests several different kinds of solutions.

The director could have precluded the unhappiness of those who wanted to participate in DOVACK and could not by insisting that the evaluation design for field testing an original program should not include the conventional experimental and control groups. (This is discussed briefly in Section II-C, B, 2; in Section II-C, B, 11; and in the Evaluation Supplement in the Attachment to Appendix B.) Now that DOVACK has been field tested and is ready to have an evaluation design which includes the conventional experimental and control group research, the control pupils should be drawn from a similar population in a different county.

An administrative assistant could have relieved the director of many of the frustrating chores related to the mutual inflexibilities between the various agencies. Also, an administrative assistant might have had the qualities of political sophistication and grantsmanship expertise that this writer lacks.

The problem of having no financial support for DOVACK is so incredible that most people do not believe it. This writer is holding her finger in the dike by drawing her early retirement income so that she can write and keep DOVACK alive -- otherwise, many years of her human creative energy, a quarter of a million dollars of government money, and an opportunity to serve education with an undeniably excellent program for teaching beginning readers, severely retarded readers, and adult illiterates, would burst through the dike and be lost. A suggested solution that could have helped DOVACK and that might help other original programs is presented in Section II-C, B, 2, "Proposed Plan for Handling Federal Support of Original Programs." This is followed by a proposed specific application for DOVACK entitled "DOVACK Demonstration-Diffusion Center."

#### (4) Philosophical isolation

This writer, a classroom teacher for twenty-nine years, is convinced that classroom teachers want to do the best possible job of teaching their pupils and that they welcome

appropriate and practical guidance. She therefore believes that workshops and in-service training for the teachers and aides will help to solve the problem of philosophical isolation. The supervisors, principals, and curriculum specialists also should attend parts of the workshops so that their understanding and support can be assured.

A plan for implementing such a solution is contained in Section II-C, B, 2, "DOVACK Demonstration-Diffusion Center," which follows the writer's "Proposed Plan for Handling Federal Support of Original Programs."

4. Report the effect of the project on the educational institution or agency by discussing what you consider to be the greatest change resulting from the project.

The director considers the greatest change in the county resulting from the project was to the teachers and pupils who were in direct contact with DOVACK.

A black educator in Jefferson County, upon being told by the director that the project would not be continued, remarked, "....You've given these boys and girls dignity and pride - but I guess you are just twenty years ahead of your time..."

Dignity and pride.

Let the writer take you, the reader, for a visit to some DOVACK classes. Watch the children enter. They go to their desks, get their DOVACK boxes, consult their Agenda, and go to work, each one doing what he had planned the day before.

One pupil is dictating a new story; another is sharing a story with a peer; another is taking a dictionary and a touch alphabet to work with two others on their new words.

One little boy deviates from his Agenda and motions to you, the visitor. He wants to read his story to you and to make a copy of it for you to take with you. Another tugs at your sleeve and tells you that it's OK for you to voice-tape his story for him. A little girl asks you if you want to listen to a story she has just dictated.

You, the visitor, are not disturbing them. They go on about their activities that they have planned. But they want

you to know that you are welcome and they want you to know how proud they are of the work they are doing.

You observe the teacher working with a small group on developing new vocabulary - later working with another group on word recognition skills, using their own words.

You see the pride of the sixth grade boy who can recognize his own name for the first time and is reading his own story.

You can't help reacting to the uninhibited exuberance of the kindergarten pupils reading their own stories.

Look at the little boy on the rug on the floor feeling the sandpaper letters as he forms the words in his story.

The little girl who has just finished administering her DRSVR Test to herself takes it to the basket, then turns to flash a triumphant smile. She did well on her test and she knows it.

The director asks a first-grade group if anybody knows why she and the visitor stayed such a long time observing the class. A little black girl dances and cries out, " 'Cause we're so SMART?"

Perhaps these experiences will not be totally lost on the children.

The teachers whose children were in DOVACK observed and remarked favorably about the pupils' behavior when they returned to the classroom - their favorable attitude toward reading, the application of independent word attack skills when

they encounter new words; the improvement in general listening comprehension, in ability to communicate with peers and teachers, and in following directions; in independent work habits. These teachers know now that there are viable alternative ways of teaching.

The DOVACK teachers have stated that although they will not be able to use DOVACK, they will continue to use many of the basic ideas that are part of the teaching philosophy of DOVACK.

The reader will wish to supplement this subjective account by reading Section II-C, B, 1; Appendix A; Appendix B; and the literature in the Attachment to Appendix B, especially the Evaluation Supplement.

5. Report the effect of the project on the cooperating agencies by:

- a. Listing all the community agencies that cooperated in the project;
- b. Discussing the results of such cooperation; and
- c. Listing local educational agencies and counties which were served by the project and indicate any changes since the initial application.

.....

a. Listing all the community agencies that cooperated in the project.

The Howard PTA:- The director was invited to speak to a PTA meeting. Several mothers served as chaperones on field trips.

Volunteer mothers at Mamie B. Scott:- A member of this group of concerned mothers served as a volunteer helper for the DOVACK teacher for Kindergarten and first grade.

The local dairy (Bassetts):- They hosted the pupils during a field trip.

The Kiwanis Club:- The Superintendent introduced the director at the Kiwanis Club when she was invited to make a presentation there just before she left to make an invited presentation in Chile.

The Monticello News:- The local weekly paper gave good coverage to the project.

b. Discussing the results of such cooperation

As indicated above, several mothers did volunteer work as chaperones; and one did volunteer work as a part-time aide.



It is necessary for the reader to keep in mind that Jefferson County has a population of less than 10,000 people, less than 40% of whom are white. It has the second highest illiteracy rate in the state. The per capita income is approximately half the amount of the national average. The county has been federally designated as a "poverty area."

Given the circumstances in the county and the nature of the project (See Section II-C, B, 2), this writer does not know what results are expected.

c. Listing local educational agencies and counties which were served by the project and indicate any changes since the initial application.

The LEA that was served by DOVACK is Jefferson County. The Howard School was served for the three months of operation during the first year. Both Howard School and the Mamie B. Scott School were served during the second and third years.

There was no way for the original plans for expansion to other counties to be implemented.

6. Discuss how project information was disseminated and include such information as:

- a. The number of unsolicited requests for information;
- b. The number of visitors from outside the project area;
- and
- c. The estimated cost of such dissemination.

The director has added

- d. Personal appearance dissemination activities.

Appendix B contains tables that itemize the number of visitors and inquiries by year, by county in Florida, by state, by territory, and by country.

The table does not include the unsolicited dissemination activities by the director since the project closed. (There have been more than 100 inquiries and requests for information and materials since the project closed.)

The 557 visitors and inquiries while the project was in operation came from 34 other counties in Florida, 40 other states, the District of Columbia and four territories, and from 8 other countries.

The requests for the film were not tabulated by county, state, and country.

The requests for information, materials, the film, and for the director to make presentations came by mail, by telephone, and by personal request. Many of these requests were prompted by the wide publicity given to DOVACK, by articles written by this writer and by others, by the listing of DOVACK in various indexes. Some came after the director had made a presentation. Some came from people who had received favorable reports of the project from other people who had visited

it. Some came as a result of ESEA Title III dissemination activities.

a. The number of unsolicited requests for information;

The tables in Appendix B show that there was 344 unsolicited inquiries and requests for materials and information.

There were 35 requests for the film at the AV Center in Monticello. (In some cases, one request served several groups in the same place.) This number does not include the number of times people have borrowed the film without sending in a formal request, nor the innumerable times the director has showed the film informally and in her presentations.

b. The number of visitors from outside the project area;

The tables in Appendix B show that there were 213 visitors from outside the project area. (Unfortunately, many visitors failed to sign the register.)

c. The estimated cost of such dissemination.

It is estimated that the cost for dissemination for the three years is about \$1800. This includes stamps, stationary, large manila envelopes for mailing; Xeroxing copies of materials for mailing; and buying reprints of the Computers and Automation article (Way, 1970).

d. Personal appearance dissemination activities by the director.

Appendix B contains a list of personal appearance activities by the director. Most of these were invited appearances. Some were efforts on the director's part to interest state department people in supporting DOVACK.

7. Describe the methods and procedures being developed to carry the project forward without Federal support after the designated approval period.

The following section is quoted directly from the "Application for Continuation Grant" for 1970-1971 (Vol. 1, Part II, #6, p. 22-23).

"The method and procedures being developed to carry the project forward without Federal support after the designated approval period will now be discussed.

Even though there is tremendous moral and educational support for the program in the county, it is unrealistic to think that Jefferson County can assume total responsibility for continuing DOVACK beyond the ESEA Title III funding period without external financial support. Jefferson County has been designated by the federal government as a poverty county. It is racially impacted. Illiteracy and unemployment rates are high. The county has no way to raise money. A new private school (designated "Christian") is due to open in the fall of 1970 - the educational and financial implications are obvious, as well as the anticipated social consequences. (In spite of these rather depressing facts, the project director resigned her tenured Associate Professorship at the University School of FSU's College of Education when the request for continuation of her leave of absence was denied. She took this step because of her confidence in the potential of DOVACK to help solve some persistent problems in education and because Jefferson County offers an excellent laboratory situation, both for teaching pupils and for conducting workshops. Besides - on a purely personal note - the high road of adventure with her dedicated and loyal staff and pupils beckons stronger than the low road of security.)

The director has county administrative approval to approach private foundations as soon as this renewal grant proposal is submitted. They will be asked to support the DOVACK Centers for the purpose of (a) teaching the pupils, and (b) conducting workshops. It is hoped that results in both areas in this third year of ESEA Title III funding will persuade another funding source to continue the work, especially in view of Commissioner Allen's "right to read" campaign."

As revealed in this quotation, the director is naive beyond belief.

## EFFORTS TO OBTAIN FUNDS

The following is a brief annotated list of the director's efforts to obtain funds.

(1) School Board, Jefferson County. (No money. Program too big for county to support more than pro rata share of larger operation.)

(2) ESEA Title III, Section 306, "DOVACK - Innovative Applications and Services." (Rejected with a form letter which she happened to see months later. Her request for a summary of the objections to the proposal so that she could amend and resubmit was ignored.)

(3) Presentation to a group in Washington assembled by Dr. Hinze. (Much enthusiasm. No money.)

(4) Ford Foundation. ("....we have, therefore adopted a policy of not picking up projects formerly supported under Title III.")

(5) Rockefeller Foundation. ("....I regret having to reply in this negative way, as I am sure your project aims will be of considerable interest and importance in the area of teaching basic reading skills. I do hope, therefore, that you will be able to obtain funds from other sources...")

(6) The Florida State Department of Education. (The director might as well have been asking for a slice of the moon.)

(7) Right to Read Committee of the State of Florida. (The chairman said they are not interested in programs for teaching reading, only in making assessments of needs.)

(8) "Southeastern Regional Seminar on Reading in the 70s." (The director totally misunderstood the nature and reason for the "seminar.")

#### COMMENTS

The director has concluded that it is easier for her to teach illiterate prison inmates (Way, 1965), than for her to communicate with funding agencies. This writer lacks both political sophistication and grantsmanship expertise.

Under contract with the USOE, the American Institutes for Research investigated programs all over the nation and identified DOVACK as one of 34 Model Programs in Childhood Education and as one of 17 Model Programs in Reading; and included DOVACK in an audiovisual presentation on model programs at the 1970 White House Conference on Children. (See Attachment to Appendix B.)

Under contract with the USOE, a group at Indiana University is investigating preschool programs to identify those that are exemplary. Dr. J. Jaap Tuinman from I.U. spend most of the day on December 6, 1971, with the director, viewing the film, viewing the slide talk (made by AIR), looking at the DOVACK data, and discussing DOVACK.

Under contract with the USOE, the Educational Testing Service of Princeton is investigating compensatory reading programs to identify exemplary compensatory reading programs. Dr. Donald Trisman of ETS called the director about this on March 13, 1972. He had just read about DOVACK and liked what

he read. However, they are not allowed to include in their visitations any programs that are not operational, no matter how good they are. That eliminated DOVACK from consideration.

Under contract with ESEA Title III, on-site evaluations of on-going Title III projects were conducted. DOVACK received a rating of "Excellent, nationally significant." (See Section II-C, B, 11.)

One is tempted to speculate on the benefits that might accrue to education if the activities of the agencies that fund programs were coordinated with the activities of the agencies that investigate and evaluate programs.

This writer would be interested in the reader's reaction to Section II-C, B, 2, which contains her "Proposed Plan for Handling Federal Support of Original Programs," followed by her proposed specific application for DOVACK entitled "DOVACK Demonstration-Diffusion Center."



8. List costs for budget period this narrative report covers:

- a. \$204,000.00 Total Federal support under Title III,  
P. L. 89-10
- b. \$ 19,280.00 Total Federal support other than Title III,  
P. L. 89-10
- c. \$ 30,000.00 Total non-Federal support
- d. \$253,280.00 Total cost

9. A copy of all materials used for purposes of dissemination are to be compiled as a separate package and submitted with each continuation grant application.

Most of the director's dissemination activities are unsolicited on her part. Inquiries continue to come to this writer about DOVACK. She continues to mail literature and answer inquiries.

Interest in DOVACK is multidisciplinary. The inquiries range, for example, from a classroom teacher in McComb, Mississippi to a scientist in the Institute for Atomic Physics in Cluj, Romania. The director's answers to letters and the materials that she mails vary according to the interests expressed by the inquirers.

A copy of each item on the DOVACK Reference list that it is possible to include is included in the Attachment to Appendix B. (The reader should have his own copy of the June 1971 issue of American Education so that will not be included. The extra copies that were sent to the director are reserved for distribution to people who do not normally have access to that publication - for example, inquirers from Brazil, Turkey, Romania, etc.)

DOVACK and this writer appear in various indexes, lists, and registers such as: "Scholars Active" in Computers and the Humanities (1970); PACE publications; CENTREL's R & D Register (1970); Wisconsin's Index (1970); LIST 1972; EDUCOM's EIN (1969).

The following two pages contain a list of other DOVACK references.

## DOVACK References

- Chapman, Ruth, "Computer Does the Chores in DOVACK," Florida Schools, Vol. 32, No. 2 (p. 20-25) illus. November-December 1969.
- NCEC (National Center for Educational Communication), Model Programs - Childhood Education DOVACK. Cat. No. 5.220:20141, U. S. Government Printing Office, Washington, D. C., 20202 (20 cents). (Note: Since this booklet was prepared by the American Institutes for Research, the per pupil cost quoted has been drastically reduced.)
- Paisley, Clifton, "The One What Drinking Water Is The Sister....," Research in Review (Clifton Paisley, Ed.) Florida State University, Tallahassee, 32306, illus. November 1970.
- Way, Flo, The DOVACK System (film b&w 18 min 16 sec narrated). Available on loan from: Area AV Center, Box 499, Monticello, Florida, 32344.
- Way, Florine L. The DOVACK Method for Teaching Reading. (Unpublished. 24 pages.) 1966. (Note: The material in this paper is included in subsequent papers that were published.)
- Way, Florine L. Teaching Illiterate Prison Inmates with the Individual Pupil Dictation Technique and Testing with Adaption for Group Administration of the Peabody Picture Vocabulary Test: An Evaluation. (unpublished, 48 pages). 1965. (Note: This is a report on the evaluation pilot study that preceded the experimental work in a federal prison during which the writer designed and developed DOVACK.)
- Way, Florine L. "The DOVACK Model," EDUCOM Bulletin Vol. 4, No. 5, (pages 5-6) October 1969.
- Way, Florine L. "The 'Language Experience' Approach in Teaching Reading - Computerized," Computers and Automation, Vol. 19, No. 9 (p. 28-31) September 1970. (An abstract of this article appears in Language and Language Behavior Abstracts, Vol. V, No. 1 (Entry E00251, p. 530-531) January 1971.
- Wills, Martee, "DOVACK's Machines Help Children Read," AMERICAN Education, Vol. 7, No. 5 (p. 3-8) illus. June 1971.

As the final draft is being typed, two more references are added.

- Way, Flo, The DOVACK System, Tallahassee, Florida, 1972.  
(Note: This brochure was prepared for ED/fair '72 to be distributed from the DOVACK exhibit. The USOE paid for printing the brochure.)
- Way, Flo, "Evaluation Supplement to the Brochure Prepared for ED/fair '72 on The DOVACK System." Tallahassee, Florida, 1972. (Note: ESEA Title III paid for Xeroxing this supplement.)

The reader is referred to the Attachment to Appendix B for copies of these materials.

## 10. Annotated Photographs

This section contains ten photographs depicting student activities. Preceding each photograph is a brief description of the activity depicted.

The goal and educational objectives for DOVACK are repeated below for the convenience of the reader in using them as reference points for interpreting the photographs.

Inherent in all of the educational objectives for DOVACK is the aim of enhancing the self-image of each pupil. The goal is that given the opportunity to participate in a DOVACK class, each pupil will develop (1) skill in manipulating his equipment and materials; (2) independent and self-pacing study habits; (3) favorable attitudes toward reading; and (4) proficiency in word recognition, word attack skills, and in general reading achievement.

Educational Objective 1 (Psychomotor):- Each pupil who participates in a DOVACK class will demonstrate skill in manipulating his own equipment and materials.

Educational Objective 2 (Affective):- Each pupil who participates in a DOVACK class will demonstrate that he is independent and self-pacing in his study habits.

Educational Objective 3 (Affective):- Each pupil who participates in a DOVACK class will demonstrate favorable attitudes toward reading.

Educational Objective 4 (Cognitive):- Each pupil who participates in a DOVACK class will demonstrate increased proficiency in word recognition, word attack skills, and in general reading achievement.

Photograph #1

The pupils in the following photograph are gaining new experiences on this field trip so that they can expand their understanding and extend their vocabularies. They are also learning to manipulate the videotape equipment.

When the pupils return from the field trip, they will replay the videotape recording of their experiences and discuss them so that the experiences can become a part of their own language experience. Then the pupils will dictate their own reading lessons based on their understanding of these experiences.





Photograph #2

Three aspects of DOVACK teaching are evident in the following photograph. One pupil is studying independently. Another pupil is acquiring new experiences vicariously through the use of the Viewmaster. The teacher is in one of her appropriate classroom roles, as knowledgeable observer and available helper. (See also the comments for Photograph #10 for further discussion of the role of the teacher in DOVACK teaching.)



### Photograph #3

The pupil in the following photograph is inserting a Dictabelt into his Dictaphone with self-confident independence.

The magnetic Dictabelt is used by the pupil for (a) dictating his lessons; (b) listening to the teacher-recorded voice-tape models of his lessons; (c) administering his DOVACK Random Sample Vocabulary Recognition (DRSVR) Tests to himself; (d) studying his DOVACK Word Attacker; and for (e) listening to a variety of instructions, lessons, fun stories, etc., to help broaden his experiences and expand his personal repertoire of vocabulary and concepts.

Most of the pupils also learn to read and interpret the numerals on the front of the Dictaphone in order to locate a particular lesson on the belt.



## Photograph #4

The pupil in the following photograph is getting materials to use in implementing the next item on his DOVACK Agenda. Each pupil must learn to plan and follow his Agenda. He must learn to identify what he needs, locate it, get it, use it, and return it to the appropriate place. The cultivation of independent work habits is one of the most important of the interdependent facets of The DOVACK System.

In order for the teacher and the pupils to be able to take advantage of the high creative potential of DOVACK, the non-creative aspects of the program are routinized.



5-0110

Photograph #5

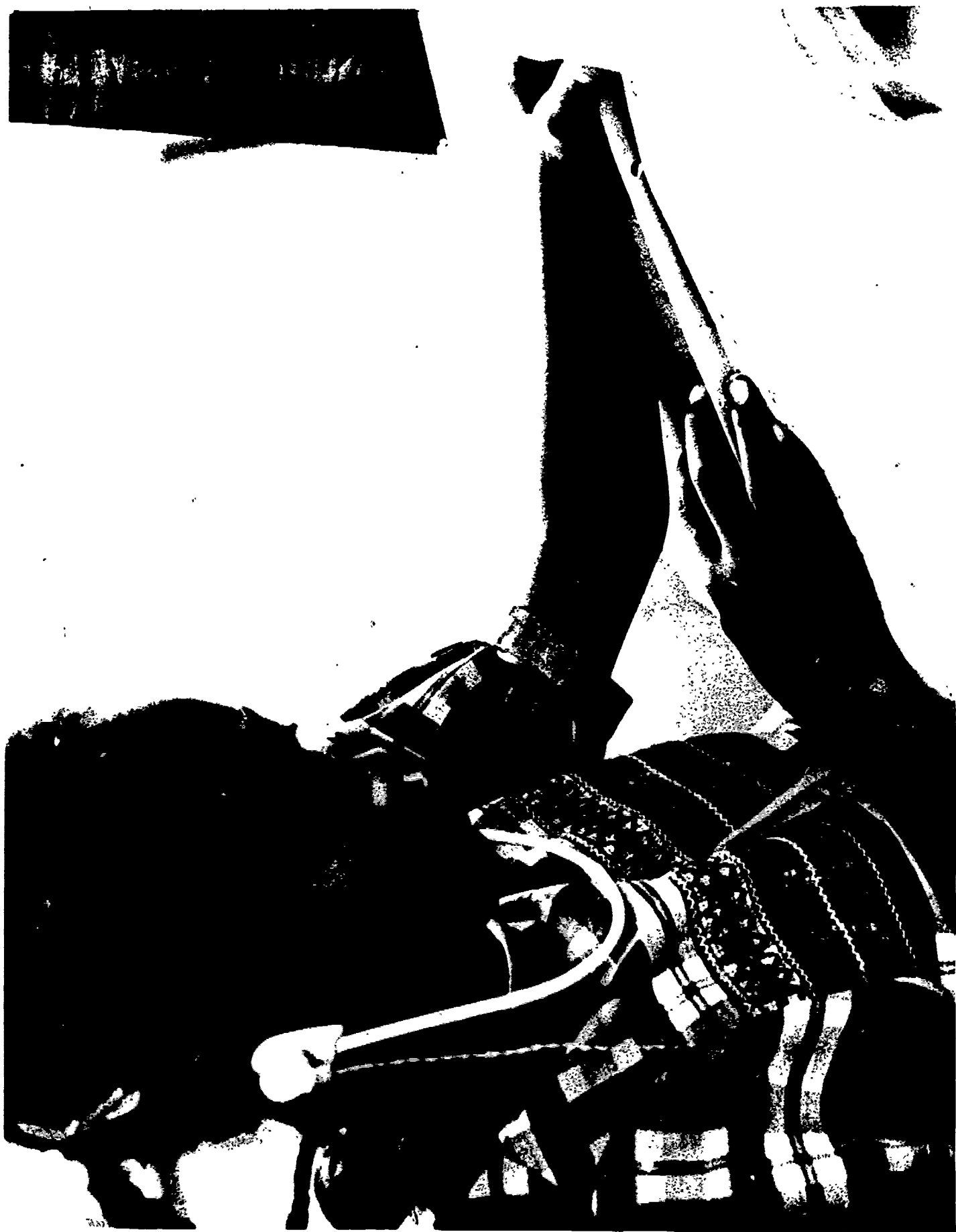
The following photograph shows one of the typical activities in a DOVACK class. The pupil is studying independently. She is listening to the teacher-made voice-tape model of her lesson on the Dictaphone while she reads the printout of her dictation prepared by the computer for her independent study.

At the end of the dictation can be seen the long word list with a number beside each word. The computer-prepared word lists are used for several purposes. (1) They serve as a guide to independent study. When the pupil finds a word on his list that he does not know, he uses the number beside the word to refer to the line on which the word first appeared in the text of his dictation to use a combination of beginning-sound and context clues to recognize the word. (If this fails, he replays the voice recording to hear the teacher pronounce the word.) (2) The pupils study the words in their own word lists by using touch alphabets to form the words and by using the dictionary to find and divide their words into syllables. They often study together and teach each other their words. (3) The computer derives each pupil's Random Sample Vocabulary Recognition (DRSVR) Tests from his own word bank which is kept on file. (4) The computer uses, for each pupil, the stored word lists and results of the DRSVR

Tests to calculate and compile the periodic REPORTS after each test period. (5) One of the unique features designed into DOVACK is that the computer stores information about the words, which pupils use them, etc., so that the organized data can be retrieved for analysis.



ERIC  
Full Text Provided by ERIC



Photograph #6

This second grade pupil is working independently, concentrating on his task of feeling cut-out sandpaper letters and using them to form words in his dictated story.

Each pupil, guided by his teacher when necessary, is encouraged to emphasize the sensory stimulation that is most useful to him in studying his lessons.



Photograph #7

This pupil is entering on her DOVACK Agenda the time at which she completed the most recent task that she had planned for herself. This pupil has already obtained all of the materials for her present needs and is handling her equipment and materials independently.

The planning by the pupils on their Agenda is within a broad pre-defined structure. This is an important part of teaching the acceptance of the responsibility that must accompany the freedom to choose a course of action. This writer believes that guiding pupils to learn to organize and plan their work is an essential part of all teaching. More advanced pupils can be taught to make their own Agenda without having a printed guide.

The DOVACK Agenda is modified in various ways for the pupils who are being served. For example, the Kindergarten and first grade pupils start with a picture agenda and are phased into a printed agenda when they are ready for it.



Photograph #8

This pupil is using his equipment independently. He might be administering his DOVACK Random Sample Vocabulary Recognition (DRSVR) Test to himself. Or he might be ordering and dictating his own instructional material to be sent to the computer to be processed for his independent study with his Dictaphone.



Photograph #9

This pupil is making a copy of his composite story to share with a peer, with the teacher, or perhaps with a visitor.

Composite stories are written by teachers and aides. (They can also be written by volunteers.) The composite stories are standard English versions of each pupil's own dictations in which he can recognize his own words in a different context. Composite stories are presented to the pupils, not as a substitute for their own language, but for alternative and situational use. Composite stories are used for transitional materials to conventional published materials.





Photograph #10

Just as in Photograph #2, the teacher here is shown in an appropriate role in the classroom.

In a DOVACK classroom, through the creative mediation of the teacher, technology supports the learning but does not intrude upon the environment.

The pupil does not automatically acquire manipulative skills, independent study habits, favorable attitudes toward reading, and proficiency in reading. The teacher is there to provide learning experiences that are necessary for him to acquire these skills, attitudes, habits, and proficiencies; to assess his needs and plan for them.

The individualization of the Language Experience approach is made possible by using the computer to perform the tedious chores that would be prohibitively expensive and monotonous if they were performed by human labor. In this way, and by using a system of efficient classroom management, technology serves the individual pupil through the mediation of the teacher who is thus free to do the work, with many more pupils in one day, that only humans can do effectively - that is, to encourage, motivate, guide, and interact with the pupils.

Thus, with DOVACK, technology helps to enhance the creative and human qualities of the teacher so that both teacher and technology can more effectively serve the individual pupil.



11. Discuss how recommendations of the on-site evaluators have been incorporated into the project.

This section contains the on-site evaluation reports for the three years of operation; and a brief discussion, following each report, of efforts that have been made, or not made, to incorporate the recommendations into the project.

The discussion following the on-site evaluation report for 1968-1969 was included in the Application for Continuation for 1970-1971.

For convenience, the pages of each report have been numbered to conform to the pagination scheme of this report.

July 23, 1969

Mr. D. M. Bishop  
Superintendent of Public Instruction  
Jefferson County Schools  
P. O. Box 1498  
Monticello, Florida 32304

Dear Superintendent Bishop:

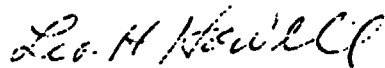
As you will recall the ESBA, Title III office contracted with certain Department of Education personnel and consultants outside the Department to conduct on-site evaluations of on-going Title III projects during the spring of this year.

We would like to take this opportunity to thank you and the people connected with the project for the hospitality afforded the on-site evaluators and for the excellent cooperation extended.

Superintendent Bishop, on the attached pages you will find summaries regarding the observations of the evaluators. It is hoped that the recommendations afforded by these consultants will be given due consideration and when feasible incorporated into the project.

Once again let me express the appreciation of this office for the fine way these visitors were treated and extend to you and your staff an open invitation to visit us.

Sincerely,



Leo H. Howell, Jr.  
Coordinator, ESBA Title III

LWH:cc

Enclosure

cc: Mrs. Florine Way

Jefferson      DOVACK METHOD FOR TEACHING READING      Doc 33-70001

PROJECT STRENGTHS

- a) Enthusiastic and dedicated staff
- b) Program communicates across barriers of race, class, age, interest and intellect
- c) Differentiation of program to meet individual needs
- d) Receptivity to and enthusiasm for program evidenced by students
- e) Children can assume much of the responsibility for learning to read
- f) Master teacher can assume most effective place in classroom

PROJECT WEAKNESSES

- a) Question how long interest may be maintained by using only children's experiences and personally dictated stories
- b) Delay in return of dictated stories for a period of 2 or 3 days
- c) Lack of variety in materials available to students
- d) Lack of involvement of classroom teachers in program philosophy and goals and incidental contributions they might make in their daily contact with participating students
- e) No apparent commitment to continue the project, if it proves successful, beyond the usual 3-year funding period

RECOMMENDATIONS TO IMPROVE THE PROJECT

- a) Investigate possibilities for speeding return of dictated stories in printed form
- b) A good collection of books -- high interest, low vocabulary -- should be placed in classroom for students to use in testing their new found skills
- c) Enrichment activities -- field trips and art work -- might provide an additional stimulus for dictated stories
- d) The involvement of classroom teachers should assure additional benefits for the children from the project particularly in providing experiences from which the participants could draw on for story material.
- e) Means for continuing project beyond normal funding period should be explored

1968-1969

## Weaknesses Listed Followed by the Director's Comments

"(4) Examination of the progress being made to incorporate the recommendations of visiting evaluators into the project."

The DOVACK project director and staff were pleased and gratified with the Project Strengths that were found to exist. They feel that both the "Project Strengths" and the "Project Weaknesses" constitute a fair and penetrating assessment. The project had been operational on a limited basis for about two months when the evaluations were made.

The efforts that are being made to overcome the weaknesses and implement the Recommendations to Improve the Project will be discussed below item by item.

"(a) Investigate possibilities for speeding return of dictated stories in printed form."

This has been improved. Next year, the system for it will be stabilized while work continues on perfecting the teleprocessing version.

"(b) A good collection of books -- high interest, low vocabulary -- should be placed in classrooms for students to use in testing their new found skills."

Many of these kinds of books had already been ordered at the time of the evaluations and are now available for the pupils. They will be more attractively displayed when the revolving book racks are in the rooms.

Other sources of variety in reading materials are the following. The pupils exchange stories with each other and

teach each other the words in their exchanged stories. Each pupil has composite stories written from his own vocabulary lists. (These are written by the teachers and the aides. In addition to giving the pupils a chance to recognize their own words in a different context, this is also the way that standard English for alternative usage is introduced.)

New material is introduced to the pupils by the use of films, narrated film strips, by the teacher reading to the pupils, etc. The pupils then dictate their lessons from their internalized vocabulary and understanding of this material.

"(c) Enrichment activities -- field trips and art work -- might provide an additional stimulus for dictated stories."

Progress that is being made in this area is still not enough. Increased efforts will be made next year. In Part III, proposed activities include expanding both the real and vicarious experiences of the pupils. It is necessary however, to limit field trips specifically for DOVACK because of scheduling problems.

"(d) The involvement of classroom teachers should assure additional benefits for the children from the project particularly in providing experiences from which the participants could draw for story material."

The groundwork for this mutual participation in DOVACK was laid this year in meetings, conferences, and discussions. Some of the classroom teachers in both schools have expressed interest in the plans that are included in Part III.



"(e) Means for continuing project beyond normal funding period should be explored."

This is the most serious weakness. In Part II, 6, the plan to seek financial support from private foundations is mentioned.

August 20, 1970

Mr. Desmond H. Bishop  
Superintendent of Public Instruction  
P. O. Box 499  
Monticello, Florida 32344

Dear Superintendent Bishop:

As you will recall the Title III, ESEA, office contracted with certain Department of Education personnel and consultants outside the Department to conduct on-site evaluations of on-going Title III projects during the Spring of this year.

We would like to take this opportunity to thank you and the people connected with the project for the hospitality afforded the on-site evaluator and for the excellent cooperation extended.

Superintendent Bishop, on the attached pages you will find observations of the evaluator. It is hoped that the recommendations afforded by this consultant will be given due consideration and when feasible incorporated into the project.

Once again let me express the appreciation of this office for the fine way this visitor was treated and extend to you and your staff an invitation to visit us on your next trip to Tallahassee.

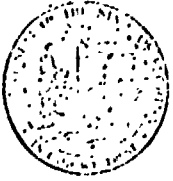
Sincerely,

Leo H. Howell, Jr.  
Coordinator, ESEA, Title III

LHEH:vb

cc: Mrs. Florine L. Wey

Attachments



LOYD T. CHRISTIAN  
SUPERINTENDENT

STATE OF FLORIDA  
DEPARTMENT OF EDUCATION

TALLAHASSEE 32304

OFFICE OF FEDERAL-STATE RELATIONS

ON-SITE PROJECT EVALUATION REPORT FORM  
TITLE III, ESEA

1. Project Number: U.S.O.E. 68-06004-0 SDE 33-70001
2. Project Title DOVAK Method for Teaching Reading
3. Project Activity:  Planning  Pilot  Operation
4. Name of Project Director Mrs. Florine L. Way
5. Address of Director P.O. Box 499,  

	Number		Street
<u>Monticello, Florida</u>	<u>32344</u>		<u>904 997-2022</u>
City	State	Zip	Area Code - Telephone
6. Date Project Began July 1, 1968
7. Date(s) of Visit May 24, 1970
8. Name of Visitor Ruthellen Crews
9. Title of Visitor Associate Professor of Education
10. Employed by University of Florida
11. Number of Hours Spent on Visit 7 1/2 hours
12. With Whom Did You Visit? (Give approximate numbers)

	<u>Public</u>	<u>Non-Public</u>
<input checked="" type="checkbox"/> A - <u>Students</u>	<u>40</u>	
<input checked="" type="checkbox"/> B - <u>Project Staff</u>	<u>5</u>	
<input type="checkbox"/> C - <u>Superintendent</u>		
<input type="checkbox"/> D - <u>Parents</u>		
<input type="checkbox"/> E - <u>Board Members</u>		
<input type="checkbox"/> F - <u>Teachers</u>		
<input type="checkbox"/> G - <u>Others (specify)</u>		

13. What evidence is there of participation in the project on the part of teachers and students in non-public schools?

none

14. What are the primary objectives of the project as you understand them?

To field-test and perfect Way's DOVAK model for teaching reading, using these criteria for success: adaptability to the populations for which it was designed; effectiveness in meeting needs of participants so they they will become independent and self-pacing in their study habits, improve their reading, develop favorable attitudes toward reading, and learn to manipulate the materials; economic feasibility for use on a simultaneous shared-time shared-cost basis.

15. List all the project activities and/or procedures currently being undertaken or planned to achieve the objectives as you understand them.

1. All participants received instruction on how to manipulate all equipment and materials.
2. All participants were taught how to plan and carry out their daily DOVAK Agenda so as to work independently.
3. Computer-compiled records and reports were periodically reviewed so that they could be analyzed and interpreted.
4. Teacher instruction was given on a one-to-one basis and to small groups.
5. Children shared stories dictated and written.
6. Activities were planned to provide experiences so as to have a basis for story dictation. This also provided for development of oral and reading vocabulary.

16. Are the project activities and/or procedures currently being undertaken or planned to achieve the objectives as you understand them?

Yes

No

Comments:

17. Adequacy of staffing to meet project objectives.

A. Qualifications of staff to carry out project activities.

Excellent

Good

Fair

Poor

B. Numbers of Staff Members to carry out project activities:

Excessive

Adequate

Inadequate

Comments:

18. Adequacy of physical facilities to achieve project objectives:

- Excessive
- Adequate
- Inadequate

Comments:

9. Adequacy of funding to meet project objectives:

- Excessive
- Adequate
- Inadequate

Comments:

0. Is there a relationship of the project to existing school programs?

- Closely
- Unrelated

Comments:

I would like to see more of the classroom teachers in the schools involved in the project so that greater carry-over into classroom activities would result. Since the reading program is built on the child's experiences, the classroom teacher could play an important part in providing for these thus relieving the reading teacher of some of this responsibility. The Director indicated that plans were to have more active participation of total school staff in the program in a way that there would be benefits to the total curriculum.

21. What plans are being made to continue the project activities after federal funds have been phased out?

The Director stated that the community has received the program with such enthusiasm that there were indications that the school system would continue the program even if federal funds were depleted.

22. In your opinion, to what degree will the LEA be able to finance the project after federal funds are phased out?

- Current level
- Reduced level
- Not at all

23. List project strengths as you can see them.

1. Total commitment of director and staff
2. Truly provides for individualized instruction
3. Develops independence on the part of the child to learn on his own at his own pace.
4. Effective use of time
5. Total involvement of students
6. Learning activities are relevant to living
7. Incorporates all language skills instead of isolating reading as a separate skill
8. Provides for children whose background of experiences are meager

24. List project weaknesses as you can see them.

1. Need for a closer working relationship between the classroom teacher and the reading teacher.
2. Since the program recognizes the relationship of listening, speaking, and writing to reading, perhaps art and music activities could be added as forms of communication and sources for developing communication skills.
3. Add other technical media, such as single-concept films and 8mm film projectors, to add to experiences.
4. A specific commitment from local school system to continue the project at the end of 3-year funding period is needed.
5. Expansion of the program facilities to provide for more children, should be considered at this point.

25. To improve the project:

What action (s) would you recommend? (Be specific)

1. According to the Director, there are plans for providing DORAK teaching packets for classroom teachers for all curricular areas. I strongly recommend that this be carried out and that these packets be the result of the cooperative efforts of the DORAK Staff and the classroom teachers.
2. Give serious consideration to the five points that I have included in item 24 describing the weaknesses.

26. In view of the project objectives, how would you rate the project at this time? Check one only.

- Excellent, Nationally significant.
- Seems to be very successful for State or Region.
- Good chance to succeed.
- Fair, may be successful but...
- Seems to be failing (Needs help)
- Failure, should be terminated.

Explain Selection: <sup>example</sup>

An excellent/of how to use computers in education so that the teacher is helped to improve instruction rather than replaced.



1969-1970

The DOVACK project director and staff were pleased with the evaluation report. It was especially gratifying that the evaluator had prepared herself in advance by thoroughly reading the papers describing the program, and therefore knew what to look for; that she spent enough time in the classroom to interact with the pupils and understand what they were doing; that she understood the strengths of the program; and that she was aware of the same weaknesses of which the director and the teachers were already acutely aware.

There will now be a brief discussion of the weaknesses that were found, and the efforts to overcome them.

#### Weaknesses Listed Followed by the Director's Comments

##### "Item 20

"I would like to see more of the classroom teachers in the schools involved in the project so that greater carryover into classroom activities would result. Since the reading program is based on the child's experiences, the classroom teacher could play an important part in providing for these thus relieving the reading teacher of some of this responsibility. The Director indicated that plans were to have more active participation of total school staff in the program in a way that there would be benefits to the total curriculum."

##### "Item 24

"1. Need for a closer working relationship between the classroom teacher and the reading teacher.

"2. Since the program recognizes the relationship of listening, speaking, and writing to reading, perhaps art and music activities could be added as forms of communication and sources for developing communication skills."

The director agrees completely with this statement of weaknesses and suggestions for overcoming the weaknesses.

Attempts were made to solve the problem, but on the whole the attempts failed because of insurmountable difficulties.

The director and the DOVACK teacher met at intervals with the teachers whose pupils came to DOVACK classes. The teachers were high in their praise of what DOVACK was doing for their pupils. However, when suggestions were made about cooperative activities in the classroom, the teachers' remarks revealed the basic problem: "By the time we cover the books...." "By the time we follow the curriculum...." "By the time we follow our schedule...."

In Section II-C, B, 3, above, the problem of philosophical isolation is discussed and a proposed solution to the problem for future projects is offered in Section II-C, B, 2.

"Item 24

"Add other technical media, such as single-concept films and 8 mm film projectors, to add to experiences."

The director and staff agree completely with this. These items were in the budget that was not approved. The best that could be done was to use more narrated film strips and narrated Viewmasters.

"Item 24

"4. A specific commitment from local school system to continue the project at the end of 3-year funding period is needed."

It would perhaps be an understatement to write that everybody who is in any way connected with DOVACK agrees that the project should continue. However, this problem is not as simple as it sounds.

Section II-C, B, 7, above, contains a brief account of some of the efforts of the director to obtain funds.

Section II-C, B, 2, above, contains the director's "Proposed Plan for Handling Federal Support of Original Programs," followed by a proposed specific application for DOVACK entitled "DOVACK Demonstration-Diffusion Center."

"Item 24

"5. Expansion of the program facilities to provide for more children should be considered at this point."

Again, the director and staff agree. Also, the principal and teachers at the Mamie B. Scott School agree and would like to implement a plan to include many more pupils in that school. Two of the junior high school teachers at Howard wanted to cooperate closely to include an implementation of DOVACK in their classrooms.

Again there were insurmountable difficulties. However, during 1970-1971, DOVACK served twice as many pupils as were served in 1969-1970 with the same staff. (See Table D1, Section I.) This was some progress but not nearly enough.

Actually, this problem is part of the basic problem, philosophical isolation, which is discussed above in Section II-C, B, 3, and for which a solution is offered in Section II-C, B, 2.

"Item 25

"1. According to the director, there are plans for providing DOVACK teaching packets for classroom teachers for all curriculum areas. I strongly recommend that this be carried out and that these packets be the result of the cooperative efforts of the DOVACK staff and the classroom teachers."

One of the keen disappointments of the project was that this could not be done. The failure of it was due mainly to two problems: (1) the philosophical isolation discussed above, and (2) the failure of the money to arrive on time to hold the workshops in which the packets were to be made. However, some packets were made as the DOVACK teachers had the time to make them.

"Item 25

"2. Give serious consideration to the five points that I have included in Item 24 describing the weaknesses."

These items are discussed above.

May 27, 1971

Superintendent Donald H. Bishop  
Jefferson County School Board  
P. O. Box 1229  
Monticello, Florida 32304

Dear Superintendent Bishop:

As you will recall the ESEA, Title III office contracted with certain Department of Education personnel and consultants outside the Department to conduct on-site, in-depth evaluations of Title III programs during the spring of this year.

Enclosed please find the narrative evaluation written by the consultants. It is hoped that this evaluation report will be helpful as you, your staff, and school board members deliberate the future of the ESEA III project herein discussed.

We would like to take this opportunity to thank you and the people connected with the project for the hospitality afforded the on-site evaluators and for the excellent cooperation extended.

Sincerely,

Leo H. Howell, Jr.  
Coordinator, ESEA, Title III

LHH/bl

cc: Mrs. Flo Way

Enclosure

## EVALUATION REPORT

for

DOVACK METHOD FOR TEACHING READING

a

Title III, ESEA Project

in

Jefferson County, Florida

1968-1971

Prepared by:

Charles T. Mangrum, II  
School of Education  
University of Miami

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Bureau of Planning and Coordination  
Florida Department of Education

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Bureau of Curriculum and Instruction  
Florida Department of Education

May 4-5-6, 1971

A REPORT OF THE IN-DEPTH ON-SITE EVALUATION OF  
"DOVACK METHOD FOR TEACHING READING"

A Description Of The School Community In Which The Project Activities Were Conducted<sup>1</sup>

Jefferson County, located in North Florida, is bounded on the west by Leon and Wakulla counties, on the east by Madison and Taylor counties and extends south from Georgia to the Gulf of Mexico. It is one of the few Florida counties whose roots go back into the antebellum period of the South. This is a contributing factor to the slow change in cultural and economic patterns of the community. In addition, Jefferson County is included in the Big Bend area of North Florida which has been federally designated as a poverty area.

The county's population has been declining at an average rate of more than 100 per year since the turn of the century. According to the 1960 census report, the county's population is 9,543 (this is .2% of Florida's population). 59.2% of the population are non-white and 40.8% are white. The population is rural with 83.2% classified as non-farming and 18% farming. It is significant to note that two age groups, the 0 through 19 and the 60 and over, make up 60% of the population which implies that the county educates the children and approximately 85% leave the county during their productive years, then return to increase the old age assistance roll. The school population age group is composed of 32% white and 68% Negro children.

General farming is the basis of the county's economy which provides a per capita income of \$1,164 which is only 53.7% of the national average. Of the 2,052 families in the county, 768 families have an annual income of

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<sup>1</sup>Taken from the 1968-1969, Continuation Grant Application, "DOVACK Method for Teaching Reading."

less than \$2,000 and 110 families representing 5.3% of the population receive aid to 435 dependent children. The rate of unemployment is 6.4%. The county ranks second in the state in its percentage of illiteracy with 222 whites classified as illiterate and 123 1/2 non-white illiterates.

Success in providing new job opportunities has been limited, due in part, to lack of: education, a skilled labor force, capital, nearby markets and available natural resources.

#### A Description Of The Target Population Served By The Project

The target population consists of 204 children in grades K-1 and 5-7. At the Mamie B. Scott Elementary School there are 126 children in grades K-1 participating in this project. At Howard Academy there are 78 children in grades 5-7 participating in this project. Of the 126 children at Mamie B. Scott, 93 are black and 33 are white. Of the 78 children at Howard Academy, 72 are black and 6 are white. There are 66 boys and 60 girls at Mamie B. Scott. There are 51 boys and 27 girls at Howard Academy.

#### The Critical Educational Needs Toward Which The Project Was Directed

Critical educational needs are noted on three levels: national, state, and local. National priorities in rank order are: improve reading achievement, services to the disadvantaged, and assisting in the county's move toward racial integration. The state priority being met by the objectives of the DOVACK program is to aid children in acquiring the basic language and quantitative skills and knowledge which will enable them to deal competently with the usual kinds of intellectual and learning tasks expected of them both in and out of school. The local priorities in order are:



increased reading achievement, independent work habits, enhanced self-concept, and positive attitudes toward learning to read.

The Statement Of Project Objectives; The Activities Which Were Conducted To Meet Each Objective; And, The Ways In Which The Attainment Of The Objectives Were Evaluated.

First Objective: "Each pupil who participates in a DOVACK class will develop skill in manipulating the equipment and materials at his disposal."

ACTIVITIES: During whatever part of a class period a pupil is observed, he will be seen making appropriate use of the materials and equipment at his disposal. Materials and equipment at his disposal include: DOVACK kit containing DOVACK book of stories (visual and voice), Agenda, Check List, Dictabelt, Dictamailer, chalk and chalkboard, Gafax duplicator, cutter, paper punch, fasteners, View Masters, VTR headsets and monitors, Teletype.

EVALUATION: Includes (1) camera observation pictures; (2) teacher inspection of My DOVACK Record; (3) informal teacher observation.

Second Objective: "Each pupil who participates in a DOVACK class will become independent and self-pacing in his study habits."

ACTIVITIES: An agenda is made by each pupil each day. When the child arrives at his DOVACK learning station, he begins working immediately without being reminded. He continues to work in an organized way, making the necessary changes and/or entries on his agenda.

EVALUATION: Includes (1) analysis of computer records; (2) informal teacher observation.

Third Objective: "Each pupil who participates in a DOVACK class will develop favorable attitudes toward reading."

ACTIVITIES: Stories are dictated. Real experiences are provided to

develop background and language. Pupils share stories at least once each week. Children construct composite stories and study these along with their own.

**EVALUATION:** Includes (1) upon request, any pupil will show the evaluator a composite story or a story he received from a peer within the week; (2) upon request, any pupil will demonstrate how he studies his story; (3) upon request, any pupil will demonstrate to the evaluator that he can read his stories.

**Fourth Objective:** "Each pupil who participates in a DOVACK class will develop proficiency in using word attack skills, in general reading achievement, and in word recognition."

**ACTIVITIES:** (1) Practice reading sentences containing unknown words; (2) teacher and self-instruction in word analysis skills; (3) practice reading a variety of DOVACK stories; (4) practice reading words in isolation; (5) listening to voice tapes of stories.

**EVALUATION:** Includes (1) when requested to do so, a child will demonstrate his effective use of the DOVACK technique for recognizing a word in context; (2) when requested to do so, a pupil will read one of his stories to an evaluator on an independent level, that is, without missing more than approximately 5% of his words; (3) 80% word recognition of a random sample of words from past stories dictated by the child.

#### An Analysis And Interpretation Of The Results Of The Project In Relationship To The Stated Objectives

Mrs. Flo Way, Project Director for DOVACK, is indeed a remarkable person. She deserves and has received numerous accolades for her efforts and successes in developing a reading program that utilizes computer

technology to handle common secretarial chores and to produce reading media from the dictations of individual children.

Teachers with students in the DOVACK program were extremely impressed with their students' language growth, vocabulary development, and changes in attitude. When asked to compare these children to those not involved in the DOVACK program either presently or during their tenure as teachers, all indicated that the DOVACK children were superior in language development, reading, and attitude. One teacher even said that she would rather have more children in her class than to lose the DOVACK program. The children all appeared to be eager to participate in the DOVACK program. They demonstrated rather impressive reading abilities for kindergarten and first grade children.

The administrators and supervisors with whom we spoke were impressed with the nature and apparent results of the program. One administrator wanted to see further testing of the program, however, before giving a personal assessment of its comparative effectiveness with other methods for teaching reading.

Some of the program's strengths and weaknesses, as noted by the Evaluation Team, follow:

Strengths

1. Strong component for developing expressive and receptive language.
2. Strong vocabulary development component.
3. Strong concept development component.
4. Program develops many desirable experiences fundamental to growth in reading comprehension.
5. Capitalizes upon experiences and language of children to develop media for teaching children to read.
6. Enthusiasm of staff and children.

7. Children become self-directive in their learning.
8. Differentiated reading media and learning activities.
9. Use of computer to store and analyze data thus relieving teacher of secretarial tasks.
10. Builds self-confidence in learning.
11. Builds attitude, interest, and purpose for reading.

Weaknesses

1. Lack of a formal and objective evaluation of the program.
2. No data on cost per pupil projected for maximum utilization of the system.
3. Insufficient involvement of classroom teachers whose children participated in DOVACK.
4. No comprehension skills instruction program.
5. Word recognition program is incomplete.
6. Questionable transfer policy between DOVACK and traditional reading materials.

It is unfortunate that the program was not compared with other primary school and/or remedial reading programs during the third year of the project. This lack of data makes it extremely difficult to discuss the values of the DOVACK program from an objective vantage point. The DOVACK program does appear to have been successful but the cause-effect relationships are unclear. It would be most helpful, however, if the model that now exists could have been tested adequately to determine its value for primary school and remedial reading instruction.

A Listing Of The Practices Deemed Most Successful And Worthy Of Wide Dissemination With Justification For Each Given

1. The basic technique used to develop materials for reading instruction

is deserving of dissemination. This includes the use of recording devices, storing devices, and reproduction devices (computer and Gafax duplicator).

2. The basic technique used for creating word recognition tests is worthy of dissemination. A unique sampling procedure was used to create the word recognition tests utilized in this project.
3. The adaptation of computer technology to assist in the preparation of reading material should be of interest outside the project area. In this case, stories dictated by children are printed out by the computer and the vocabulary used in all dictated stories is stored for each child in the computer's memory. For every sixth, thirty-sixth, and seventy-second lesson the computer is commanded to produce a random sample of words from past dictations to be used for determining reading growth. This command is issued for each child in the program.

#### A Historical Account Of The Project Describing Some Of The Major Successes And Failures Experienced

From the outset, the project was accepted enthusiastically by administrators, staff, pupils, and the community-at-large. Of course during the first year of operation, the usual types of delays were experienced for a program of this type. For example, excessive delays in getting the building finished and the project started were extremely frustrating. There were technical problems beyond the control of the project personnel which precluded implementation of some of the objectives. The delays prompted were not without benefit, however. They provided the director with an opportunity to finish designing phase III of the DOVACK model and the programmer time to write the computer program for it.

The second year of project operation found many of the "kinks" worked out of the system. Teachers and students were able to move forward in a meaningful language experience reading program with enthusiasm. Local interest continued high and inquiries came in greater numbers than anticipated from outside the project area. In the technical area, however, efforts to perfect the tele-processing version had disappointing results.

Of particular significance during the third year has been the recognition achieved by DOVACK. Mrs. Flo Way has appeared before several groups with national representation to tell the DOVACK story. At the local level, there has been a lack of time for the director to work with teachers in DOVACK schools to exploit their interest to the maximum in this method of teaching reading. This situation could have been avoided to a degree had the continuation grant application been approved on time. A pre-school workshop planned for teachers did not materialize because of the funding delay.

The Extent To Which The Project Activities Will Be Continued After Title III Funds Are Phased Out

Persons at all levels in the Jefferson County School District are positive in their response regarding DOVACK. There were expressions of regret that local economic conditions prohibited not only a continuation of the program but an expansion to the Adult Basic Education area as well.

The Project Director indicated that the Jefferson County Schools would attempt to continue some part of DOVACK next year. The Project Director estimated a 75% reduction in the project operation upon the termination of ESEA, Title III funds on June 30, 1971. Jefferson County School District administrators and supervisors were less encouraging than the Project Director in their discussions with members of the Evaluation Team.

1970 - 1971

Since the DOVACK project closed shortly after the 1970-1971 evaluation by the team for ESEA Title III, there was no chance to incorporate any of the recommendations into the project.

However, this writer wishes to discuss the evaluation report because of (1) the implications for future DOVACK projects, (2) the implications for evaluating other original programs in the future, (3) the basic philosophical differences between this writer and the evaluator concerning the evaluation of an original program, and (4) the lack of understanding by the evaluator of some of the important facets of The DOVACK System.

#### Weaknesses Listed Followed by the Director's Comments

"1. Lack of a formal and objective evaluation of the program."

This criticism reflects a lack of understanding by the evaluator of two things: (a) the purpose of field testing an original program, and (b) the techniques for the evaluation of DOVACK.

#### (a) The purpose of field testing an original program.

There are basic philosophical differences between evaluating an original program and evaluating a conventional program. The original program itself has to be evaluated according to its own criteria during the field testing. It is only after that, that enough variables can be controlled and

remain uncontaminated to make it worthwhile to include a conventional research design in the comprehensive evaluation design. (This subject is treated in some detail in the forthcoming evaluation report.) Apparently, the confusion about evaluation and the assumption of the synonymy of research and evaluation is not uncommon among those who do not understand the nature of original programs. In discussing the "...lack of an evaluation theory...", Guba wrote:

"f. The impossibility of continuous refinement.

Perhaps the most damaging assertion that may be made about the application of conventional experimental design to evaluation situations is that such application conflicts with the principle that evaluation should facilitate the continuous improvement of a program. Experimental design prevents rather than promotes changes in the treatments because as has been noted treatments cannot be altered if the data about differences between treatments are to be unequivocal. Thus, the treatment must accommodate the evaluation design rather than vice versa.

"It is probably unrealistic to expect directors of innovative projects to accept these conditions. Obviously, they cannot constrain a treatment to its original, undoubtedly imperfect, form just to ensure internally valid end-of-year data. Rather, project directors must use whatever evidence they can obtain continuously to refine and sometimes radically to change both the design and its implementation. Concepts of evaluation are needed which would result in evaluations which would stimulate rather than stifle dynamic development of programs. Clearly, equating evaluation methodology with research methodology is absolutely destructive of this aim." (Guba, Egon G. "The Failure of Educational Evaluation," Educational Technology, Volume IX, Number 5, pages 29-38, May, 1969. p. 35.)

The reader is referred to Section II-C, B, 2, for this writer's "Proposed Plan for Handling Federal Support of Original Programs."



b. The techniques for the evaluation of DOVACK.

The data that this writer collected on the DOVACK Random Sample Vocabulary Recognition (DRSVR) Tests prove the efficacy of this data-collecting technique for the pupil-criterion-referenced tests and reports for use on a large scale. Now that the technique has been field tested, it can be used at low cost for collecting data on a large scale under normal classroom conditions without disrupting classroom work.

The DRSVR Tests and the Reports have the advantage that they can be used for both process and product evaluation. In addition to being criterion-referenced, the Reports following each DRSVR Test period contain current norms computer-compiled for each group for each test period.

For a summary of the evaluation design, techniques for evaluation, some of the results, and conclusions, the reader is referred to Section II-C, B, 1, above, and to the Evaluation Supplement in the Attachment to Appendix B.

Now that DOVACK has been field tested, it is ready to be subjected to a conventional research design within a comprehensive evaluation design. This writer states as a condition for accepting the results as valid and reliable that she train the teachers who will use DOVACK. After all the years that teachers have spent being trained in other methods, it would seem that a brief workshop for using DOVACK is not asking too much.

"2. No data on per pupil projected for maximum utilization of the program."

Again, there is a lack of understanding of DOVACK - of the options available in applications and in choice of equipment, etc.

The reader is referred to Section II-C, B, 1, for a discussion of "Evaluation of economic feasibility." (It had been impossible to prepare this section before the visitation because the collection of some of the data was incomplete.)

"3. Insufficient involvement of teachers whose children participated in DOVACK.

This is a valid criticism of a real weakness in the program. The criticism has been made by previous evaluators. The director is acutely aware of the problem.

The reader again is referred to Section II-C, B, 3, in which the writer discusses philosophical isolation among the project endeavors in which the anticipated results have not measured up to expectations; and in which she proposes workshops and in-service training for future projects. The reader is also referred to Section II-C, B, 2.

"4. No comprehension skills instruction program."

Here, again, there are philosophical differences between this writer and the evaluator.

After twenty-nine years of classroom teaching, this writer went to great lengths to build into the design of DOVACK the kind of comprehension learning that would avoid

the dismal, dreary, conventional, workbook type of comprehension exercises for beginning readers, severely retarded readers, and adult illiterates.

The first major assumption in The DOVACK System is that the pupil has prior comprehension of the vocabulary and content of his dictations. This is one of the jobs of the teacher, to see that his experience - whether real or vicarious - becomes a part of his language experience, a part of his comprehension, his understanding, before he dictates.

This controversial problem is treated in some detail in the forthcoming evaluation report.

Certainly, this writer will concede that more data need to be collected from different populations before definitive conclusions can be drawn and before generalizations can be inferred - either pro or con.

"5. Word recognition program is incomplete."

The director recognized that the word recognition program was incomplete in its implementation in the field tests. The basic approach to teaching word recognition will be retained but in the future teachers will keep a check list to make sure that no pupil is neglecting any part of it.

The reader is referred to Section II-C, B, 1, and to the Evaluation Supplement in the Attachment to Appendix B for evidence of the effectiveness of the DOVACK word recognition program in spite of the limitations in the field tests. Because of the small samples and the atypical population,

more data need to be collected before generalizations can be made to other populations about the effectiveness of the word recognition program.

"6. Questionable transfer policy between DOVACK and traditional reading materials."

Again, there is a lack of understanding of an important facet of The DOVACK System, i.e. the use of composite stories for transition materials.

In the evaluation report, the evaluator wrote, "Children construct composite stories and study these along with their own." Children do not construct their own composite stories. The teachers and aides (and volunteer workers) write the composite stories. The composite stories are third-person narratives, standard English versions of the pupils' own stories. Composite stories are presented to the pupils for the following purposes: (1) so they can recognize their own words in a different context; (2) so they can know that there are alternative means of communicating one's ideas; (3) so that they can share their composite stories with peers; and (4) so that the composite stories can be used for transition materials to published books.

The following quotations are pertinent.

"Standard English usage is introduced through composite versions of the pupils' own stories. The child is told that his stories in his dialect are fine, and that here is simply another approach to the same material. The composite stories also become transition materials to

help prepare the pupils for published books. They are encouraged to read published materials of their own choosing as soon as possible." (Quoted from the narration at slides 35 and 36 for the slide talk on DOVACK prepared by the American Institutes for Research for inclusion in an audiovisual presentation at the 1970 White House Conference on Children.)

Under the heading "Alternate Forms of Communication," "The teacher and the aides write composite stories for each pupil, using his own vocabulary. These composite stories serve several purposes. They give each pupil a chance to recognize his own vocabulary in a different context. They give him a story to read about himself, and, since they are frequently shared, about his peers. In the composite stories, there is a subtle introduction to standard usage, but the content is still based on each pupil's own vocabulary. The pupils understand that both ways of communicating are good - the non-standard and the standard." (Way, 1970, p. 5)

Again, the reader is referred to Section II-C, B, 1, and to the Evaluation Supplement in the Attachment to Appendix B. And again, the writer concedes that more data need to be collected on different populations before definitive conclusions can be drawn and before generalizations can be inferred.

#### Strengths Listed Followed by the Director's Comments

The director is pleased with the strengths listed in the evaluation report. However, she counts it as a grave omission that four of the strong components of The DOVACK System were not listed as strengths: (1) the totally differentiated DOVACK Random Sample Vocabulary Recognition (DRSVR) Tests; (2) the pupil-criterion-referenced DOVACK Reports which are used for both process evaluation and for product evaluation; (3) the composite stories which serve so many useful purposes (see above); and (4) the techniques for data

collection that are unique to DOVACK that can be valuable for use in interdisciplinary research and that can be collected under normal conditions without interfering with the classroom teaching.

Part III  
PROPOSED BUDGET SUMMARY, OR  
EXPENDITURE REPORT OF FEDERAL FUNDS

Name & Address of Local Agency

Jefferson County School Board  
P.O. Box 499; Monticello, Fla. 32344

PROJECT NUMBER 6004

BUDGET PERIOD: Begin: 7/1/70 End: 11/30/71

For planning, including pilot projects;  
for exemplary and innovative educational  
programs

For education of handicapped children

Amount

\$

\$

Check One:

Proposed Budget Summary

Est. Expenditure Report

Final Expenditure Report

EXPENDITURE ACCOUNTS

FUNCTIONAL CLASSIFICATION	Fed. Acct. No.	SALARIES		CONTRACTED SERVICES	MATERIALS AND SUPPLIES	TRAVEL	CAPITAL OUTLAY	OTHER EXPENSES	TOTAL EXPENDITURES
		PROFESSIONAL	NON-PROFESSIONAL						
1 Administration	2	3	4	5	6	7	8	9	10
2 Instruction	100	23,285.00	10,871.92	22,910.40	3,269.54	379.58			60,716.44
3 Attendance Services	200								
4 Health Services	300								
5 Pupil Trans. Services	400								
6 Operation of Plant	500							355.50	355.50
7 Maintenance of Plant	600							1,167.20	1,167.20
8 Fixed Charges	700							2,702.22	2,702.22
9 Food Services	800								
10 Student Body Activities	900								
11 Community Services	1000								
12 Sites, Remodlg. Construction	1100								
13 Capital Outlay Equipment	1210								
14 TOTAL	1220	23,285.00	10,871.92	22,910.40	3,269.54	379.58	5,070.54	4,224.92	5,070.54
15 Negotiated Budget	1230	23,285.00	10,871.92	22,910.40	3,274.39	379.58	5,070.54	4,224.92	70,011.90
16 Unexpended Balance of Funds Authorized for Expenditure; Total of Line 15 minus Total of Line 14									

THIS FISCAL REPORT IS CORRECT AND THE EXPENDITURES INCLUDED HEREIN ARE DEEMED PROPERLY CHARGEABLE TO THE GRANT AWARD.

(Signature of Project Fiscal Officer)

Date:

(Signature of Project Director)

Date:



Quotations from the Visitor's Register

The spontaneously written comments of visiting educators cannot be ignored. The following dated quotations are taken from the comments in the Visitor's Register.

5/14/69 "Excellent." (FSU Professor)

5/23/69 "The DOVACK operation is quite a fascinating innovation. I'm eagerly awaiting the final evaluation so that other schools and students may use the DOVACK Method."  
(Atlanta teacher)

5/23/69 "This is truly a new innovation! Interesting and intriguing. I would welcome an opportunity to work in a program of this kind. Miss Stokes (the DOVACK teacher at Howard), you are really way out - Thanks and I shall return." (DeKalb County, Georgia, teacher)

5/27/69 "High commendation should be given to the administrative leadership which has made possible so valuable an innovation." (Professor of Education at Florida A & M)

6/2/69 "Excellent idea, should be expanded and begun at an earlier age." (Tallahassee)

6/29/69 "Heaven!" (Atlanta teacher)

6/28/69 "Wonderful. Make full use and get more."  
(Atlanta)



11/13/69 "...I find it valuable in as much as it attacks the learning of reading from all of the senses."  
(Washington, D. C. educator)

11/16/69 "Very excited." (teacher in nearby county)

11/16/69 "It's fabulous. Wish we had something like this in our county." (Supervisor in nearby county)

11/16/69 "I'm quite interested. Would like to know more about it and observe regular class." (Educator, Taylor County)

11/20/69 "Very motivational, we really could use such as this." (Supervisor in nearby county)

12/11/69 "I was impressed by evidence of independent work, such as obtaining material and replacing it in the proper place - Interesting." (Educational Consultant)

12/20/69 "Very exciting and an interesting and new approach to reading. Thank you. (Educator, reading specialist, from Indiana)

12/69 "This approach proves to be very effective in context. Would be interesting to see how widespread the idea will become." (Tallahassee)

1/9/70 "This has been a most educational experience for the team of (6) FAMU Administrative Interns and graduate assistants to observe what is so highly regarded as an effective approach to reading skill development."

(Florida A & M Professor Education)

1/9/70 "Seeing 'DOVACK' in operation, I am convinced

of its usefulness and worth. To have read about it, I might not have been. I wish for it universal acceptance." (Graduate student in educational administration at Florida A & M)

1/9/70 "My visit and observation of the 'DOVACK' project center has been most helpful. Observing the pupils and teachers in action were tremendous. I must commend you for a job well done." (Administrator in a Georgia school and a graduate student in educational administration at Florida A & M)

1/9/70 "The visit was a very rewarding experience for me. Through observations of classroom activities, discussions with teachers and director, and viewing of the film, I have become to understand better the DOVACK Model." (Educator from a Florida county and a graduate student in educational administration at Florida A & M University)

3/10/71 "Very exciting and new to me. Will discuss this at Godby School. Hope to have the reading teacher to visit."

4/10/71 "A very interesting project." (ESEA Title III project director)

4/17/70 "Thank you for allowing me to share your exciting reading." (Tennessee)

4/20/70 "I am enthralled with the limitless possibilities." (Principal, Leesburg, Fla.)

4/24/70 "Terrific!" (Professor of Education, U. of F.)

4/28/70 "I am very much impressed with the center

here." (Teacher, Jax)

4/28/70 "I'm so happy I came to visit and observe this center, because my educational experiences have been enhanced a great deal." (Edward Waters College, Jacksonville)

4/28/70 "The class is based on the independence of the child which is as good as any procedure." (Edward Waters College, Jacksonville)

4/28/70 "I've really enjoyed every minute of it!" (Edward Waters College, Jacksonville)

4/28/70 "Very impressed!" (Edward Waters College, Jacksonville)

4/28/70 "Surprised!" (Edward Waters College, Jacksonville)

4/28/70 "I am very impressed at the reading abilities of these young pupils." (Edward Waters College, Jacksonville)

4/28/70 "I am very excited by the thing I have seen." (Edward Waters College, Jacksonville)

4/28/70 "I am very impressed with the center." (Edward Waters College, Jacksonville)

4/28/70 "We wish we were back in grade school." (Edward Waters College, Jacksonville)

4/28/70 "I am very much impressed with the reading class here." (Edward Waters College, Jacksonville)

5/1/70 "I shall return." (Out-of-state supervisor)

5/14/70 "I was quite impressed with this reading program and enjoyed my visit very much....." (teacher from Georgia)

5/14/70 "It was a pleasure meeting warm, friendly teachers and students who are a part of such a wonderful program!" (teacher from Georgia)

5/14/70 "I have enjoyed everything from the time I entered the campus, but mostly the Reading Room. I do wish I could have spent all day in the Reading room. Thank you so very much for your time and cooperation. May God's rich blessing continue to be with you." (teacher from Georgia)

10/2/70 "As a guidance counselor I feel this program functions not only for the purpose designed and intended but most important the individual learner's self-concept is preserved and enhanced. With continued research I would hope the program or a similar concept could be expanded to reach more levels in more communities." (Guidance counselor, Jefferson County)

10/21/70 "Very impressive program. Interested in seeing long range results." (TV news director)

10/21/70 "Children obviously enjoying program. Getting a chance to use their imagination & confront a learning situation without fear and with active enthusiasm. Fantastic." (TV news dept.)

11/18/70 "A fascinating project of high value and great potential. The teachers aides and clerical staff are cooperating beautifully in developing the program. My congratulations." (Educator-administrator, Fisk University)

11/3/70 "I am impressed from the observation I made.

I really enjoyed listening to the children. They were eager." (teacher, Lake County)

11/3/70 "The observation has been informative."  
(teacher, Lake County)

11/3/70 "Very impressive. Valuable." (teacher,  
Lake County)

11/3/70 "Just hope we can apply many of the principals used here. Send us any new information any time. Thanks." (educator, Lake County)

11/3/70 "Excellent - very informative. I enjoyed the children - very good work habits." (educator, Lake County)

11/3/70 "Concrete evidence of learning. Their work habit are excellent." (educator, Lake County)

11/3/70 "Most enjoyable and informative." (educator, Lake County)

11/3/70 "Very good. This was a learning experience for me. Wish others could see it." (educator, Lake Co.)

11/3/70 "Enjoyed it so much. Thanks again."  
(Principal, Lake County)

11/23/70 "As a parent, I feel this is one of the greatest programs I have ever witnessed." (Parent in Jefferson County)

12/1/70 "Very impressed by what we saw and by the students response - looking forward to learning more about DOVACK. Congratulations to the teachers!"

1/29/71 "WOW" (Director of a reading laboratory)

in another county in Florida)

2/1/71 "Fascinating!" (Jefferson County educator)

2/1/71 "Great!!! Need more of this." (Jefferson County educator)

2/3/71 "Seems very helpful!" (educator from nearby county)

2/3/71 "Would love to have it in Taylor County." (educator from nearby county)

3/17/71 "Impressive" (educator from nearby county)

3/19/71 "A well-organized program." (educator from nearby county)

3/19/71 "Wonderful!" (educator from nearby county)

3/18/71 "There seems to be evidence of pupil success." (educator from nearby county)

3/18/71 "Interesting, a look into future education!" (educator from nearby county)

3/18/71 "Very interesting approach." (educator from nearby county)

3/18/71 "Interesting. I am anxious to learn more." (educator from nearby county)

3/18/71 "Stimulating" (educator from nearby county)

3/18/71 "Very exciting!" (educator from nearby county)

3/18/71 "Impressive" (educator from nearby county)

3/18/71 "Very impressive." (educator from nearby county)

3/18/71 "Very exciting - has many possibilities."

(Educator from nearby county)

4/6/71 "I think this is a good method to use, to help the children with their reading problems." (education major at Edward Waters College in Duval County)

4/6/71 "This program is very inspiring and quite an experience for one if you are not familiar with the DOVACK program. Thank you for the invitation." (education major at Edward Waters College in Duval County)

4/6/71 "I feel like the DOVACK Program is a very good one with well instructed teachers that are helping the pupils in their learning, especially reading. The DOVACK is very interesting and inspiring. It's just great in general." (education major at Edward Waters College in Duval County)

4/6/71 "I believe that the DOVACK Program is the best thing that could happen in the field of Children's Education(early). This program can really tell you what's on a child's mind." (education major at Edward Waters College in Duval County)

4/6/71 "Our visit at this DOVACK Center has been most inspiring and informing, and we are certain that each experience gained will aid us as (future) elementary education teachers." (education major at Edward Waters College in Duval County)

4/6/71 "The use of the DOVACK and dictaphone was very interesting. I think it helps the children learn to read well and have fun at the same time. The instructors

were very nice." (education major at Edward Waters College in Duval County)

4/6/71 "The use of the DOVACK Reading Program here in the school is very unique, and I feel the students will grasp more from this method of individualizing instruction of reading." (education major at Edward Waters College in Duval County)

4/6/71 "The use of the Dictaphone is somewhat like a portable teacher, there is nothing like it. And I'd like to add, the method is so simple to learn from your own material."

4/7/71 "Very good!" (A University Campus Coordinator for Student Concern)

4/7/71 "Right On!!! Please!!!" (State Coordinator for Student Concern)

4/22/71 "Really great. Why can't we expand this idea to college level?" (Director of computer center of a community college)

4/22/71 "Keep the program going so that our deplorable national literacy level can finally be raised."  
(Community College English teacher)

4/23/71 "Offers so much hope - not only for reading but also for really meaningful communication!" (State Student Concern staff member)



Appendix B

The tables on the following five pages show the number of visitors and inquiries to the DOVACK project in Monticello by year; by counties in Florida; by states; by territories and possessions; and by other countries.

Florida Counties

	1968-1969		1969-1970		1970-1971	
	Visitors	Inquiries	Visitors	Inquiries	Visitors	Inquiries
Alachua			8	19		14
Baker						
Bay				1		
Bradford						
Brevard		1				
Broward	1					2
Calhoun						
Charlotte						
Citrus				1		
Clay						
Collier	1			1		
Columbia			2	1		
Dade			1	1		4
DeSoto						
Dixie			7			
Duval			24		8	26
Escambia				1		
Flagler						
Franklin						1
Gadsden			4			
Gilchrist						
Glades						
Gulf						
Hamilton			1			
Hardee						
Hendry						
Hernando						
Highlands						
Hillsborough			1	2		
Holmes						
Indian River				1		
Jackson						
Lafayette			1			
Lake			1	2	20	
Lee						1
Leon	17		31	7	20	25
Levy						
Liberty						
Madison	1		1		2	
Manatee				1		1
Marion						
Martin						
Monroe						

## Florida Counties, Cont.

	1968-1969		1969-1970		1970-1971	
	Visitors	Inquiries	Visitors	Inquiries	Visitors	Inquiries
Nassau						
Okaloosa				1		2
Okeechobee						
Orange						3
Osceola						
Palm Beach				1		1
Pasco						
Pinellas				1		6
Polk						1
Putnam						
St. Johns						
St. Lucie						
Santa Rosa				1		
Sarasota						
Seminole						
Sumter				1		
Suwannee			1			
Taylor			6	1	3	1
Union						1
Volusia						
Wakulla			1			
Walton						
Washington						
<b>Total</b>	<b>20</b>	<b>1</b>	<b>89</b>	<b>44</b>	<b>69</b>	<b>88</b>
<b>Number of Counties (Excludes Jefferson)</b>	<b>4</b>	<b>1</b>	<b>15</b>	<b>18</b>	<b>5</b>	<b>15</b>

States

	1968-1969		1969-1970		1970-1971	
	Visitors	Inquiries	Visitors	Inquiries	Visitors	Inquiries
Alabama			1	1		6
Alaska						4
Arizona						
Arkansas				1		2
California				9	1	9
Colorado						2
Connecticut				1	2	1
Delaware						
D of C	1		1	1		10
Florida						
(See counties)	20	1	89	44	69	88
Georgia	6	1	13	4		5
Hawaii						
Idaho					1	
Illinois				1		4
Indiana			2	1		2
Iowa						
Kansas				1		2
Kentucky						
Louisiana				1		2
Maine						1
Maryland				1		3
Massachusetts			2	2		4
Michigan		1		3		2
Minnesota				2		5
Mississippi						1
Missouri				1		2
Montana						1
Nebraska						2
Nevada						
New Hampshire				2		1
New Jersey				2		5
New Mexico				1		1
New York				6		5
North Carolina						5
North Dakota						
Ohio				2		3
Oklahoma						
Oregon						3
Pennsylvania				3		4
Rhode Island						2
South Carolina				1		6
South Dakota						1

## States, Cont.

	1968-1969		1969-1970		1970-1971	
	Visitors	Inquiries	Visitors	Inquiries	Visitors	Inquiries
Tennessee			1	1	1	4
Texas				1		4
Utah						1
Vermont						2
Virginia				2		4
Washington				1		5
West Virginia						5
Wisconsin				3		7
Wyoming						
Total	28	3	108	99	74	224
Number of States	3	3	7	28	5	41

Territories and Possessions

	1968-1969		1969-1970		1970-1971	
	Visitors	Inquiries	Visitors	Inquiries	Visitors	Inquiries
American Samoa						1
Guam						1
Puerto Rico			1			2
Virgin Islands						1
Total	0	0	1	0		5
Number of Territories & Possessions	0	0	1	0		4

Foreign Countries

	1968-1969		1969-1970		1970-1971	
	Visitors	Inquiries	Visitors	Inquiries	Visitors	Inquiries
Australia						1
Brazil						6
Canada				1		1
Chile	1		1			
Colombia				1		
Peru				1		
Romania						1
Turkey				1		
Total	1	0	1	4	0	9
Number of Countries	1	0	1	4	0	4

Personal Appearance Dissemination  
Activities by the Director

(This does not include presentations to groups that came to Monticello to visit the project; nor many of the small informal presentations.)

1968

- 11/11 ff Tallahassee. Participated in WFSU-FM radio series, including unrehearsed classroom lesson on Negroes in American History, taught by the director.
- 12/16 Monticello. Spoke to Howard School Faculty luncheon meeting. Film. Question and Answer period.

1969

- 3/25 Tallahassee. Spoke to VIM (Control Data 6000 series users) group. Q&A
- 4/8-4/12 Santiago, Chile. CAVISAT Conference, Toward a University Satellite Network. Subject of director's presentation, "Technology in the Service of Literacy Programs." Film. Q&A. (All expenses paid by conference.)
- 4/30 Monticello. Spoke to Howard School PTA. Film. Q&A.
- 5/15 Monticello. Spoke to Mamie B. Scott faculty. Film. Q&A.
- 10/12-10/15 Notre Dame. EDUCOM Fall Council. Spoke at luncheon meeting. Film. Q&A. (Expenses paid by EDUCOM.)
- 10/23 Tallahassee. Spoke to Statistics Seminar for graduate students, FSU. Film, transparencies, data. Q&A.
- 12/2-12/3 Moffett Field, California. NASA Hearing. The director made an informal presentation with the film and had informal discussion afterwards during second day of conference. (Expenses paid by Florida State Department of Education, ESEA Title III.)

1970

- 1/23 Gainesville. Kimball Wiles Memorial Conference. Two "Promising Practices" presentations to two different audiences. Film, transparencies. Q&A.
- 2/2 Tallahassee. Spoke to Continuing Education group at FSU.
- 2/9 Tallahassee. Spoke to Graduate Seminar in Speech Department, FSU. Film, transparencies. Q&A.
- 5/18-5/20 Atlantic City. Spring Joint of AFIPS. (Spring Joint Computer Conference sponsored by the American Federation of Information Processing Societies). Presentation to special group on 5/19: film, slide talk, transparencies, followed by panel discussion. (Expenses paid by AFIPS.)
- 5/26 Tallahassee. Spoke to Mental Health Clinic staff. Film, slide talk. Q&A.
- 6/13-6/17 Daytona Beach. Southern States Work Conference. Presentation to Committee on "Barriers to Innovation." Had exhibit. (Expenses paid by Florida State Department of Education, ESEA Title III.)
- 6/24 Tallahassee. Spoke to Brazilian Space Agency students, FSU. Film, slide talk, transparencies. Q&A. (Professor and graduate student did not stay for presentation.)
- 6/23-6/26 Miami Beach. ESEA Title III Diffusion Workshop. Had table display for DOVACK. (Expenses paid by Florida State Department of Education, ESEA Title III.)
- 7/15 Tallahassee. Seventh Annual Reading Conference, FSU. Reactor on panel.
- 8/13 Tallahassee. Spoke to conference Calculus and the Computer, FSU Summer Institute, sponsored by NSF. Photo display. Q&A.



1970

- 11/13 Washington, D. C. NASA Review (Monitored by Ames Research Center, Advanced Concepts Division). Observer, not participant. Also saw ESEA Title III people at USOE. (Expenses paid by project money.)
- 12/7 Jacksonville. Spoke to personnel of Project FULFILL and their guests. (Project money.)

1971

- 1/27 Tallahassee. Small group of teachers and pupils, Leon High School. Film. Q&A.
- 1/28 Tallahassee. Spoke to group from Information Systems, Florida State Department of Education. Film. Q&A.
- 1/28 Tallahassee. Spoke to group from Division of Elementary and Secondary Education and others in State Department of Education. Film.
- 2/17 Tallahassee. Spoke to Bureau Chief, Planning and Coordination; representative from Adult Education, etc. Film, slide talk. Q&A.
- 3/10 Monticello. Talked with small group at home of Mrs. Tom Bird, Civic Leader. Slide talk. Q&A.
- 4/14 Washington, D. C. Presentation to about 30 from USOE, Bureau of Indian Affairs, Bureau of Prisons. Arranged by Dr. Hinze. Film, slide talk, transparencies. (Expenses paid by Florida State Department of Education, ESEA Title III.)
- 4/27-4/28 Atlanta. Seminar on Reading in the 70s. (Expenses paid by Florida State Department of Education, ESEA Title III.)

1971

- 2/25 Tallahassee. Spoke to Leon County Reading Council. Film, slide talk. Q&A.
- 3/9 Tallahassee. Spoke to Early Childhood Education Class, FSU. (Invited by graduate student.) Film, slide talk. Q&A.
- 3/21 Tallahassee. Spoke to Advanced Sunday School Class, Trinity Methodist Church (adults). Film, slide talk. Q&A.
- 3/24-3/25 Gainesville. Governor's Invitational Conference on Post-Secondary Educational Opportunities for the Disadvantaged. Small group presentations three times, voluntary attendance. Film, slide talk. Q&A.
- 3/31 Tallahassee. Spoke to Kate Sullivan School Faculty. Film, slide talk.
- 4/1 Tallahassee. Presentation after luncheon meeting with Director of FSU's Computing Center, Vice President of Control Data Corp. (from Minneapolis) and others from Control Data. Film, slide talk. Q&A.
- 4/3 Tallahassee. Two presentations to groups at an FSU conference. Voluntary attendance.
- 4/5 Tallahassee. Presentation at breakfast meeting. Film, slide talk. Q&A.
- 4/5 Tallahassee. Spoke to Adult Basic Education Institute. Film, slide talk. Q&A.
- 4/19 Tallahassee. The director was interviewed by Linda Kay of Channel 6. Interview was videotaped for later showing on TV Morning Show.
- 4/20 Tallahassee. Spoke to Student Concern staff at Alga Hope's office. Film, slide talk. Q&A.

1971

5/4

Tallahassee. Spoke to education class at FSU. (Invited by graduate student.) Film, slide talk. Q&A.

5/11

Tallahassee. Spoke to class, "The Disadvantaged Child," at FSU. Film, slide talk. Q&A. (Professor was not there. Graduate Assistant was there.)

## DOVACK References

- Chapman, Path, "Computer Does the Chores in DOVACK," Florida Schools, Vol. 32, No. 2 (p. 20-25) illus. November-December 1969.
- NCEC (National Center for Educational Communication), Model Programs - Childhood Education: DOVACK. Cat. No. 5.220:20141, U. S. Government Printing Office, Washington, D. C., 20202 (20 cents). (Note: Since this booklet was prepared by the American Institutes for Research, the per pupil cost quoted has been drastically reduced.)
- Paisley, Clifton, "The One What Drinking Water Is The Sister....," Research in Review (Clifton Paisley, Ed.) Florida State University, Tallahassee, 32306, illus. November 1970.
- Way, Flo, The DOVACK System (film betw 18 min 16 mm narrated). Available on loan from: Area AV Center, Box 499, Monticello, Florida, 32344.
- Way, Florine L. The DOVACK Method for Teaching Reading. (Unpublished. 24 pages.) 1966. (Note: The material in this paper is included in subsequent papers that were published.)
- Way, Florine L. Teaching Illiterate Prison Inmates with the Individual Pencil Dictation Technique and Testing with Adaption for Group Administration of the Peabody Picture Vocabulary Test: An Evaluation. (unpublished, 48 pages). 1965. (Note: This is a report on the evaluation pilot study that preceded the experimental work in a federal prison during which the writer designed and developed DOVACK.)
- Way, Florine L. "The DOVACK Model," EDUCOM Bulletin Vol. 4, No. 5, (pages 5-6) October 1969.
- Way, Florine L. "The 'Language Experience' Approach in Teaching Reading - Computerized," Computers and Automation, Vol. 19, No. 9 (p. 28-31) September 1970. (An abstract of this article appears in Language and Language Behavior Abstracts, Vol. V, No. 1 (Entry E00251, p. 530-531) January 1971.
- Wills, Martee, "DOVACK's Machines Help Children Read," AMERICAN Education, Vol. 7, No. 5 (p. 3-8) illus. June 1971.

As the final draft is being typed, two more references are added.

Way, Flo. The DOVACK System, Tallahassee, Florida, 1972.  
(Note: This brochure was prepared for ED/fair '72 to be distributed from the DOVACK exhibit. The USOE paid for printing the brochure.)

Way, Flo. "Evaluation Supplement to the Brochure Prepared for ED/fair '72 on The DOVACK System." Tallahassee, Florida, 1972. (Note: ESEA Title III paid for Xeroxing this supplement.)

The reader is referred to the Attachment to Appendix B for copies of these materials.

Evaluation Supplement  
to the  
Brochure Prepared for ED/fair '72  
on  
The DOVACK System  
by  
Flo Way

## Contents

Item	Page
Acknowledgments . . . . .	2
Introduction. . . . .	3
(1) Soft data from subjective judgment, observation, photographs, and film. . . . .	4
(2) Hard data from standardized tests. . . . .	4
Intermediate Grades . . . . .	6
First Grade. . . . .	7
(3) Hard data on each pupil's Rate of Learning to recognize his own vocabulary . . . . .	9
(4) Data on estimated readability levels of dictations . . . . .	12
(5) Hard data on Vocabulary Usage. . . . .	5
Conclusions . . . . .	14
DOVACK References . . . . .	17

ACKNOWLEDGMENTS

The author wishes to thank the following individuals for their assistance in the development of this project: Dr. J. H. Gentry, Director of the Florida State University Center for Educational Research, Tallahassee, Florida.

The Florida State University Center for Educational Research provided the facilities and equipment which made possible the development of this project.

Dr. J. H. Gentry, Director of the Center for Educational Research, Florida State University, was Director of the Center during the development of this project.

Mr. William Miller and Mr. William Petty are the field project coordinators for DOVACK.

Dr. Duane Kester is the consultant in statistics for DOVACK.

The U. S. Office of Education, USA Title III, funded the field tests of DOVACK in Marietta, Florida, 1968-69 - 1970-71. (00-1-8-000010-0059-056)

The Jefferson County (Florida) School Board, Mr. Bernard H. Bishop, Superintendent, administered the USOE grant for the field tests.

The U. S. Office of Education financed the printing of the brochure for distribution from the DOVACK exhibit at MD/EdEx '72 which is sponsored by the USOE. USA Title III financed the reproduction of the Evaluation Supplement.

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The aim of the project is to collect and evaluate the DOVACK data for the use of a teacher's guide in the field. The DOVACK data is a collection of experimental data on the use of DOVACK in the classroom. The data is collected from a number of schools and is intended to provide a basis for the evaluation of DOVACK in the classroom.

Examples of the data collected in this project include: (1) the number of children who use DOVACK; (2) the number of children who do not use DOVACK; (3) the number of children who use DOVACK but do not use it correctly; (4) the number of children who use DOVACK but do not use it consistently; (5) the number of children who use DOVACK but do not use it for the intended purpose; (6) the number of children who use DOVACK but do not use it for the intended purpose consistently; (7) the number of children who use DOVACK but do not use it for the intended purpose consistently and correctly; (8) the number of children who use DOVACK but do not use it for the intended purpose consistently and correctly and consistently.

All of these are discussed in detail along with basic assumptions, tables and figures, and references to the literature, in the full evaluation report that is being prepared.

This writer has extracted some of the representative data to present in this paper as a supplement to the DOVACK brochure that was prepared for ED/EAR 172.





Results of the tests, especially on the job, which are a  
of course, the validity and reliability factors (a) the tests  
were administered to all pupils in a grade & made up of ten  
that may pupils were no fewer, and due to time or the year  
below 80% of their grade; (b) the correlation of the scores  
is of grade; (c) the reading & other skills, if it were  
concerned, are related to the level of the type of reading  
as the pupils might be a group, especially if they read  
"run twice as fast to go half as far." For these reasons, it would  
be unwise to infer any general conclusions from these data.

Class sizes varied. The number of pupils for whose data were  
available in the intermediate grades varied from eight in Grade 2  
to 29 in Grade 7. The number of pupils in each of the seven first  
grade classes (both P.M.T.C. & Control) for whose data were  
available ranged from 19 in one class to 27 in another.

All standardized test scores are expressed as Grade Equivalents.

### Intermediate Grades

Analyses of Variance were performed on the results of the CTBS in the intermediate grades to test the significance of differences between the DOVACK groups and the Control groups or between the DOVACK groups and the Residue; and between the DOVACK groups and the Residue; and between the Control groups and the Residue. (Note: The Residue consists of all pupils in the grade who were not randomly assigned to either the DOVACK or Control groups.)

#### Grade 4

In Grade 4, 1968-1970: the pretest-posttest increment for the DOVACK group was higher than the posttest-pretest increment for the Control group at a statistically significant level in Spelling (.025), in Arithmetic Total (.02), and in Vocabulary Total (.025). It might be argued that these gains were due to a regression effect since the DOVACK and Control groups were chosen on the basis of low scores and low performance. However, there were no statistically significant differences between the DOVACK and Control groups on pretest scores. This lack of statistically significant differences between the pretest scores tends to indicate a real gain for the DOVACK group rather than a regression effect.

#### Grades 5, 6, and 7

From eleven summary tables for pupils in grades 5, 6, and 7, on all tests on CTBS, there were very few statistically significant differences between the DOVACK groups and the Control groups or between the DOVACK groups and the Residue or between the Control groups and the Residue. The exceptions are noted below.

In Grade 5, 1968-1969: The increment for the Control group was higher than the increment for the DOVACK group in Spelling at the .05 level of statistical significance. In the same grade, the Residue was higher than the DOVACK group on Spelling (.001) and on Language Total (.05). (Note: This proved to be excellent for process evaluation: Needless to say, this embarrassing revelation had a salutary effect; and the techniques for integrating Spelling with DOVACK were improved.)

In Grade 6, 1969-1970: The increment for the Control group was higher than the increment for the DOVACK group in Language Total at the .025 level of statistical significance. (Note: This is traceable to the Language Mechanics test.)

In Grade 7, 1968-1969: The increment for the DOVACK group was higher than the increment for the Control group on Arithmetic Applications at the .05 level of statistical significance.

(Note: In all of the other intermediate grades - except in Grade 5, 1969-1970 which was .1 higher - the increment on Arithmetic Applications for the DOVACK group was higher than the increment on Arithmetic Applications for the Control group but not at a statistically significant level. This higher performance of the DOVACK groups over the Control group in Arithmetic Applications as demonstrated on the standardized tests is not surprising because the reading material in Arithmetic Applications is probably a true test of the ability to read critically, comprehend, profit from the DOVACK type of experience in attending unfamiliar words, and profit from the DOVACK language experience type of teaching that is the reading material in the reading tests.)

In Grade 7, 1968-1969: The increment for the DOVACK group was higher than the increment for the Residue at a statistically significant level in Reading Comprehension (.05), in Arithmetic Applications (.05), in Reading Total (.01), and in Battery Total (.05). In the same class, the only statistically significant difference between the increment for the Control group and the increment for the Residue was in Language Expression in which the increment for the Control group was higher than the increment for the Residue at the .05 level of statistical significance. There were no statistically significant differences between the DOVACK groups and the Residue or between the Control groups and the Residue on the pretest scores.

### First Grade

In Grade 1, 1970-1971, the school principal randomly assigned all of the first grade pupils by race and sex to seven classes, and then randomly assigned a teacher to each class. Fortunately, of the two teachers who are considered by a number of knowledgeable people to be "the best," one was randomly assigned to a class that had DOVACK and the other to a class that became a Control class.

The pupils from four classes spent an average of about twenty-five minutes a day in the DOVACK classroom. The pupils from three classes had no DOVACK treatment and are called the Control classes.

No pretests were given. The CAT tests were administered in the spring by one team of teachers to all of the classes. The first grade tests are considered somewhat more valid and reliable than

the intermediate tests for the following reasons. Although the first-grade population in Jefferson County is atypical, and although the standardized reading tests are generally considered to favor pupils who have been taught by the basal reader approach over those who have been taught by a language experience approach, the fact still remains that atypical populations of first-grade pupils have not yet had as much time to accumulate the standardized test score deficits that are characteristic of such populations by the time they reach the middle grades.

In an effort to identify relevant variables that might help with interpretation of the program and plan for future uses of DOVACK, and that might merit further investigation, this writer considered the first grade test results important enough to compile approximately a hundred and twenty tables and figures. These include, by class for each test, Analyses of Variance and Multiple Range Tests. They also include cumulative per cent tables and figures by race and sex within each of the seven first-grade classes for each test. Obviously, it is impossible even to attempt to present a comprehensive summary of these results in this brief brochure supplement.

There were vast differences in results among the DOVACK classes and among the Control classes as well as between DOVACK and Control classes. The teachers had vastly different characteristics, years of experience, personalities, and teaching styles.

The national norm of the CAT test battery at the time of testing was 1.8.

In lieu of a comprehensive summary, this writer thought it might be of interest to extract the two highest mean scores from the seven classes on each of the CAT tests. Beside each score in parentheses a D or a C will indicate whether that mean score was achieved by a DOVACK group or by a Control group. Unless indicated, the difference between the two highest scores is not statistically significant.

Reading Vocabulary:	1.9 D	1.8 D		
Reading Comprehension:	1.6 D	1.4 C		
Reading Total:	1.9 D	1.8 D		
Mechanics of English:	2.2 D	2.2 C		
Spelling:	3.4 D	2.1 C	(.05)	
Language Total:	2.6 D	2.1 D	2.1 C	(.05)
Arithmetic Fundamentals:	2.1 D	1.9 D	1.9 C	
Arithmetic Reasoning:	1.9 D	1.7 C		
Arithmetic Total:	2.0 D	1.7 D	1.7 C	
Battery Total:	2.1 D	1.8 D	1.8 C	(.05)

The mean score of 3.4 in Spelling for one of the DOVACK classes was higher at the .05 level of significance than the mean score in Spelling for each of the six other classes, both DOVACK and Control; including one DOVACK class which had the lowest mean score in Spelling.

The mean score of 2.6 in Language Total for one of the DOVACK classes was higher at the .05 level of statistical significance than the mean score in Language Total for each of the six other classes, both DOVACK and Control, including one DOVACK class which had the lowest mean score in Language Total.

It can be noted above that the class that achieved the highest mean scores on every test (except in Mechanics of English in which it tied with a Control class) was a DOVACK class. The identical second highest score was achieved on four tests by both a DOVACK class and a Control class. On three tests, a Control class received the second highest mean score. The mean scores on three tests were different at a statistically significant level with the direction in favor of a DOVACK class on each test.

In the highest scoring first grade class, a DOVACK class, the only one of the mean scores that was below the national norm was in Reading Comprehension. This seems ironic except when one remembers that the standardized reading tests are generally considered to be based on the basal reader type of teaching reading and are presumably designed for a typical population. Even so, this highest score in Reading Comprehension was achieved by a DOVACK class.

It might be argued that the Hawthorne effect may have influenced the pupils in the DOVACK class that had the highest mean scores. If this is true, then why didn't the Hawthorn effect influence the pupils in all of the DOVACK classes? Inspection of the complete tables which are included in the full evaluation report reveals that some of the lowest mean scores were made by DOVACK classes as well as by Control classes.

Included in the full evaluation report, a table of selected characteristics of the teachers enables the reader to make subjective speculations about the possible effect of these variables that were not controlled statistically.

(3) Hard data on each pupil's Rate of Learning to recognize his own vocabulary

The DOVACK Random Sample Vocabulary Recognition (DRSVR) Tests are administered for the purpose of testing each pupil's ability to

recognize in isolation his own vocabulary on tests derived from the computer-stored work bank of all of the new words that he has dictated.

Every six days, each pupil was given a DRSVR Test. The mean score on these tests for each pupil and for each class was obtained for the year. Cumulative DRSVR Tests were also given to each DOVACK pupil in grades 2, 4, 5, and 6 on his own vocabulary at 36 days, at 72 days, and at 108 days. Class means for grades, 2, 4, 5, and 6 were obtained for each cumulative test.

The DRSVR Tests are computer-compiled and computer-printed for each pupil; and they can be administered by each pupil to himself. These data are unique to DOVACK. They are the most important data collected during the project. This writer designed the DRSVR Tests and designed the pupil-criterion-referenced Reports that follow the tests. The formula for the sampling technique to obtain the test words was designed to yield an unbiased estimate of the number of new words learned by each pupil per class period, with a stated precision. (Note: The DRSVR Tests and the pupil-criterion-referenced Reports are used for both process and product evaluation.) Sixty-six tables and figures have been prepared to present the data in the full evaluation report that is being written.

For each of the DRSVR Tests (6-day, 36-day, 72-day, and 108-day), the Wilcoxon Rank Sum Test was used to test the differences in performance due to sex. For each test, cumulative per cent tables and figures for each class were made to show the Rate of Learning per class period by race and sex.

It is obviously impossible, in this brochure supplement, to summarize all of the data. Results from two different grade levels will be extracted.

For the unbiased estimate of the number of words from his total list that each pupil would be expected to recognize in isolation if he were tested on the total list, the reader may multiply each reported number of words learned per class period by the number of class periods in the test period. (In this supplement, only the class means and the highest individual scores are reported.)

## Grade 2

In Grade 2, 1969-1970, (13 black males, 10 black females), differences in performance due to sex were statistically significant at the .05 level on the mean of the 6-day DRSVR Tests and on the 108-day



DRSVR test, with the direction in favor of the females on both tests. There was no statistically significant difference in performance due to sex on the 36-day DRSVR Test or on the 72-day DRSVR Test.

In Grade 2, 1969-1970: On the 6-day DRSVR Tests, the unbiased estimate of the mean Rate of Learning new words per class period for the class was 4 and the unbiased estimate of the highest individual mean Rate of Learning per class period was 9 (achieved by a black male). On the 36-day DRSVR Test, the unbiased estimate of the mean Rate of Learning per class period for the class was 3 and the unbiased estimate of the highest individual Rate of Learning per class period was 7 (achieved by a black male). On the 72-day DRSVR Test, the unbiased estimate of the mean Rate of Learning per class period for the class was 6 and the unbiased estimate of the highest individual Rate of Learning per class period was 14 (black male). On the 108-day DRSVR Test, the class mean was 10 and the highest was 21 (black female). This means that on the 6-day DRSVR Tests, the unbiased estimate of the class mean of the total number of words learned during the test period was 24 and the unbiased estimate of the highest number of words learned by an individual during the test period was 54. On the 36-day DRSVR Test, the unbiased estimate of the class mean of the total number of words learned during the test period was 108 and the unbiased estimate of the highest number of words learned by an individual was 252. On the 72-day DRSVR Test, the class mean was 432 and the highest individual number was 1008. On the 108-day DRSVR Test, the class mean was 1080 and the highest individual number was 2268.

#### Grade 6

In Grade 6, 1969-1970, (19 black males, 8 black females), differences in performance due to sex were not statistically significant on any of the tests.

In Grade 6, 1969-1970: On the 6-day DRSVR Tests, the unbiased estimate of the mean Rate of Learning new words per class period for the class was 8 and the unbiased estimate of the highest individual mean Rate of Learning per class period was 14 (achieved by a black male and by a black female). On the 36-day DRSVR Test, the unbiased estimate of the mean Rate of Learning per class period for the class was 7 and the unbiased estimate of the highest individual Rate of Learning per class period was 15 (achieved by a black male and by a black female). On the 72-day DRSVR Test, the

unbiased estimate of the mean Rate of Learning per class period for the class was 16 and the unbiased estimate of the highest individual Rate of Learning per class period was 21 (black male). On the 108-day DRSVR Test, the class mean was 5 and the highest was 11 (black male). This means that on the 6-day DRSVR Test, the unbiased estimate of the class mean of the total number of words learned during the test period of 48 and the unbiased estimate of the highest number of words learned by an individual during the test period was 84. On the 36-day DRSVR Test, the unbiased estimate of the class mean of the total number of words learned during the test period was 252 and the unbiased estimate of the highest number of words learned by an individual was 540. On the 72-day DRSVR Test, the class mean was 720 and the highest individual number was 1512. On the 108-day DRSVR Test, the class mean was 540 and the highest individual number was 1188.

It is interesting to note that this group of sixth grade pupils reached their peak performance on the 72-day DRSVR Test.

#### (4) Data on estimated readability levels of dictations

Fry's formula was used to obtain estimates of the readability levels of the dictations. A mean readability level of third grade was found for the following grades: Grade 5 in 1968-1969; Grades 2, 4, 5, and 6 in 1969-1970; Grades 1 and 6 in 1970-1971. A mean readability level of fourth grade was found for Grade 6 in 1968-1969 and for Grade 5 in 1970-1971. A mean readability level of fifth grade was found for Grade 7 in 1968-1969.

One variable that possibly accounts for the differences in estimates of readability levels is the kind of population from which the data were derived. For example, the pupils in 1968-1969 were chosen for both DOVACK groups and Control groups on the basis of the ratio of difference between their reading scores and their IQ scores; the pupils in 1969-1970 were chosen on the basis of their low scores on a standardized reading test; the first grade classes in 1970-1971 were heterogeneously divided, randomly assigned by race and sex; the fifth and sixth grade pupils in 1970-1971 were chosen on the basis of low scores on a standardized reading test.

Another variable that is possibly relevant is the grade level of the pupils, although this writer believes that this handicap can be overcome. It seems evident that the teachers in the intermediate grades need to spend more time with pupils on developing both real and vicarious experiences that will help the pupils extend their vocabularies and learn to express themselves orally in more sophisticated sentences. More extensive use of composite stories should be useful in these efforts.

#### (5) Hard data on Vocabulary Usage

A data structure has been devised so that all of the words that the pupils dictated can be printed out by number of users, frequency of use, by grade, race, and sex.

When money is available, these data will be compared with recently published similar data derived from conventional texts and trade books.

## Conclusions

Evaluation of the effectiveness of The DOVACK System in achieving the educational objectives stated for it were conducted in five areas. Two sets of conclusions are included in this supplement, extracted from the conclusions presented in the full evaluation report. The conclusions presented in this supplement are (A) Five areas of evaluation, and (B) Adoption of The DOVACK System.

### (A) Five areas of evaluation

(1) The soft data from subjective judgment and observation of pupils, parents, aides, professional educators, and professional evaluators are overwhelmingly favorable to The DOVACK System. Written documents supporting these evaluations include comments in the Visitors Register; brochure, booklet, and listing by the American Institutes for Research; articles by visiting authors; and written evaluations by professional evaluators for ESEA Title III. Film and photographic evidence are available.

(2) No definitive general conclusions can be inferred from the standardized test data because of the small sample sizes, the experimental field-testing situation, the atypicality of the population, the probable inappropriateness of some of the standardized tests especially on the intermediate level; and the impossibility of controlling certain crucial variables.

However, it can be concluded that a population that is mainly rural, black, and disadvantaged, with dialectical and cultural differences, from a county that has been federally designated "poverty-level" need not necessarily be the population that scores below the national norm on standardized tests.

There is implied evidence that the way the DOVACK composite stories are used in The DOVACK System is effective in teaching standard English for alternative and situational usage; and in helping to make the transition from DOVACK to conventional reading materials.

(3) By their performance on the DOVACK Random Sample Vocabulary Recognition (DRSVR) Tests, pupils proved that they can learn to recognize in isolation the words that they have dictated in context.

There is implied evidence that the DOVACK way of teaching skills for word attack and word recognition is effective.

Performance in learning to recognize words is not necessarily due to sex when the words were dictated in context by the pupils themselves.

The DOVACK System can be used effectively in teaching first grade pupils who are grouped heterogeneously.

(4) The readability level of instructional materials for a first-grade population that is mainly rural, black, and disadvantaged, with dialectical and cultural differences, from a county that has been federally designated "poverty-level" need not necessarily be confined to first-grade level when the instructional materials for those pupils are produced by the pupils themselves in The DOVACK System.

There is implied evidence that teachers in the intermediate grades need to spend much time with pupils who are severely retarded in reading in order to help them expand their experiences - both real and vicarious - to help the pupils extend their vocabularies and to develop their ability to express themselves orally.

(5) When the pupils order and dictate their own instructional materials, they do not necessarily use the words that are on their grade level in the conventional trade books and text books. This needs further investigation by comparing the dictated words from the project populations with the most recent categorized word lists of published materials.

#### (B) Adoption of The DOVACK System

(1) It is necessary for the teachers and aides who will use The DOVACK System to participate in workshops conducted by this writer and/or by teacher-consultants who have successfully used The DOVACK System under the direction of this writer.

(2) Good teachers, with DOVACK workshop experience, and with appropriate support (administrative/equipment/services) who make appropriate use of The DOVACK System, should be able to overcome many of the problems that plague educators in teaching standard English; in teaching initial and remedial reading; and in unifying the teaching of content with the language arts.

(3) In order to adopt The DOVACK System, and have it work successfully, there can be a reallocation of resources:

(a) DOVACK workshops can be conducted for the teachers and aides who are already in the school system. (b) Since the computer work for DOVACK is independent of class time, the computer services can be performed any time, day or night. The same computer facilities and services can be used for different populations in different locations. (c) Equipment (i.e. dictation machines, input/output machines) can be used during the day for public school pupils and for administrative purposes; and can be used in the evening for adult illiterates. (d) A special purpose reallocation of resources might be for teaching illiterate prison inmates. There, literate inmates can serve as aides.

(4) The DOVACK System, when appropriately used on a large scale over a long period of time, should produce cost-effective results.

·DOVACK References

- Chapman, Ruth, "Computer Does the Chores in DOVACK," Florida Schools, Vol. 32, No. 2 (p. 20-25) illus. November-December 1969.
- NCEC (National Center for Educational Communication), Model Programs - Childhood Education DOVACK. Cat. No. 5.220:20141, U. S. Government Printing Office, Washington, D. C., 20202 (20 cents). (Note: Since this booklet was prepared by the American Institutes for Research, the per pupil cost quoted has been drastically reduced.)
- Paisley, Clifton, "The One What Drinking Water Is The Sister....," Research in Review (Clifton Paisley, Ed.) Florida State University, Tallahassee, 32306, illus. November 1970.
- Way, Flo, The DOVACK System (film b&w 18 min 16 mm narrated). Available on loan from: Area AV Center, Box 499, Monticello, Florida, 32344.
- Way, Florine L. The DOVACK Method for Teaching Reading. (Unpublished. 24 pages.) 1966. (Note: The material in this paper is included in subsequent papers that were published.)
- Way, Florine L. Teaching Illiterate Prison Inmates with the Individual Pupil Dictation Technique and Testing with Adaption for Group Administration of the Peabody Picture Vocabulary Test: An Evaluation. (unpublished, 48 pages). 1965. (Note: This is a report on the evaluation pilot study that preceded the experimental work in a federal prison during which the writer designed and developed DOVACK.)
- Way, Florine L. "The DOVACK Model," EDUCOM Bulletin Vol. 4, No. 5, (pages 5-6) October 1969.
- Way, Florine L. "The 'Language Experience' Approach in Teaching Reading - Computerized," Computers and Automation, Vol. 19, No. 9 (p. 28-31) September 1970. (An abstract of this article appears in Language and Language Behavior Abstracts, Vol. V, No. 1 (Entry E00251, p. 530-531) January 1971.
- Wills, Martee, "DOVACK's Machines Help Children Read," AMERICAN Education, Vol. 7, No. 5 (p. 3-8) illus. June 1971.